HEIF Project History At A Glance

| Project Name | Project ID Number | Chartfield |
|--------------------------|-------------------|------------|
| Greenhouse HVAC Retrofit | XHF013 | |

Project Folder

Project Description / Scope:

In 2014, the Humboldt Energy Independence Fund allocated \$60,777 to fund a retrofit of the Experimental Greenhouse located by Science D on the HSU campus, which had not been retrofitted since its original construction in the 1960s. The proposed retrofit included upgrades to the boiler system, water piping system, fans, and gas meter, will increase building use and decrease natural gas usage over a 20year lifespan.

This project was put on hold when Facilities Management identified that the scope of the project expanded to an infeasible level because the fin tubing (a part of the heating system) required a full replacement within the heating exchanger distribution, making the project exponentially more expensive. Facilities Management recommends defunding this project, although this formal step has not yet been completed by the Committee (as of 5/6/2021).

If you would like to read more in depth about this project:

Link to Spring 2014 Project Proposal

Link to 2013- 2014 Annual Report, see page 3

Link to 2014-2015 Annual Report, see page 8

Additions to Project Description / Scope (Include date addition was approved by Committee):

Major Project Milestones

| Stage / Phase | Description | |
|-------------------------|-------------|--|
| Milestone 1: Idea Paper | | |

| Semester & Year Idea Paper Submitted | Fall 2013 |
|---|--|
| Idea Paper Author(s), Major(s), expected graduation year & Semester | Jocelyn Gwynn |
| Date Idea Paper Voted on By Committee (Date aligns to Committee Mtg Minutes) | November 15, 2013 |
| Approved for Development (Yes / No) | Yes |
| Milestone 2: Development | |
| Semester(s) & Year(s) Project was in Development | Spring 2014 |
| Development Team Member names, majors, expected graduation year & semester | Jessica Jewett, Major N/A, Fall 2014 Leabeth Peterson |
| Development Mentor Name | - |
| Estimated Savings from this Project | Avg Annual Net Savings: \$2,838 20 Year Estimated Lifetime Energy Savings: 56,755 Therms, or 5,675,500,000 BTU |
| Date(s) Development Proposal Voted on By Committee (Date aligns to Committee Mtg Minutes) | May 9, 2014 |
| Approved for Implementation (Yes / No) | Yes |

| Milestone 3: Funding | | |
|--|----------|--|
| HEIF Funding Amount Requested in Development | \$60,766 | |
| HEIF Funding Amount Approved by Committee | \$60,777 | |
| HEIF Funding Amount Approved for design services (Included in the amount above) | | |
| Match Funding Amount from other sources (State the other source) | 0 | |
| HEIF Funding Addition Approved by Committee, (Include Date of Additional Funding Approval) | 0 | |
| Total Project Funding Needed from HEIF | \$60,777 | |
| Reason for HEIF Funding Addition | | |
| Estimate Total Budget | \$60,777 | |
| Milestone 4: Design & Permitting | | |
| Date Project transition to PD&C | | |

| Date Project completed Design Phase (i.e. Date Project was Permitted) | | |
|---|---------|--|
| Name of Design Manager (in house) | | |
| Name of Outside Consultant | | |
| Major scope element changes | | |
| Milestone 5: Implementation | | |
| Date Project entered Implementation Phase | | |
| Date Project completed Implementation Phase | | |
| Delivery Method (e.g. name of implementer) | | |
| Name of Project Manager (in house) | | |
| Milestone 6: Project Closeout | | |
| Final Implementation Cost (including non-HEIF sources) | \$1,102 | |
| Date Project Billed & Recorded in OBI | | |
| Milestone 7: Monitoring | | |
| Final Annual Savings Calculated | | |
| Name of Person who Calculated Savings | | |
| How were savings calculated? (e.g. monitoring devices, utility bill review, etc.) | | |
| Date Savings Metrics Calculated | | |

Pictures



(Picture 1: Existing Conditions, date photo taken)

(Picture 2: Completed Project, date photo taken)

(*Include screencaptures and links to non-infrastructure projects.)

Names of People who compiled this information:

| Name | Date |
|----------------|------------|
| Theressa Lopez | 11/12/2020 |
| Theressa Lopez | 3/29/2021 |
| Andrea Alstone | 5/6/2021 |
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