

The University of Iowa Flood Status – April 2009

The following updates the March 2009 status report to the Board. Recommendations for projects eligible for replacement are in a companion agenda item.

BUILDING SUMMARY

Buildings eligible for FEMA “**Replacement**” or “**Restoration/Mitigation**” Financing

- Hancher/Voxman/Clapp
- Art Building East (including original Art Building)

Buildings eligible for FEMA “**Restoration/Mitigation**” Financing

- Art Building West
- Iowa Advanced Technology Labs
- Theatre Building
- Iowa Memorial Union
- Museum of Art Building
- Power Plant/Energy Distribution Systems
- Hawkeye Court Apartments

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Music and Performing Arts Center: Hancher/Voxman/Clapp

See “Facilities Replacement” document dated April 2009.

The University will lease space within the Old Capitol Town Center to provide additional interim use space for the School of Music. It will also fit-out the former theatre space within the Old Capitol Town Center (purchase and fit-out of the space was approved by the Board in September 2007). Fit-out of both locations will be done to meet acoustical requirements and to accommodate classroom, rehearsal, and recital areas. Substantial FEMA assistance is expected for both projects.

Art Building East – Including the Original Art Building

See “Facilities Replacement” document dated April 2009

Art Building West

The original damage estimates for Art Building West (exclusive of clean-up, mitigation and temporary replacement costs) were \$10M for the facility and \$2M for contents. The University, under the extraordinary authority granted by the Board in July 2008, has underway a project to restore much of the facility to its pre-flood condition. The University is developing a mitigation plan using BNIM-Iowa Architects. FEMA funding support requires its preapproval of the recovery project and details of the flood mitigation elements.

Current estimate of building recovery is \$7M (exclusive of mitigation components); the contents estimate remains unchanged.

Iowa Advanced Technology Labs

The Iowa Advanced Technology Labs (IATL) has been partially restored and reoccupied to accommodate some of the research teams whose specialized work cannot be accommodated in other existing facilities. Ayers Associates (UI's flood mitigation consultant) and architects Smith-Metzger are working on permanent plans for IATL. The original estimate of damages (exclusive of clean-up, mitigation and temporary replacement costs) was \$8M for the facility and \$34M for contents. The contents are mostly scientific equipment that takes longer to assess for damage. That assessment continues under the supervision of the Vice President for Research's office and Risk Management.

Current estimate of building recovery is \$5M (exclusive of mitigation components); the contents estimate remains unchanged. Mitigation will be complex and must be integrated with the IMU and surrounding area.

Theatre Building

The upper floors of the Theatre Building have been restored and reoccupied by the Theatre Department. Flood water filled the lower level only. Original estimates of damage (exclusive of clean-up, mitigation and temporary replacement costs) were \$3.5M for the facility and \$1M for contents. The current estimate for building recovery remains at \$3.5M and \$1M for contents.

The Theatre Department is also using adjacent temporary mobile units and space within the Studio Arts temporary facility to house functions previously located in the lower level of the building. The Department will also utilize leased space this fall at 108 River Street following fit-out for temporary offices and classrooms.

Iowa Memorial Union

The upper floors of the Iowa Memorial Union have been reoccupied. The original damage estimates for the Iowa Memorial Union (exclusive of clean-up, mitigation and temporary replacement costs) were \$15M for the facility and \$5M for the contents.

A project is being developed by architects Rohrbach Associates to relocate and protect all mechanical and electrical systems as well as additional other mitigation components.

Current estimate of building recovery is \$17M (exclusive of mitigation components).

A determination of the type of restoration and occupancy of the ground level is in progress. The bookstore, credit union, food service and convenience store venues were previously located on the ground level. The Richey Ballroom will be converted into an arts education facility using portions of the Museum of Art collection. Functions that had been accommodated by the Richey Ballroom will be relocated to the University Athletic Club facility.

The University plans to move this restoration and mitigation planning along to enable a reopening of the ground level by fall, 2010. In the interim special accommodation is being planned for temporary space to help with summer orientation in 2009 and 2010.

Museum of Art Building

FEMA has determined that it will support 90% of the cost of restoration and mitigation of the Museum of Art Building, but not replacement of the facility. The restoration of the facility must accommodate programs that are of like nature to those housed prior to the flood.

The original damage estimates for the Museum (exclusive of clean-up, mitigation and temporary replacement costs) were \$3.5M for the facility and \$500K for the contents. The most valuable contents are insured by Lloyds of London and were almost entirely removed before the flood water entered the building. Current estimate of building recovery is \$5.5M (exclusive of mitigation components).

