

## **Case Study**

Location: Milwaukee, WI

**Industry:** Education

**Scope:** BIM, HVAC, Plumbing, Fire Protection, Underground Utilities

Contract Amount: \$7.4 MN



Building SqFt: 300,000

**Owner:** Marquette University

Owner's Rep: Tom Ganey

General Contractor: Opus Development

**Architect:** Opus Architects and Engineers

**Engineer:** Grunau Company

Delivery Method: Design Build

**Contract Type:** Guaranteed Maximum Price

**LEED:** Silver NC Rating

Website: www.grunau.com

## Marquette University Law School

With a new high-profile law school scheduled for construction, Marquette University knew it could rely on Grunau, its long standing partner, for their HVAC, plumbing, and fire protection expertise.

The 300,000 sq ft Eckstein Hall consists of four stories of academic space and two stories of underground parking. An impressive architectural design that includes curved walls and a 4-story atrium lobby required a complicated, intricate system for air handling and fire protection. As a brief snapshot of Grunau's work:

- To heat, cool and regulate the massive building's air, Grunau installed a 1200-ton chiller and three 50,000-cfm air handlers.
- All accompanying duct work was custom fabricated in Grunau's sheet metal shop.
- Grunau's underground utilities team saved from having to use a subcontractor for the excavation portion of Marquette's mechanical work.
- The plumbing system includes 66 low-flow fixtures which helped to determine Marquette would use 40% less water than a traditional building, and provided points toward the building's LEED NC Silver rating.
- Grunau Fire Protection installed sprinklers throughout the building and the supporting equipment in a smaller mechanical room.
- Grunau installed a second central plant in the lower level of the Law School to accommodate the growing campus.

Grunau's BIM technology allowed close coordination of all of these mechanical elements and a proficient installation process. The collaborative design and construction teams were recognized and appreciated for the significant contribution to the architecture of Marquette and the City of Milwaukee.

