



ADDENDUM NO. 1 - OUTLINE AND SUMMARY INFORMATION

Project Name: Jutila Research Lab – Chiller Replacement PPA No.: 24-1200
Location: Montana State University - Bozeman Date: 6-10-25
Owner: State of Montana, MSU - Bozeman
Plew Building 6th and Grant, PO Box 172760
Bozeman, Montana 59717-2760

To: *All Plan Holders of Record*

*The Plans and Specification prepared by **Montana State University Engineering and Utilities** dated **May 16, 2025** shall be clarified and appended as follow. The bidder proposes to perform all the following clarifications or changes. It is understood that the Base Bid shall include any modification of Work or Additional Work that may be required by reason of the following change or clarifications.*

The Bidders are to acknowledge the receipt of this Addendum by inserting its number and date into their Bid Forms. Failure to acknowledge may subject the Bidder to disqualification and rejection of the bid. This Addendum forms part of the Contract Documents as if bound therein and modifies them as follows:

1. AMENDMENTS TO THE PROJECT MANUAL

- a. Mechanical Specifications page 3, paragraph 4a and 4c:
 - i. Change from 2” thick to 1” thick insulation for exterior piping.
- b. Mechanical Specifications page 4, paragraph 8a:
 - i. Change to read, “Drain entire chilled water / heat recovery system and fill with new glycol. System volume is approximately 300 gallons. Contractor to provide at least 350 gallons and leave remainder on site after project is complete”.
- c. Mechanical Specifications page 4, paragraph 8e:
 - i. Clarify new propylene glycol to be CryoTek 100AL (for aluminum).

2. AMENDMENTS TO THE DRAWINGS

- a. Sheet M3.0, Detail 1:
 - i. Change from 2” insulation to 1” thickness.

3. PRE-BID MEETING INFORMATION

- a. See attached meeting notes.

4. PRIOR APPROVALS

- a. None.

5. ATTACHMENTS

- a. Pre-bid meeting notes.
- b. Pre-bid meeting attendance list

Jutila Research Lab – Chiller Replacement
PPA 24-1200
Pre-Bid Meeting Notes
6/2/2025
Notes by Roz Kinney and Loras O'Toole

Attendees:

- Loras O'Toole, project manager, MSU
- Roz Kinney, project manager, MSU
- Brad Kauffman, electrical engineer, TD&H
- Scott Mahurin, structural engineer, TD&H
- Mark DeWald, Building manager, MSU
- Neil Jorgensen, refrigeration foreman, MSU
- Andy Smith, electrical foreman, MSU
- Others per attendance list

1. Important Dates

- Contractors to send addenda or substitutions items to MSU before Friday 06/02 5:00 PM
- Last addendum issued by Tuesday 06/10
- Bid opening 6/17 at 2 pm.

2. Building Access

- Per Mark DeWald, there will be a 1-hour training for the contractors to get access to mechanical room. Will then receive a code (and a key?)

3. Schedule

- Concrete slab to be done this year before cold weather (fall 2025)
- Project to be complete before cooling season next year (spring 2026)
- Chilled water system functions as heat recovery system also.
- Chilled water / heat recovery system outages must be done when outside temps will be between 0°F - 50°F

4. Outages

- Provide minimum 3 working days' notice to MSU prior to utility outages
- No electrical outage required to connect to existing breaker for new chiller circuit, per Brad Kauffman and Standard Electric rep.
- No domestic water outage required.

5. Chiller

- Chiller information found in mechanical specifications
- New chiller dimensions are important due to underground utilities near the building. Alternative chillers may not be allowed if dimensions require slab be extended to west due to waste piping below grade in that area, or to north.
- Chiller requires ability to provide chilled water down to 35°F leaving water temperature.
- Existing isolation valves for existing chiller can be used to avoid chilled water outages to install connections for new chiller.

6. Chilled water pumps

- New pump information found in mechanical specifications.
- New pump dimensions are important, must fit into existing piping system to reduce time required for installation.

- Existing pumps are in parallel, can be replaced one at time using existing isolation valves using proposed pumps.
7. Draining chilled water system
- Glycol information found in mechanical specifications
 - Drain, flush, clean and refill entire system with new pre-mixed propylene glycol solution. Percentage per specs.
 - System drain points are located at buffer tank and at coils.
 - Dispose of glycol per City of Bozeman requirements.
 - Existing glycol feeder serves both chilled water and heating water, new chilled water glycol must match existing as indicated in specs.
 - System must contain new glycol at end of project but can reuse existing glycol to fill system as needed during project.
 - Testing and balancing must be performed with the specified glycol percentage. It would be best for new glycol to be in place before balancing.
8. Structural
- Concrete slab is sized to allow for chiller clearances. Different chiller may require different size slab.
 - Gutter detail found in structural drawings.
9. Controls
- New chiller will have a different control sequence than existing chiller.
 - Controls must be provided by Electro Controls. See contact info in specs.



UNIVERSITY FACILITIES MANAGEMENT

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PREBID MEETING SIGN-IN SHEET

Project Name: Jutila Research Lab – Chiller Replacement PPA No.: 24-1200
Date: 06/02/2025

Please provide the following information:

Table with 3 columns: Name, Company/Email, Phone. Contains handwritten entries for various individuals and companies, including contact information like email addresses and phone numbers.