



# LancasterHistory.org

Lancaster County's Historical Society & President James Buchanan's Wheatland



## PROJECT OVERVIEW

Owner:	LancasterHistory.org
General Contractor:	Benchmark Construction
Architect:	Centerbrook Architects
Structural Engineer:	Gibble Norden Champion Brown
Civil Engineer:	David Miller & Associates
MEPF Engineer:	Altieri Sebor Wiebor
Project Cost:	\$13.5 Million
Size & Height:	32,068 SF   34 Feet

## ARCHITECTURAL FEATURES

- Saw-tooth roof with 3 clerestory windows
- Brick veneer facade
- Renovation (14,121 SF):
  - Expanded library & reading room
  - Rare book room
- Addition (19,755 SF):
  - Research facilities & archival
  - Exhibition galleries
  - Multi-use educational auditorium.
  - Collection storage & conservation
- LEED Gold Certified rating

## MECHANICAL SYSTEM

- DOAP with enthalpy wheel & 3 VAV ACU's
- Natural-gas high efficiency condensing boiler
- Open-loop water to air geothermal system

## ELECTRICAL/LIGHTING SYSTEM

- 1600 Amperes 120/240 Delta, 3 phase, 4 wire MDB
- Eleven 120/240V panel boards feeding the buildings systems
- Artificial lights are almost exclusively LEDs or Fluorescents
- Photovoltaic system
- 80kW 100KVA generator

## FIRE PROTECTION SYSTEM

- 500 GPM split-case fire pump
- Laser smoke detection w/ wet & dry sprinkler systems

## STRUCTURAL SYSTEM

- Cast-in-place concrete column footings, slab on grade and foundation walls
- Precast hollow core plank at ground level
- CMU shear walls
- HSS 12X8X1/2 columns
- W12X16, HSS 12X8X1/2, 16X8X1/2 & 14X6X1/2 beams
- W12X40 girders
- Arced Glulam beams & LVL rafters



**ERIC R. BUCKWALTER**  
Construction Management

<http://www.engr.psu.edu/ae/thesis/portfolios/2013/erb5074/index.html>