REGISTER OF UNIVERSITY OF IOWA
CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS

Actions Requested: Consider approval of:

1. The following actions for the Museum of Art – New Facility and Museum of Art (former) – Permanent Flood Recovery projects, major capital projects as defined by Board policy:
   a. Acknowledge receipt of the University’s initial submission of information to address the Board’s capital project evaluation criteria (Attachment A for new facility and Attachment B for former facility);
   b. Accept the Board Office recommendation that the projects meet the necessary criteria for Board consideration; and
   c. Authorize permission to proceed with project planning, including proceeding with a request for information and qualifications process for the new facility and the design professional selection process for the former facility.

2. The following actions for the John and Mary Pappajohn Biomedical Discovery Building – Fit-Out Central Vivarium Space and Iowa Advanced Technology Laboratories – Flood Mitigation and Permanent Recovery projects:
   a. Acknowledge receipt of the University’s final submission of information to address the Board’s capital project evaluation criteria (see Attachment C for Vivarium and Attachment D for Technology Laboratories);
   b. Accept the Board Office recommendation that the projects meet the necessary criteria for Board consideration; and
   c. Approve the schematic designs, project description and budgets ($24,000,000 for the Vivarium and $18,276,476 for the Technology Laboratories), with the understanding that approval will constitute final Board approval and authorization to proceed with construction.

Executive Summary:

The University requests permission to proceed with project planning for the Museum of Art – New Facility project. The project would study options for returning the University’s Museum of Art collection to the main campus. (Since the flood of 2008, most of the collection has been housed in the Figge Museum in Davenport.) The University submitted appeals to FEMA for replacement of the existing Museum building based on the fact that the collection could not be returned to and insured within the former structure. Those appeals were denied. The University is therefore exploring options for returning the collection to the campus.

As currently envisioned by the University, the establishment of a formal design process for the new museum facility would begin with a public Request for Information and Qualifications. This public solicitation would aid in establishing a range of potential siting options and partnerships that would meet the University’s needs. As options are established, the
University would solicit for the services of planning and design experts, consistent with Board policy. The new facility would be financed by a combination of University and gift funding.

The University requests permission to proceed with project planning for the Museum of Art (former) - Permanent Flood Recovery project, which would provide for the permanent recovery of the former Museum of Art building, consistent with FEMA guidelines and its funding obligation. Work would include replacement of damaged mechanical and electrical services, and drywall, doors and finishes on the ground and first floors that were damaged by the 2008 flood. Repair work would return the building to the same condition as prior to the flood. The estimated project cost of $2.5 million would be funded by a combination of flood recovery resources. A map showing the location of the former Museum of Art is included in Attachment E.

The University requests approval of the schematic design and project description and budget for the John and Mary Pappajohn Biomedical Discovery Building – Fit-Out Central Vivarium Space project, which would complete and fit-out for research support the shelled space presently being constructed as part of the John and Mary Pappajohn Biomedical Research Building (PBDB), maximizing space available underground in the courtyard created by the Medical Education Research Facility (MERF) / Carver Biomedical Research Building (CBRB) and PBDB. Modifications will also be made to the lower level of the MERF and the Bowen Science Building (BSB). The project budget of $24,000,000 would be funded by Carver College of Medicine Gifts and Earnings. The schematic design booklet, which shows the project location, is included with the Board's agenda materials.

The University requests approval of the schematic design and project description and budget for the Iowa Advanced Technology Laboratories – Flood Mitigation and Permanent Recovery project which would provide for construction of a removable flood wall (similar to that installed at Art Building West) encircling the building and the north service yard. The 1992-built structure is a noted design by world-renown architect Frank Gehry and hosts substantial laboratory activities serving multiple academic programs. (See Attachment F for the location of the Advanced Technology Laboratories and the schematic design of the proposed removable flood wall to be installed at the site.) Permanent recovery consists of recovering damaged portions of the exterior metal skin system damaged by contact with and exposure to flood waters. The project budget of $18,276,476 is being funded by a combination of flood recovery resources.
Details of the Projects:

