

Cost:

Total Project: \$4,000,000
Construction: \$3,000,000
MEPT Const: \$2,000,000

Owner:

University of Iowa
Iowa City, Iowa
David W. Kieft, Business Manager
319.335.5052
david-kieft@uiowa.edu

User:

University of Iowa
Iowa City, Iowa
Steve McGuire, Professor
Studio Division Coordinator, Summer
Director School of Art and Art History
319.335.3011
s-mcguire@uiowa.edu

Team:

Principal in Charge:
Amy Infelt, PE, LEED AP

Project Manager:
Amy Infelt, PE, LEED AP

Mechanical Engineer:
Justin M. Opperman, PE, LEED AP BD+C

Electrical Engineer:
Eric B. Bruxvoort, PE

Architect:
OPN Architects
Cedar Rapids, Iowa
Bradd A. Brown, AIA, LEED AP
319.730.2907
bbrown@opnarchitects.com

**Project History**

In June of 2008 severe storms and heavy rains caused the Iowa River to overflow its banks and flood the University of Iowa campus located in Iowa City, Iowa. Floodwaters inundated the Art Building West and Art Building East. These buildings housed the majority of programs and operations for the esteemed School of Art and Art History. Both buildings were rendered unusable by the flood. Program elements that were housed on the first floor and basements of these buildings were hardest hit, with near total losses of equipment and other learning tools.

The Challenge

With the beginning of the fall semester approaching rapidly, it was necessary to make quick and deliberate decisions on alternate accommodations for classes. Many of the history, seminar, and classroom functions were accommodated in various campus teaching facilities. The unique nature of the Studio Arts program and the physical demands of its teaching spaces, however, required an alternative approach.

In order to accommodate previously scheduled fall classes, a massive effort was commenced to transform a vacated “big box” retail store into suitable facilities for instruction in the Studio Arts, including: Painting and Drawing, Photography, Graphic Design, 3d Design, Sculpture, Metal Arts, Ceramics, Inter-media, Costume Design, and Printmaking. Additional space was made ready for elements of the Performing arts division, and for the administrative offices of the U of I Museum of Art. Approximately 140,000 sf was transformed in approximately 5 weeks.





While necessity is the mother of all invention, a five-week timeline is the starting point for improvised, creative and beautiful solutions.



Systems installations were challenging, but the results were often surprisingly exciting.



The Results

Classes were held successfully on the first day of the semester, though continued refinements were necessary over the course of the next year.

During this time, Design Engineers worked closely with the University and the contractors to facilitate the installation of additional heating and cooling systems required to support the new usage for this space. Specific equipment installed included natural gas fired radiant burners, a 100% outdoor make up air unit to provide cooling of and make up air for the shop area, a furnace with condensing unit on roof and associated ductwork distribution at office suite on south side, variable flow packaged split system cooling units and multiple exhaust fans and fume hoods.

Specialized Systems

Other systems provided included the installation of multiple electric and natural gas fired kilns, spray booths, dust collection systems, a neutralizing tank in the metals area, specialty soaking sinks and plate makers, a duplex compressed air system, and the addition of restrooms and sinks.

An additional 1200A, 480V main electrical service was added to serve the renovated lumber yard area (Performing Arts, Wood Shop, Sculpture Foundry, Metals and Ceramics) and the existing electrical distribution was revised and extended. Additional electrical panels were provided throughout to keep branch circuit wiring to allowable distances and increase flexibility.

In addition, fluorescent high bay light fixtures were installed to provide required light levels, track lighting was installed in gallery spaces and electrical distribution was added to serve mechanical equipment and general receptacles throughout the facility to serve User equipment. Specialty lighting was also provided for the photography darkrooms and silkscreen room. Corridor lighting, emergency egress lighting and exit signage was added to comply with local and state codes.

The dry sprinkler system in the unheated shop area was converted to a wet system while the existing wet system throughout the remainder of the space was modified to support new room configurations.

In addition, an addressable fire alarm system was installed with required detection and notification devices provided throughout.