A project has recently been completed to enable the north end of the Museum Building – formerly called the Alumni Center – to be used temporarily by the School of Music (~18,400 square feet). The remaining 54,733 square feet will need restoration and mitigation for ongoing use. Discussions with FEMA must occur regarding allowed uses.

The University is working with Lloyds of London to determine best options for housing the Museum collection. Simultaneously the Museum staff is making plans for the Museum collection to be exhibited at a number of locations other than the Museum Building. In January the University announced that the Figge Art Museum in Davenport had offered the UIMA significant space for display and storage of its permanent collection, Museum of Art-organized exhibitions and traveling shows in its three-year-old, state-of-the-art museum building.

Power Plant and other Energy Production and Distribution Systems

The Power Plant's main boilers are functioning normally and the remaining restoration projects (e.g. make-up water facility replacement) are moving ahead. A number of projects to provide alternative systems/routes for steam distribution from the Power Plant have been completed. Contracts have been awarded to construct tunnel system barriers to isolate the Power Plant from future flooding. This work will be accomplished by May. Other tunnel system flood mitigation contract awards to protect academic buildings on the east side of the river will be made very soon. Due to review requirements by FEMA and associated design refinements, this second phase of tunnel barriers will not be completed until later this summer.

As work progresses on these building-specific barriers, UI utilities staff and the design consultants have established additional operational safeguards to minimize possible tunnel water infiltration until tunnel barriers are completed for future year protection. The more severely impacted tunnels on the west side of the river have been recovered to serve re-opened facilities but are still being studied for most effective long-term mitigation solutions that could include abandonment and use of direct buried utilities.

Original estimates of damage to the Power Plant and to the utility tunnel systems were \$20M each. The current estimate of recovery cost is \$21.5M combined (exclusive of mitigation components).

The construction of chilled water lines crossing the Iowa River is now complete. Restoration of the construction site and removal of the cofferdam is expected by the end of April.

A critical need exists for west campus emergency power systems and redundant west campus base load power and steam. Complete reliance on the east campus Power Plant and distribution systems that traverse the river needs to be altered. This investment in long-term reliability is under review, but it will be enormously expensive to accomplish.

Hawkeye Court Apartments

FEMA has determined that it will support 90% of the costs of restoration and mitigation of the existing facility, but not replacement of the facility. Timetables have not been determined.

Mitigation

University staff, along with Shive-Hattery and Sasaki and Associates, is reviewing the campus sidewalk system along the east and west banks of the river. The team is looking at the feasibility and impact of elevating the sidewalks to a consistent elevation of no less than one foot above the 100-year flood elevation. Current areas of the sidewalk reflect this level now, however it is not consistent along all areas. The sidewalk will serve as the base for erecting Hesco barriers should flood waters threaten. The sidewalks would be designed to accommodate vehicles used for transporting sand/rock to the Hesco barriers and the engineers are investigating measures to minimize below-grade wash-out of the walks. The design will be fully reviewed for all permitting and will be studied against the newly completed Iowa River Model.

The Iowa River Model, completed at the end of March, was a collaboration between flood mitigation consultant Ayers Associates and the University of Iowa Institute for Hydraulic Research (IIHR). Larry Weber, Director of IIHR, and his staff completed in-depth review of the computer-based Model as it was completed. The Model is being shared with Iowa City, Coralville and Johnson County so that all four entities, working in tandem, can fully understand the various physical components of the 2008 flood and can explore and propose river's-edge changes with full understanding of the benefit and impact of each change. This milestone serves as an important step in advancing long-term mitigation strategies for the University and its neighboring communities.

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The Most Recent Financial Analysis Of Flood Recovery Is Shown Below:

Flood Expenses (3-24-09)

	<u>Actuals</u>	<u>Encumbrances</u>	<u>TOTAL</u>
	\$107,309,018	\$14,062,127	\$121,371,145

Flood Funding (3-24-09)

	<u>FM Global</u>	<u>Federal Flood</u>	<u>FEMA</u>	<u>Gifts</u>	<u>TOTAL</u>
Building/Content/Extra Exp	\$50,946,212	\$4,428,181	\$22,218,811	\$1,000,000	\$78,593,204

	<u>FM Global Business Interruption</u>	<u>Gifts Flood Relief</u>	<u>TOTAL</u>
Other	\$4,053,788	\$1,138,722	\$5,192,510