Museum of Art – New Facility

Project Summary

<table>
<thead>
<tr>
<th>Project</th>
<th>Amount</th>
<th>Date</th>
<th>Board Action</th>
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<tbody>
<tr>
<td>Permission to Proceed with Project Planning</td>
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<tr>
<td>Proceed with Request for Information and Qualifications Process</td>
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<tr>
<td>Initial Review and Consideration of Capital</td>
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<td>Receive Report</td>
</tr>
<tr>
<td>Project Evaluation Criteria</td>
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The former University of Iowa Museum of Art building was built in 1969 with private donations to display and store the University’s fine art collection. The collection is one of the premier university fine art collections, with over 12,400 objects of art valued at more than $500 million. The University has acquired and collected valuable artistic objects and holds those works of art for public engagement and education. The collection supports the academic programs of the University through the exhibition of the permanent collection, display of art on loan, and the hosting of traveling art exhibitions and exhibitions prepared by museum staff. Access to the collection and adjacency with other University educational programs is essential. Since the floods of 2008, access to the collection for students, teachers, scholars and the general public has been very limited.

Fine art must be housed in space that is safe, secure, climate and light controlled, adequately insured and guarded in accordance with insurance requirements.

Museum of Art (former) – Permanent Flood Recovery

Project Summary

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<tr>
<th>Project</th>
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<tr>
<td>Project Evaluation Criteria</td>
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*Approved by Executive Director, consistent with Board policies

Built in 1969 and designed by renowned modern architect Max Abramovitz, the facility marked the first campus project that utilized a noted architect to advance recognition for design excellence. Portions of the north end of the building are currently being used, on an interim basis, for displaced functions from the School of Music. Those programs will remain in the building until the replacement School of Music facility is complete in 2016. The work which enabled this interim use included partial recovery of the damaged mechanical and electrical systems and
repair of walls and finishes in that part of the building. The proposed project would recover all other portions of the building, while allowing the Music programs to remain.

Permanent reprogramming of the building for non-museum, academically-related functions will not be addressed as part of this repair project; the building will be recovered to its pre-flood condition. Evaluation of reprogramming options will be discussed with the Board of Regents at a future date.

John and Mary Pappajohn Biomedical Discovery Building – Fit-Out Central Vivarium Space

<table>
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<tr>
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<th>Amount</th>
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<tr>
<td>Permission to Proceed with Project Planning</td>
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<td>April 2012</td>
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<td>Selection of Design Professional</td>
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<td>(Rohrbach Associates; Iowa City)</td>
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<td>Initial Review and Consideration of Capital</td>
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<td>Project Evaluation Criteria</td>
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<td>Report</td>
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<tr>
<td>Design Professional Agreement</td>
<td>$ 1,235,000</td>
<td>July 2012</td>
<td>Not Required*</td>
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<tr>
<td>(Rohrbach Associates; Iowa City)</td>
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<tr>
<td>Schematic Design</td>
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<td>June 2013</td>
<td>Requested</td>
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<tr>
<td>Project Description and Budget</td>
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<td>June 2013</td>
<td>Requested</td>
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<td>Receive</td>
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<td>Project Evaluation Criteria</td>
<td></td>
<td></td>
<td>Report</td>
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</table>

*Approved by Executive Director, consistent with Board policies

The project would create research support space on the Health Sciences Campus that does not affect the above-ground building environment in this densely built area of central campus. The centralized research support location will be within walking distance of 85% of the laboratories of University researchers.
The following summarizes the square footages in the building program and schematic design:

<table>
<thead>
<tr>
<th>Project Description</th>
<th>NSF</th>
<th>GSF</th>
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<tbody>
<tr>
<td>PBDB Central Vivarium</td>
<td>22,186</td>
<td>31,079</td>
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<tr>
<td>MERF Renovation (lower level)</td>
<td>2,082</td>
<td>2,945</td>
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<tr>
<td>BSB Renovation (second level)</td>
<td>748</td>
<td>801</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>25,016</strong></td>
<td><strong>34,825</strong></td>
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Since the project will complete the unfinished shell space being presently built as part of the PBDB project, materials, mechanical electrical and plumbing systems, and functional layouts will be similar to those within PBDB.

