Architectural Program
For
Kurata Thermodynamics
Lab Remodel for EHS
Project #190/9246

The University of Kansas
Lawrence, Kansas

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Chancellor

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## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>History</td>
<td>3</td>
</tr>
<tr>
<td>Program Summary</td>
<td>4</td>
</tr>
<tr>
<td>Funding</td>
<td>5</td>
</tr>
<tr>
<td>Description of Facility</td>
<td>5-7</td>
</tr>
<tr>
<td>Site Considerations</td>
<td>7</td>
</tr>
<tr>
<td>Project Design, Documentation and CAD Requirements</td>
<td>8</td>
</tr>
<tr>
<td>Project Estimate</td>
<td>8</td>
</tr>
<tr>
<td>Project Schedule</td>
<td>8</td>
</tr>
<tr>
<td>Site Plan</td>
<td>9</td>
</tr>
<tr>
<td>Concept Floor Plan</td>
<td>10</td>
</tr>
</tbody>
</table>
Introduction

The University proposes to renovate Kurata Thermodynamics Building to be the new home of KU’s Office of Environmental Health and Safety (EHS). The renovation will allow EHS to move from their existing offices and labs in Burt Hall to a renovated facility next door to their existing hazardous materials storage facility. In addition, the move will allow KU to move ahead on proposed additions to the existing Engineering facilities.

History

Kurata Thermodynamics Building was built in 1990 to provide additional research space for the School of Engineering. Kurata has served this purpose well over the last 20 years but because of its remote location to the School of Engineering its research use has declined recently.

Program Summary

The project consists of the total renovation of the Kurata Thermodynamics Building to house KU’s Office of Environmental Health and Safety (EHS).

EHS assists faculty, staff, and students with designing facilities that meet safety requirements and with inculcating and implementing safe practices in the conduct and operation of University programs, activities, and facilities. EHS also monitors campus activities to assure that Federal, State, Local, and University environmental, health and safety laws, regulations, ordinances, and policies are being followed. EHS carries out the assigned management responsibilities for the following campus environment, health and safety programs:

- Air Quality (Outdoor & Indoor)
- Asbestos Compliance and Removal
- Environmental Compliance, Protection and Impact Assessments
- Extremely Hazardous Materials Inventory
- Hazardous Materials: Use, Transportation, Disposal, Recycling & Waste Minimization
Laboratory Safety: General, Biological, & Chemical
Lead Based Paint Compliance & Removal
Occupational Safety & Health Assistance
Pollution Prevention
Radiation & Laser Safety: Materials Procurement, Use & Disposal
Water Quality, Storm Water & Wastewater Discharge

EHS provides many services to a wide variety of units and individuals across the Lawrence Campus (academic, research, public service, support, auxiliary, etc.) as well as its satellite campuses. EHS often provides public service assistance to our local community (City and County) and sometimes to other areas throughout the State. As the University has worked to improve and expand academics and research over the last several years it has created a significant impact on EHS. In addition, both federal and state environmental health & safety regulatory requirements have increased and become more stringent and complex. The campus’s demands for EHS services, assistance and involvement are at such a level that we have surpassed our current ability to serve them in a timely manner.

The following is a summary of the space and program requirements for those facilities to be included in the improvements. The areas for each space are shown as net square footage (NSF). The gross square footage is the actual gross square footage of the existing structure.

The space descriptions listed provide an overview of the types of activities to be located within the facility. Each of these spaces shall be incorporated into the design. Additional details of the requirements of each space will be provided during future design phases.

The new facilities shall meet all applicable codes and regulations that are in force as of the date of the contract for professional services and comply with the University of Kansas Design and Construction Standards and the Landscape Master Plan.

**Description of Facilities**

1) Radiation Safety Lab and Offices
a) **Lab** - (350 s.f.) modern lab facility designed for radiation safety procedures with radioisotope type fume hood, lab benches and sink. The lab shall be adjacent to the radioactive waste and processing storage area.

b) **Radioactive Waste and Processing Storage Area** – (725 s.f.) shall be adjacent to the existing overhead exterior door and the radiation safety lab. Space shall allow for both processing radioactive waste and storing the processed waste until it is picked up.

c) **Offices** – (220 s.f.) shall allow for one private office with a second space that will serve as an open office environment. The open office area shall have direct access from the corridor.

2) **Hazardous Material Safety Lab and Offices**

a) **Lab** - (350 s.f.) modern lab facility designed for hazardous material safety procedures with chemical type fume hood, lab benches and sink. The lab shall be adjacent to the chemical storage area.

b) **Chemical Storage Area** – (150 s.f.) shall be adjacent to the existing exterior entrance at the existing overhead door and the hazardous material safety lab. Space shall allow for both storage on shelving and storage of 55 gallon drums until the waste is picked up.

c) **Offices** – (240 s.f.) shall allow for one private office with a second space that will serve as an open office environment. The open office area shall have direct access from the corridor.

