The Science & Technology Building

SLIPPERY ROCK UNIVERSITY, SLIPPERY ROCK, PA

Building Description
- Replacement of The Vincent Science Building
- 3 Story Lab, Classroom, Lecture Hall, and Office Building
- Located at the Entrance of The University at the South most point of the West Quad
- Brick and Glass Curtain Wall System

General Project Information
- Total Cost: $12.3 Million
- Size: 76,000 Sq. Ft.
- Dates of Construction: June 15, 2004 — January 4, 2005
- Project Delivery: Design—Bid—Build

Project Team
- Owner: Slippery Rock University
- Management: Department of General Services
- Architect: IKM Incorporated
- Consultants: GWSM. Division of Pennoni Ass. H.F. Lenz Company
- General Contractor: Reginella Construction

LEED Analysis
- All prerequisites fulfilled by present design
- 13 of 69 credits gained from current design
- Another 15 credits at low / med. additional cost to achieve basic LEED certification
- Option for owner to pursue Silver

LEED Design
- Reduce Heat Islands, Roof Surfaces
  - Intensive/ Extensive Green Roof
  - Highly Reflective/ High Albedo Roof
  - Waterless Urinals
  - Sink water sensor adjustment
  - Low flow valves for laboratory sinks

Alternate Structure Design
- Cast-in-place multi-span joist slab w/ load bearing columns
  - 30’ x 30’ bay sizes
  - 125 lbs/ sq. ft. design load
  - 5” slab thickness w/ rib depth’s of 14” @ 18” oc.
  - 20” - 26” column sizes

Alternate Structure Pros and Cons
Pros
- Cost: Savings of over $300,000
- Added 4” of ceiling plenum
- No Fireproofing needed
- No lead time for materials
- Move available labor
- Meets vibration criteria at no extra cost

Cons
- Schedule impact. Could add as much as 60 days to the schedule with little room to accelerate.
- Curtain wall constructability issues
- Foundation redesign

Schedule Reduction
- Main Goal: 4 month schedule reduction in order to obtain building occupancy for the Fall 2005 semester.
- Key in on upfront site work/ superstructure phases and double manpower to accelerate the 10 month process to 7 months.
- Gain the other month from performing punch list inspections during occupancy.

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