**Project Budget**

- **Construction**: $19,721,739
- **Planning and Design**: $2,551,220
- **Contingency**: $1,727,041

**TOTAL**: $24,000,000

Construction is scheduled to commence in May 2014, following substantial completion of the PBDB, with an anticipated completion date in late spring of 2015.

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**Iowa Advanced Technology Laboratories – Flood Mitigation and Permanent Recovery**

**Project Summary**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Date</th>
<th>Board Action</th>
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</thead>
<tbody>
<tr>
<td>Mitigation Study (Architects Smith Metzger; Des Moines)</td>
<td>$50,500</td>
<td>July 2012</td>
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<tr>
<td>Design Professional Amendments (#1-8) (Architects Smith Metzger; Des Moines)</td>
<td>160,710</td>
<td>various</td>
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<tr>
<td>Design Professional Agreement – Schematic Design – Flood Mitigation</td>
<td>125,750</td>
<td>Feb. 2013</td>
<td>Not Required*</td>
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<tr>
<td>Design Professional Agreement – Schematic Design – Flood Recovery and Mitigation</td>
<td>1,357,500</td>
<td>Apr. 2013</td>
<td>Not Required*</td>
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<tr>
<td>Schematic Design Project Description and Budget</td>
<td>18,276,476</td>
<td>June 2013</td>
<td>Requested</td>
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</table>

*Approved by Executive Director, consistent with Board policies

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On June 16, 2008, flood waters engulfed the lower level of the Iowa Advanced Technology Laboratories (IATL), and building service tunnels, and rose to a level approximately 18 inches
above the first floor level. The lower level and service tunnels contain electrical and mechanical equipment and provide piping routing of water, steam, chilled water, and electrical conduit. The first floor houses main electrical switchgear, mechanical equipment, research laboratories, offices, graduate student areas, conference rooms and restrooms.

Permanent recovery consists of recovering damaged portions of the exterior metal skin system due to contact with and exposure to flood waters. To access the damaged portions of the exterior wall system, all copper sidewall and roof cladding covering the Service/East Wing portion of the building requires removal. After replacement of flood damaged components, new copper panels matching the size; shape and profile of existing panels will be installed. On the stainless steel clad Office/West Wing the recovery steps are identical, except that the upper level penthouses and skylights will receive no work.

Mitigation from future flooding consists of a removable flood wall (similar to that installed at Art Building West) encircling the building and north service yard. This will provide flood protection to a level 2’ above the 500 year flood elevation. Also included are an extensive sub-grade dewatering system, pumping stations and a natural gas emergency generator to support the site dewatering pumping system.

The project will include two alternates. One alternate consists of providing new curtain wall windows in lieu of reusing the existing windows as directed by the FEMA Recovery Project Worksheet. The other alternate consists of interior finish repairs to room 100 (Gallery) from 18 inches above the finished floor to the ceiling level. Work between the finished floor and 18 inches above the finished floor is captured in the FEMA Recovery Project Worksheet. Any alternates that are accepted following the bid would be funded independent of FEMA funding.

### Project Budget

<table>
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<tr>
<th>Description</th>
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<tr>
<td>Construction</td>
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<td>Planning and Design</td>
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<tr>
<td>Contingency</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$18,276,476</strong></td>
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Construction is scheduled to commence in March of 2014, with completion by March of 2015.
Museum of Art – New Facility
Evaluation Criteria

Since the project meets the Board’s definition of a major capital project, the University has provided the following information in response to the Board’s evaluation criteria.

Institutional Mission / Strategic Plan: The former University of Iowa Museum of Art building was built in 1969 with private donations as a fine art museum, to display and store the University’s fine art collection. The collection is one of the premier university fine art collections with over 12,400 objects of art valued at over $500 million. The University has acquired and collected valuable artistic objects and holds those works of art for public engagement and education. The collection supports the academic programs of the University through the exhibition of the permanent collection, display of art on loan, and hosting of traveling art exhibitions and exhibitions prepared by museum staff.

Fine art must be housed in space that is safe, secure, climate and light controlled, adequately insured and guarded with access for students, teachers, scholars and the general public.

The collection is a critical part of the academic mission for those studying, teaching and researching within visual arts programs. Access and adjacency to the collection for University of Iowa students is critical, and since June 2008 this has not been possible.