3) **Safety Training Lab and Offices**

a) **Lab** - (350 s.f.) modern lab facility designed safety training with chemical type fume hood, lab benches and sink. The lab shall be close to a storage area used for storing training materials.

b) **Safety Training Storage Area** – (60 s.f.) shall be close to and the Safety Training Lab. Space shall allow for storage on shelving.

c) **Offices** – (240 s.f.) shall allow for one private office with a second space that will serve as an open office environment. The open office area shall have direct access from the corridor.

4) **Asbestos / Lead Section Offices** – (240 s.f.) shall allow for one private office with a second space that will serve as an open office environment. The open office area shall have direct access from the corridor.

5) **Classroom** - (500 s.f.) shall be a multimedia training classroom with audio and video capability. Classroom shall seat 30.
6) **Administrative Offices and Support Spaces**

   a) **Director’s Office** – (180 s.f.) shall allow for a work area and a small conference space.
   b) **Administrative Assistant’s Office** – (100 s.f.) shall be adjacent to the director’s office.
   c) **Administrative Office** – (100 s.f.).
   d) **Reception Area** – (150 s.f.) shall allow for one open office reception station and seating for 4 in the waiting area. This space shall be adjacent to the administrative offices, classroom and the mail/copy area.
   e) **Break / Mail / Copy Room** – (200 s.f.) shall allow space for the department mail boxes, copier and a break area for employees.

7) **Facilities**
   a) **Restrooms** – (150 s.f.) one men’s and one women’s single occupant.
   b) **Storage** – (100 s.f.) space shall be for asbestos/lead section and administrative storage.

**Site Considerations**

The site is at the existing Kurata Thermodynamics Building at the Lawrence campus of the University of Kansas. Site considerations will include access to current parking areas and construction of new facility parking, ADA compliant paths of travel, and access to adjoining the adjoining chemical storage facility. The design of the project assumes the use of the existing west campus storm water detention facility which has additional capacity for future development. During the course of this work, access to the chemical storage facility must be maintained.

**Code Requirements**

- Codes currently used on KU projects include the following:
  - Other codes as listed at the State of Kansas, Division of Facilities Management (DFM) website.
• Code Footprint templates of the existing buildings shall be prepared by DCM and furnished to the architect on DCM’s standard 11x17 code footprint sheets.

• The architect shall update these drawings to reflect all proposed work and submit them for approval to DFM through the KU-DCM office, immediately following approval of the Design Development phase.

• Electronic files of the approved code drawings shall be forwarded to DCM in both .PDF and .DWG formats.

- The building shall have a new fire sprinkler system throughout.
- Fire alarm systems shall comply with current code and KU requirements for an intelligent addressable system.

**Design Standards / Consultant Services**

- The consultant team shall comply with the latest provisions of The University of Kansas *Design and Construction Standards*, as maintained by the Office of Design and Construction Management (DCM).

  - These standards are available online at the DCM website: http://www.dcm.ku.edu/standards/design/

  - The consultant team shall also comply with supplemental updates to these standards which may be issued during the course of the project.

- The University’s Project Representative shall be a DCM staff person assigned to serve as KU’s Project Manager, and who shall be the primary point of contact for all communications between the Owner, A-E and Contractor.

- Special Consultants that will be required on the A-E team, in addition to the usual A/E disciplines:

  - Telecommunications System Engineer (must be pre-approved by KU-IT)

- Electronic Files: Consultants shall deliver to KU complete sets of electronic files for the drawings and manuals / specifications for each design review submittal, and for the bid sets and as-built sets.

  - Each set of electronic files shall include both PDF and AutoCAD .dwg files for each drawing sheet.

**Funding**

The project is funded as part of the $65 million Engineering Phase 2 Project.
## Project Estimate

Estimated Construction Costs:
- Building Construction (Renovation to labs, offices and classrooms) $1,080,000
  - 5400 GSF @ $200/SF
- Design & Construction Contingency $50,000
- Kurata Haz Mat Remediation $50,000
- EHS Moving Expenses $10,000
- Estimated Misc. Costs (FFE, Fees, Printing, 3% infrastructure fee, voice & data including NTS, etc.) 5400 GSF @ $50/SF) $210,000

Total Estimated Project Costs: $1,400,000

## Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Regents Approval</td>
<td>October 2011</td>
</tr>
<tr>
<td>A/E Selection</td>
<td>January 2012</td>
</tr>
<tr>
<td>Design Start</td>
<td>February 2012</td>
</tr>
<tr>
<td>Bidding</td>
<td>July 2012</td>
</tr>
<tr>
<td>Construction Start</td>
<td>August 2012</td>
</tr>
<tr>
<td>Construction Complete</td>
<td>January 2013</td>
</tr>
<tr>
<td>Occupancy</td>
<td>January 2013</td>
</tr>
</tbody>
</table>