



WAYNE STATE
UNIVERSITY

Division of Finance and Business Operations

Procurement & Strategic Sourcing
5700 Cass Avenue, suite 4200
Detroit, Michigan 48202
(313) 577-3734
FAX (313) 577-3747

May 28, 2020

Dear Vendors:

Wayne State University invites you to submit your Best Educational Pricing on the **Pre-purchase of Chillers for the University's Alumni House, reference Project 042-322411** for the University's **Facilities Planning and Management** per the specifications and requirements contained in this Request for Quotation, entitled: **RFQ Alumni Chiller Pre-Purchase, Project 042-322411**. Instructions to Bidders are as follows:

- Responses are to be on this request for quotation for only. Additional documents may be submitted: However, This form must be completed in full.
- Bidders that are unable to supply a specific item are encouraged to write "NO BID" on that line. Substitutions are not allowed unless otherwise indicated in these documents.
- Bidders are to note expected time of delivery for each line if the order is to ship as a partial.
- All prices will be considered FOB Destination unless otherwise indicated. If prices are Shipping Point please indicate total transportation charges.
- This order will be awarded as a total package and not on a line item basis.
- Your reply must be received in the WSU Purchasing Office no later than **2:00 PM on June 3, 2020**.
No Late Bids will be accepted

Bidding documents may be obtained by vendors from the University Purchasing Web Site at <http://go.wayne.edu/bids> beginning **May 28, 2020**. When visiting the Web Site, click on the "**Construction**" link in green.

Proposals with supporting documentation shall be submitted by electronic submission. The link for bid submission will be posted with the bid details at <http://go.wayne.edu/bids> beginning **May 28, 2020**.

The electronic submission should be limited to no more than one of each of the following file types: 1 Word Document and/or 1 Excel Workbook and/or 1 PDF document, with a total file size less than **20 megabytes**. ZIP Files containing separate sections of a proposal are **not acceptable**, drop box submissions are **not accepted** either. If your submission was sent correctly, you will receive an auto-reply message acknowledging receipt of your Proposal.

Enclosed are our requirements and bid sheet for the purchase of **Pre-purchase of Chillers for the University's Alumni House, reference Project 042-322411**.

You must bid using the format shown in Schedule A. Vendors Quotation should include the following:

- Price Summary, signed by authorized agent of Vendors Company/Firm – please see **Schedule A**
- Exceptions/Restrictions (if any)

We look forward to receiving your quotation on or before **June 3, 2020**. Should you have any questions or concerns about this invitation, please contact me at (313) 577-3720 or by e-mail at ac6243@wayne.edu (copy to Valerie Kreher, Email: ab4889@wayne.edu). Thank you for your interest in doing business with Wayne State University.

Sincerely,

Robert Kuhn
Sr. Buyer

Cc: Omar Alhyari, Valerie Kreher, Ken Doherty, Fran Ahern, Steve Pecic



Information for Vendors

The Calendar of Events is as follows:

<u>Activity</u>	<u>Responsibility</u>	<u>Date</u>
Formal Release of RFQ	Purchasing (PD)	May 28, 2020
Questions due to Procurement & Strategic Sourcing	VENDORS	June 1, 2020 , no later than 12:00 (noon)
Delivery of Quotations by e-mail to: ac6243@wayne.edu	VENDORS	June 3, 2020 by 2:00 p. m.
Delivery and Acceptance	VENDORS/ET	State Your Earliest Lead Time

The UNIVERSITY will make every effort to adhere to the above schedule. It is subject however, to time extensions at the University's discretion.

Upon request, VENDOR must agree to provide a minimum of three (3) qualified references. Requests for references will come from Robert Kuhn, Sr. Buyer, and will be treated as confidential and not added to the publicly permanent RFP file.

References are to be from organizations that have successfully utilized the products and services. The references supplied should include the name and address of the organization, and the contact name(s), titles, e-mail, and the telephone numbers.

Failure to provide references (if requested) will result in disqualification of your bid.

Vendor selected shall have an excellent track record for providing goods and/or services as specified in this document.

Insurance Requirements

The University requires Certificates of Insurance per Schedule B for the following types of work: 1) For any and all construction or construction-like work, 2) When work or service is performed on campus, 3) When food is being provided by a private caterer, and 4) When moving services or bus transportation services are being provided. The University reserves the right to require insurance on a case by case basis.

