the regional learning alliance

At Cranberry Woods

850 CRANBERRY WOODS DR ■ CRANBERRY TOWNSHIP PA. 16066

project team:

OWNER:	Regional Learning Alliance
ARCHITECT:	Renaissance 3 Architects
M E P :	Tower Engineering
STRUCTURAL:	Barber Hoffman, Inc.
G C:	Landau Building Company

project information:

PROJECT SIZE:	76,000 SF
COST:	$14,290,677
STORIES:	(1) below (2) above grade
CONSTRUCTION TIME:	10/15/04-08/24/05
DELIVERY METHOD :	Design-Bid-Build

design information:

ARCHITECTURE:

Driving the design, the building's L-shaped footprint was created to embrace the site's natural wetlands. The 2-story structure, which houses mainly conference and educational space, utilizes (3) major wall types, including a traditional brick veneer, a corrugated metal panel system, and a reinforced aluminum curtain wall system.

STRUCTURAL:

Foundation composed of caissons varying from 30"-42" in diameter, with 2' caps, spread footings and a 5"concrete SOG with 6X6 W2.1x2.1 WWF. Reinforced masonry shear walls act as load bearing system, while the typical 4"-5" composite metal deck floors are supported by W-shaped beams, HSS and structural steel columns.

MECHANICAL:

The building utilizes (50) 4-pipe fan coil units in conjunction with a 22,500 CFM variable volume dedicated outdoor AHU. The first floor and atrium are ventilated by a separate 10,000 CFM indoor AHU. (2) 1500 MBH natural gas hot water boilers and (1) 75-ton chiller serve the piping systems.

ELECTRICAL:

12.47 kVA Penn Power service line is distributed by a primary 480Y/277 V (3P, 4wire) system. The main switchboard is covered by a 1600 A bus with ground fault and phase-loss protection. (4) transformers are used to convert primary voltage into 208Y/120 secondary for smaller loads and receptacles. The entire building is protected by a 35 kW natural gas generator.

LEED:

Building received a Silver rating from the USGBC.