Other Alternatives Explored: The University initially investigated the potential reuse of the flood-damaged Museum of Art building, but found that the collection could no longer be insured at this site. This eliminated the original building as a viable location for the collection. With the assistance of Iowa Homeland Security, the University pursued FEMA support for the construction of a replacement facility. FEMA denied this option and the University has exhausted all appeal options.

Given the critical importance of access to the collection for students, faculty and University community, a new and permanent facility located on or near the main campus core must be explored. Exploration of a wide range of siting and arrangement options will be conducted.

Impact on Other Facilities and Square Footage: The former Museum facility will be permanently recovered in accordance with FEMA rules and procedure. The resulting program changes will be reviewed and considered as that recovery project is advanced.

Financial Resources for Construction Project: This project will not be funded by FEMA. As planning proceeds, the University will develop a funding plan which will include a combination of private gifts and University funding sources.

Financial Resources for Operations and Maintenance: The costs and sources for building operations will depend upon the location and ownership of the facility to be developed. University funding will be provided based upon the nature of the financial ownership.
External Forces Justifying Approval: Continued storage of the Museum of Art collection at a remote location negatively impacts academic programs of the University. Lease costs for storing the collection 60 miles from the University will become a future drain on University resources although FEMA has provided grant funding for temporary space this far.
Museum of Art (Former) – Permanent Flood Recovery
Evaluation Criteria

Since the project meets the Board’s definition of a major capital project, the University has provided the following information in response to the Board’s evaluation criteria.

Institutional Mission / Strategic Plan: In June of 2008, record floods damaged major portions of the UI campus. Twenty-two (22) major facilities were flooded. Since that time significant efforts have been made to recover and protect the campus from future flooding. After completing the temporary flood recovery of the north portion of the Museum of Art building, the University of Iowa learned it would not be able to reuse the facility for its pre-flood program. The University submitted a request to FEMA to replace the facility. This request was denied and the University has exhausted its options for appeal.

FEMA approved a funding obligation for the repair of the building to its pre-flood condition. This project will advance the project as obligated.

Built in 1969 and designed by renowned modern architect Max Abramovitz, the facility marked the first campus project that utilized a noted architect to advance recognition for design excellence. This practice continues with important projects that include the Levitt Center, IATL and Art Building West.

The facility is within walking distance of the campus core and is adjacent to other University arts programs.

Other Alternatives Explored: Following the 2008 flood and with FEMA approval, a temporary flood recovery project for the north portion of the Museum of Art building was completed for displaced School of Music programs. The University of Iowa has studied permanent flood recovery and mitigation options for the entire facility.

The University of Iowa and Iowa Homeland Security (IHS) pursued replacement funding for the Museum of Art from FEMA after learning that the Museum’s collection could not be insured if returned to the Museum building. FEMA declined the University/IHS application. The University appealed the FEMA decision but was unsuccessful. All appeal efforts have now been exhausted.

The Museum facility is considered to be fitting for repair and recovery for functions other than display and storage of a fine arts collection. FEMA funding has been obligated to allow for this work.

Impact on Other Facilities and Square Footage: This project will not result in the abandonment, transfer or demolition of existing facilities.

Financial Resources for Construction Project: The estimated project cost is $2,549,534. This amount matches the remaining funding from the original FEMA obligation for recovery of the
museum of Art facility. A combination of flood insurance proceeds, Federal (FEMA) funding and University and State flood recovery funds will account for the funding of this project.

**Financial Resources for Operations and Maintenance:** There would be little to no increased operating costs.

**External Forces Justifying Approval:** If this project is not approved, the University may lose Federal funding for the recovery of this facility. While the building cannot be used for its pre-flood program, the space will be repurposed for other academic program needs.
John and Mary Pappajohn Biomedical Discovery Building – Fit-Out Central Vivarium

Evaluation Criteria

Since the project meets the Board’s definition of a major capital project, the University has provided the following information in response to the Board’s evaluation criteria.

Institutional Mission / Strategic Plan: Vivarium space and the functions within those spaces are critical components to a wide range of important research performed on the University of Iowa campus. Recruitment of top researchers is central to the success of all research-oriented colleges at the UI and the state of facilities to support cutting edge research is a top priority for those potentially interested in joining the University. Modern and efficient facilities also promote successful research endeavors and help to ensure that current researchers will remain at the UI despite a competitive pursuit for top talent on a national and international level.