When required, VENDORS must provide Certificates of Insurance or other evidence that insurance is in place. If awarded a contract, VENDOR must then provide a Certificate of Insurance naming Wayne State University / Office of Risk Management as a certificate holder and the Board of Governors as an additional insured. During the life of the contract, the VENDOR must maintain insurance as stated in Insurance Provisions (Schedule B) and any additional requirements as specified by the UNIVERSITY Office of Risk Management.

For this project, Insurance is **Not Required, equipment only, installation to be done by others**

Quotation Evaluation

1. Quotations will be evaluated and award will be based on the VENDOR'S ability to offer the best value (technical quality, past performance and price), and on anticipated quality of service for the following principal elements:
 - Ability to meet all mandatory requirements and specifications of this RFQ;
 - Cost of Services; Compensation and Fees; (Schedule A);



VENDOR quotations will be evaluated by an evaluation team consisting of members of the UNIVERSITY'S Purchasing and **the Facilities Planning and Management** . The UNIVERSITY reserves the right to take additional time for reference review, site visits and/or quotation negotiations.

2. To qualify for evaluation, a VENDOR'S quotation must be responsive, must have been submitted on time and must materially satisfy all **mandatory requirements** identified throughout the RFP. To be considered responsive, a quotation must be reasonable and substantially conform in the judgment of the UNIVERSITY to all of the specified requirements in the RFP.
3. If there are portions of any quotation the UNIVERSITY finds unacceptable or otherwise in need of clarification or revision, the UNIVERSITY reserves the right to negotiate with any or all VENDORS. Should the outcome of evaluations result in a recommendation, any resultant contract shall be subject to the approval of the UNIVERSITY'S General Counsel and be approved and signed by the appropriate UNIVERSITY representative.

The UNIVERSITY reserves the rights to accept, reject, modify, and/or negotiate any and all quotations received in conjunction with the Request for Quotation. It reserves the right to waive any defect or informality in the Quotations on the basis of what it considers to be in its best interests. Any quotation which the UNIVERSITY determines to be incomplete, conditional, obscure, or has irregularities of any kind, may be rejected.

This Request for Quotation (RFQ) in no manner obligates the UNIVERSITY to the eventual purchase of any products or services described, implied, or which may be proposed, until confirmed by written agreement, and may be terminated by the UNIVERSITY without penalty or obligation at any time prior to the signing of an Agreement or Purchase Order.

Vendors must refrain from giving any reference to this program, whether in the form of press releases, brochures, photographic coverage, or verbal announcements, without specific written approval from the University.

Quotations may be subject to public review after the contracts have been awarded. VENDORS responding to this RFQ are cautioned not to include any proprietary information as part of their Quotation unless such proprietary information is carefully identified as such in writing, and the UNIVERSITY accepts, in writing, the information as proprietary.

You must **email your responses to my attention at ac6243@wayne.edu**. Remember, your bids must be in the format provided and be received in the Procurement & Strategic Sourcing by **June 3, 2020 by 2:00 p.m.** Please submit your bids in the format provided on the quote sheet. Include any supplemental information that will illustrate the features of the vehicles proposed.

If you have any questions regarding this bid, please contact **Robert Kuhn** by email at **ac6243@wayne.edu** (**copy to Valerie Kreher, Email: ab4889@wayne.edu**).

Sincerely,

Robert Kuhn, Sr. Buyer

Attachment: Insurance Requirements –

- Cost Schedule A
- Insurance Requirements Schedule B
- Schedule C – Summary Questionnaire



SCHEDULE A - PRICE SCHEDULE

Purchase of **Pre-purchase of Chillers for the University's Alumni House, reference Project 042-322-411.**

Email your responses to Robert Kuhn, at ac6243@wayne.edu (copy to Valerie Kreher, Email: ab4889@wayne.edu). Remember, your bids must be in the format provided and be received in the Procurement & Strategic Sourcing by **June 3, 2020 by 2:00 p.m**

Vendor to provide their price including the startup, lead time, cut sheet and warranty.

\$ _____

Earliest Lead Time _____

Payment terms: 75% upon delivery of the chiller and 25% upon startup

**NOTICE: All prices will be considered F.O.B. destination unless otherwise indicated
If prices are F.O.B. shipping, please indicate total transportation charges**

Company Name: _____

Address: _____

Telephone: (_____) _____

Fax: (_____) _____

Email address: _____

Submitted by: _____

Signature _____

(Title)

(Date)



Schedule B - INSURANCE REQUIREMENTS (Rev 2-2015)

_____, at its sole expense, shall cause to be issued and maintained in full effect for the term of this agreement, insurance as set forth hereunder:

<u>Type of Insurance</u>	<u>General Requirements</u>	<u>Minimum Requirement</u>
1. Commercial General Liability (CGL) CGL insurance should be written on ISO form CG 00 01 (or equivalent substitute) Contracts valued at \$100,000 per year or more		\$1,000,000 combined single limit \$2,000,000 annual aggregate Umbrella Liability per occurrence and in the annual aggregate of \$5,000,000.
2. Commercial Automobile Liability (including hired and non-owned vehicles)		\$1,000,000 combined single limit per accident for bodily injury and property damage, without annual aggregate.
3. Workers' Compensation (Employers' Liability)		Required by the State of Michigan and Employer's Liability in the amount of \$500,000 per accident for bodily injury or disease.

Maximum Acceptable Deductibles

<u>Type of Insurance</u>	<u>Deductible</u>
Commercial General Liability	\$5,000
Commercial Automobile Liability	0
Workers' Compensation	0
Property - All Risk	\$1,000

Coverage

- All liability policies must be written on an occurrence form of coverage.
- Commercial General Liability (CGL) includes, but is not limited to: consumption or use of products, existence of equipment or machines on location, and contractual obligations to customers.
- The Board of Governors of Wayne State University shall be named as an additional insured, but only with respect to accidents arising out of said contract.
- The additional insured provision shall contain a cross liability clause as follows: "The insurance afforded applies separately to each insured against whose claim is made or suit is brought, except with respects to the limits of the company's liability."
- The insurance company for each line of insurance coverage will be reviewed and checked per the A.M. Best's Key Rating Guide. **A rating of not less than "A-" is required**

Certificates of Insurance

- Certificates of Insurance naming Wayne State University / Office of Risk Management as the certificate holder and stating the minimum required coverage must be forwarded to the Office of Risk Management to be verified and authenticated with the agent and/or insurance company.
- Certificates shall contain a statement from the insurer that, for this contract, the care, custody or control exclusion is waived.
- Certificates shall be issued on a ACORD form or one containing the equivalent wording, and require giving WSU a thirty (30) day written notice of cancellation or material change prior to the normal expiration of coverage.
- Revised certificates must be forwarded to the Office of Risk Management thirty (30) days prior to the expiration of any insurance coverage listed on the original certificate, as follows:

Wayne State University
Office of Risk Management
5700 Cass Avenue, Suite 4622 AAB
Detroit, MI 48202

Specific Requirements- Individual contracts may require coverage in addition to the minimum general requirement such as, business interruption, higher limits and or blanket fidelity insurance.

Exception to the insurance requirements is to be approved, in writing, by the Office of Risk Management. Exceptions are determined by the type and nature of the contract and the individual contractor.



WAYNE STATE UNIVERSITY



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C No. Ext):	FAX (A/C No.):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED	INSURER A:	
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADOL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GENL AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		Y	WSU Requires This			EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ \$2,000,000 PRODUCTS - COM/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS		Y	WSU Requires This			COMBINED SINGLE LIMIT (Ea accident) \$ \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in MI) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N	WSU Requires This			PER STATE <input checked="" type="checkbox"/> OTH-ER State of Michigan E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The Board of Governors of Wayne State University shall be named as an additional insured, but only with respect to accidents arising out of said contract

CERTIFICATE HOLDER Wayne State University Enterprise Risk Management & Insurance Programs 5700 Cass Avenue, Suite 4622 AAB Detroit, MI 48202	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE



WAYNE STATE UNIVERSITY

SCHEDULE C - SUMMARY QUESTIONNAIRE

YES ALTERNATIVE

1. Can your company provide the products quoted and/or **commence services on or before Commence Date and be completed by State Your Earliest Lead Time?** _____

2. If required, will your company provide a certificate of insurance to meet or exceed all our minimum requirements as outlined in **Schedule B?** _____ **Not Required**

3. Did your company complete and provide the Summary **Price Schedule A**, and submit it electronically? (**Zip Files are not acceptable**) _____

4. Are you or any Officer, Owner or Partner in this company an employee of Wayne State University, or have you been an employee within the past 24 months? If Yes, please explain. _____ **Yes**
_____ **No**

5. Are any family members of any Officer, Owner or Partner in this company employees of Wayne State University? If Yes, please explain. _____ **Yes**
_____ **No**

6. ADDENDA:

The undersigned affirms that the cost of all work covered by the following Addenda are taken into consideration when providing price and other elements of the vendor's proposal.