The University of Iowa has achieved great strides in providing teaching and research space on the Health Sciences Campus that meet these objectives. However, the growing and developing needs for central research support space/functions has been addressed, primarily in outdated and aging spaces. The addition of top-notch researchers and associated research grants in an increasingly wide range of research areas has placed a premium on suitable support space and is currently threatening the capability of the UI to address these needs, now and in the years to come.

Additionally, as standard industry regulations are developed and refined, the UI has found increasing difficulties in maintaining those requirements in facilities that are aging and do not provide basic operational needs.

The fit-out of this space in combination with a facility to be designed and built on the UI Oakdale campus, will accommodate the base vivaria needs for health science research for the next 15-20 years. The combination of these projects will allow for the replacement/removal/modernization of several inadequate or antiquated areas, and will ensure that research remains a cornerstone of UI success and impact.

Other Alternatives Explored: This project advances a fit-out of shelled space already created (currently in-construction) for this function. The exploration of alternatives were explored during the planning stages of the Pappajohn Biomedical Discovery Building (PBDB) project and site availability, land use efficiency and central adjacencies within the Health Sciences Campus were driving factors in selecting the siting and scope for this space.

Impact on Other Facilities and Square Footage: There will be no abandoned, transferred or demolished space associated with this project.


Financial Resources for Operations and Maintenance: General Education Funds
External Forces Justifying Approval: There is increasing demand for technologically specialized equipment serving research needs on the Health Science Campus, and significant shortages on suitable space within the campus area.

This project is critical for the Office of the Vice President for Research and the Office of the Vice President for Medical Affairs to continue promoting research development by maintaining state of the art core facilities and making strategic investments to initiate and maintain programs with promise for success.
Iowa Advanced Technology Laboratories – Flood Mitigation and Permanent Recovery Evaluation Criteria

Since the project meets the Board’s definition of a major capital project, the University has provided the following information in response to the Board’s evaluation criteria.

Institutional Mission / Strategic Plan: In June 2008, flood waters engulfed the lower level of the Iowa Advanced Technology Laboratories (IATL), and building service tunnels, and rose to a level approximately 18 inches above the first floor level. The lower level and service tunnels contain electrical and mechanical equipment and provide piping routing of water, steam, chilled water, and electrical conduit. The first floor houses main electrical switchgear, mechanical equipment, research laboratories, offices, graduate student areas, conference rooms and restrooms.

The 1992-built structure is a noted design by world-renown architect Frank Gehry and hosts substantial laboratory activities serving multiple academic programs.

Other Alternatives Explored: Alternative mitigation options explored consisted of reconstructing the building exterior wall to perform as a permanent concealed flood barrier, and wet flood proofing strategies that moved critical building systems to a proposed mezzanine level well above any anticipated flood levels. Installation of a removable flood wall system is the only option that provides maximum protection against building flooding, has a more predictable outcome, is the most cost effective solution, and does not negatively impact the architectural design intent of the building. After considerable review of the various options FEMA approved the mitigation strategy proposed by this project.

Impact on Other Facilities and Square Footage: This project will not result in the abandonment, transfer or demolition of existing facilities.

Financial Resources for Construction Project: A combination of flood insurance proceeds, federal grant funding (FEMA), and State and University flood recovery resources. Two alternates to be considered upon receipt of the bids would be funded fully by the University, if accepted.

Financial Resources for Operations and Maintenance: The source of funds to cover the operating and maintenance requirements will be existing Building and Landscape Services funds. Operating costs are not expected to change due to the project.

External Forces Justifying Approval: In order to retain existing research staff and students, and maintain and grow research grant funding, the building needs to provide a predictable flood-free environment.
Schematic image of proposed removable flood wall installed at site. Flood condition not shown.

Iowa Advanced Technology Laboratories (IATL) Flood Mitigation and Permanent Recovery
Floodwall Diagram
Iowa Advanced Technology Laboratories (IATL)
Flood Mitigation and Permanent Recovery

REMOVABLE FLOOD WALL AND DE-WATERING WELL LAYOUT