Addendum No.____Date_____ Addendum No.____Date_____

Addendum No.____Date_____ Addendum No.____Date_____

Company Name: _____

Address: _____

Telephone: (_____)_____

Email address: _____

Submitted by: _____

Signature _____

(Title)

(Date)



WSU Project: Alumni House Chiller

WSU Project Number: 042-322411

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. WSU terms and conditions apply to this section

1.2 DEFINITIONS

- A. Not Applicable

1.3 SUBMITTALS

- A. Product Data: Include refrigerant, rated capacities, operating characteristics, furnished specialties, and accessories.

- B. Shop Drawings: Complete set of manufacturer's prints of chiller assemblies, control panels, sections and elevations, and unit isolation. Include the following:

1. Assembled unit dimensions.
2. Weight and load distribution.
3. Required clearances for maintenance and operation.
4. Size and location of piping and wiring connections.
5. Wiring Diagrams: For power, signal, and control wiring.

- C. Coordination Drawings: Floor plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:

1. Structural supports.
2. Piping roughing-in requirements.
3. Wiring roughing-in requirements, including spaces reserved for electrical equipment.
4. Access requirements, including working clearances for mechanical controls and electrical equipment, and tube pull and service clearances.

- D. Certificates: For certification required in "Quality Assurance" Article.

- E. Source quality-control test reports.

- F. Startup service reports.

- G. Operation and Maintenance Data: For each water chiller to include in operation and maintenance manuals.

1.4 QUALITY ASSURANCE

- A. AHRI Certification

- B. ASHRAE Compliance:

- C. ASHRAE/IESNA 90.1 Compliance

- E. ASME Compliance F. Comply with NFPA 70.

- G. Comply with requirements of UL and UL Canada

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Ship chiller from the factory fully charged with refrigerant and filled with oil to construction contractor yard.



1.6 COORDINATION

- A. Coordinate chiller installation with construction contractor.

PART 2 - PRODUCTS

2.1 PACKAGED AIR-COOLED SCROLL CHILLER

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Trane
2. York
3. Daikin
4. Multistack
5. Clima cool
6. Arctic

- B. Description: Factory-assembled and run-tested air cooled chiller complete with compressor(s), compressor motors and motor controllers, evaporator, condenser where indicated, electrical power, controls, and indicated accessories.

- C. Chiller Description:

Factory assembled air cooled chiller with all necessary equipment
(Modular chiller is acceptable)

Fluid type: Chilled water

Leaving temperature: 40 F°

Entering temperature: 55 F°

Condenser type: Air cooled

Compressor type: Scroll

Entering air temperature: 95 F°

Integrated pump

Voltage: 208/230 V

Power: 3 Ph, 60Hz

Total power: 30-40KW

Evaporator heater

Non-Fused disconnect

Digital compressor

GFI outlet

Micro channel

Single point power connection

Vibration isolation package

Operating weight: Not to exceed 3,000 lb

Recommended dimensions: Not to exceed 85" height, 45" width, 120" length

- C. Refrigeration:

1. Refrigerant: Material: Classified as Safety Group A1 according to ASHRAE 34. R-410A; provide full operating charge of refrigerant and oil.

2. Refrigerant Compatibility: Parts exposed to refrigerants shall be fully compatible with refrigerants, and pressure components shall be rated for refrigerant pressures.

- D. Central Control System:

1. Master controller monitors and reports the following:

- a. Discharge pressure fault.
- b. Suction pressure fault.



- c. Compressor winding temperature.
 - d. Suction temperature.
 - e. Evaporator leaving chilled water temperature.
 2. Master controller powered by the chiller's single point power connection and shall monitor the following system parameters:
 - a. Chilled water entering and leaving temperatures.
 - b. Condenser water entering and leaving temperatures.
 - c. Chilled water and condenser water flow status.
 3. Building Automation System (BAS) Interface: Factory-installed hardware and software to enable the University's Siemens BAS to monitor, control, and display water chiller status and alarms.
 - a. Interface accomplished using Interoperability Web Portal capable of communication over BACnet and shall enable BAS operator to remotely control and monitor the chiller from an operator workstation. Control features and monitoring points displayed locally at water chiller control panel shall be available through BAS.
- E. Chiller shall have single point power connection and external inputs and outputs to be compatible with BAS. Inputs/Outputs include:
 1. Remote Start/stop.
 2. Customer alarm relay.
 3. Customer hot/chilled/load limit reset signal.
 4. EHW to mechanical cooling module.
 5. LHW from mechanical cooling module.
 6. ECHW to mechanical cooling module.
 7. LCHW from mechanical cooling module.
 8. Power phase monitor.
 9. Chilled water flow switch input.
 10. Condenser water flow switch input.
 11. Full load indicator relay.
 12. Condenser pump relay.
 13. Chilled water pump relay.
- F. Electrical Power: Chiller shall be equipped with pre-engineered buss bar electrical system for single point power. Where equipment size exceeds amp rating of buss bar, multiple power connections may be applied. Pre-engineered system shall also incorporate individual module isolation circuit breakers for full redundancy and ability to take individual modules off-line for repairs while other modules remain operational.
- G. Safeties, Controls, and Operation:
 1. Chiller safety controls system provided with the unit as a minimum include:
 - a. Low evaporator refrigerant pressure.
 - b. Loss of flow through evaporator.
 - c. Loss of flow through condenser.
 - d. High condenser refrigerant pressure.
 - e. High compressor motor temperature.
 - f. Low suction gas pressure.
 - g. Low leaving evaporator water temperature.
 2. Failure of chiller to start or chiller shutdown due to any of the above safety cutouts shall be annunciated by display of appropriate diagnostic description at unit



control panel. Annunciation will be in plain English. Alphanumeric codes are unacceptable.

3. Chiller shall be furnished with master controller as integral portion of chiller control circuitry to provide the following functions:

- a. Provide automatic chiller shutdown during periods when load level decreases below normal operating requirements of chiller. Upon increase in load chiller automatically restarts.
- b. Provision for connection to automatically enable chiller from remote BAS.
- c. Control panel shall provide alphanumeric display showing system parameters in English language with numeric data in English units.

4. Power Phase Monitor:

- a. Provide on incoming power supply to chiller. Device shall prevent chiller from operating during periods when incoming power is unsuitable for proper operation.
- b. Provide protection against following conditions:
 - 1) Low voltage
 - 2) Phase rotation.
 - 3) Loss of phase.
 - 4) Phase imbalance.

Q. Capacities and Characteristics:

1. Refer to chiller description

R. Accessories:

1. Factory-furnished, chilled-water and condenser-water flow switches for field installation.
2. Individual compressor suction and discharge pressure gages with shutoff valves for each refrigeration circuit.
3. Factory-furnished neoprene isolators for field installation.

2.2 SOURCE QUALITY CONTROL

- A. Factory test and inspect according to ASME Boiler and Pressure Vessel Code: Section VIII, Division 1. Stamp with ASME label.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Not Applicable.

3.2 STARTUP SERVICE

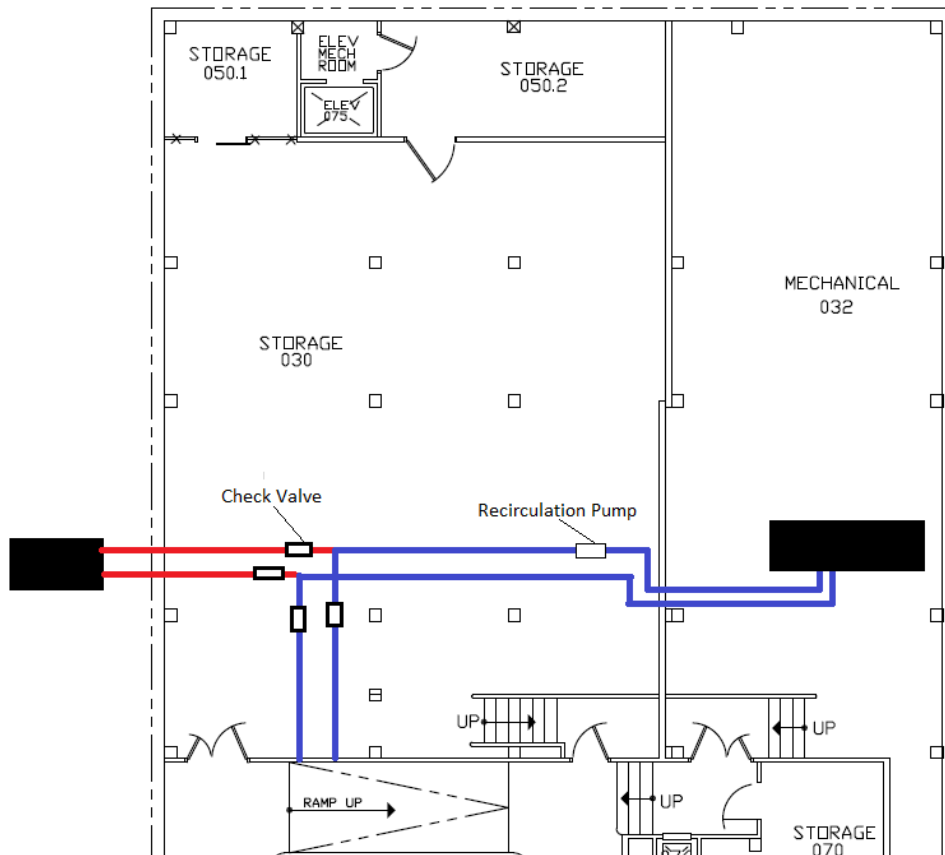
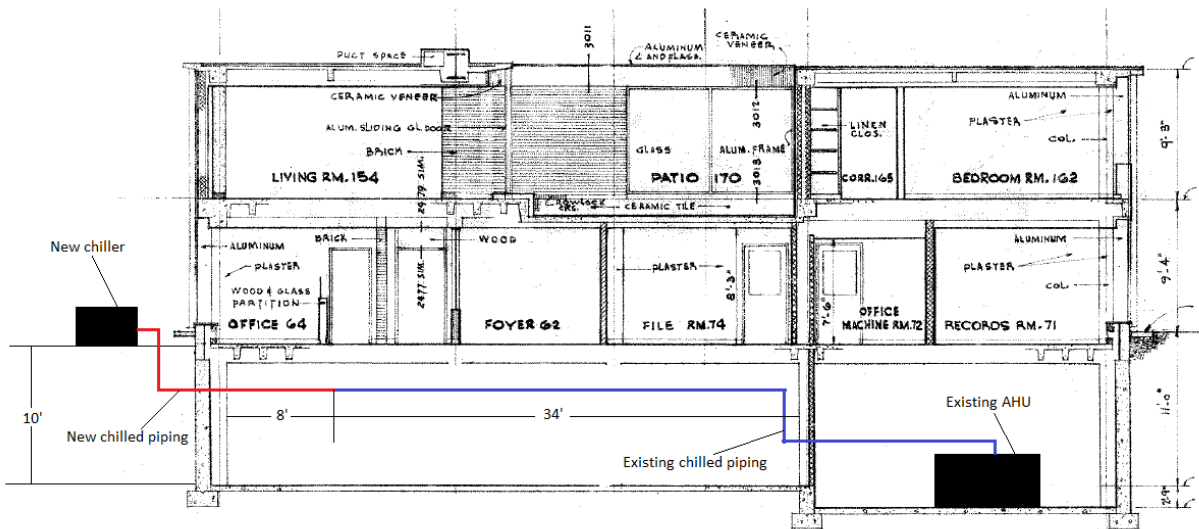
- A. Provide a factory-authorized service representative to perform startup service.
- B. Inspect field-assembled components, equipment installation, and piping and electrical connections for proper assemblies, installations, and connections.
- C. Complete installation and startup checks according to manufacturer's written instructions.
- D. Prepare a written startup report that records results of tests and inspections.

3.3 DEMONSTRATION

- A. Provide a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain water chillers. Video record the training sessions.



Recommended Installation:





Photos:



Chiller Location



Recirculation pump



New piping and old piping future connection.