



**LISLE LIBRARY DISTRICT**  
**DUPAGE COUNTY**  
**ILLINOIS**

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**LISLE LIBRARY DISTRICT**  
**RFP:**  
**HVAC SYSTEM UPGRADES**

August 13<sup>th</sup>, 2024

## **001113 Advertisement for Bids**

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NOTICE IS HEREBY GIVEN by the President and Board of Trustees of Lisle Library District, DuPage County, Illinois, that sealed bids will be received for the following improvement: **HVAC System Upgrades**. The Project Specifications will be available on our website, <https://www.lislelibrary.org> beginning August 13th, 2024, until bid opening day.

An electronic set bid Documents will be provided to interested bidders, beginning on August 13th, 2024, upon email request to Edgardo Nunez at [enunez@ccsdifference.com](mailto:enunez@ccsdifference.com).

Questions shall be directed to: [enunez@ccsdifference.com](mailto:enunez@ccsdifference.com). The deadline for questions is 5:00 p.m., August 28th, 2024.

Said bids will be received up to 1:00 p.m. local time, September 4th, 2024, at the library's front desk, 777 Front St, Lisle IL, and will be publicly opened and read at 1:05pm on the same day and location.

Indicate on the face of the sealed envelope: "SEALED BID FOR: HVAC System Upgrades". Unsigned or late bids will not be considered. The proposer assumes the risk of any delay in handling or delivery of the mail. Lisle Library District reserves the right to accept or reject any or all bids when there are sound documented reasons to do so and to waive informalities and minor irregularities in bids received.

No bid shall be withdrawn after the opening of the proposals without the consent of the President and Board of Trustees of Lisle Library District for a period of Sixty (60) days after the scheduled time of closing bids.

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## **002113 Instruction to Bidders**

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### **Purpose**

Lisle Library District, DuPage County, Illinois, notifies that sealed bids will be received for the following improvement:

HVAC System Upgrades.

The Project consists of several improvements to the HVAC system as detailed in the Bid Documents.

### **Proposal Preparation/Format**

Proposal shall be submitted in a sealed envelope addressed to:

Lisle Library District,  
777 Front St, Lisle,  
IL 60532

RE: SEALED PROPOSAL FOR: Lisle Library District RFP: **HVAC System Upgrades**

The Contractor's name and address shall appear in the upper left-hand corner of the proposal envelope with the RFP name appearing in the lower left-hand corner of the envelope. Bids will be submitted in an orderly format divided into sections and tabbed as appropriate. The Contractor shall submit minimally one (1) original, one (1) copy and one (1) electronic copy (PDF copy on flash drive) of the Bid. Failure to submit a proposal in this manner may be considered cause for rejection of the proposal as determined by Lisle Library District (**LLD**).

LLD does not assume the responsibility for delayed postal deliveries and does not recognize postmarks as representing the fact that a bid has been "received" by LLD before the specified deadline. The method of delivery of the proposal is solely the Contractor's risk.

If upon examination of the Bid Documents, the bidder shall discover discrepancies, omissions, or duplications in the bid documents, or questions of scope or intended quality, the bidder shall immediately notify LDD and its representatives, at [enunez@ccsdifference.com](mailto:enunez@ccsdifference.com), no later than the deadline for request for clarification indicated elsewhere in this RFP.

Contractor's may rely only on information contained in the proposal documents and provided in written addenda during this process and shall not rely on any oral information or interpretations given by any representatives or agents of LLD.

Contractor must complete, date, and sign the affidavits and certifications accompanying this proposal document. Failure to do so may result in rejection of the bid.

Contractor agrees to comply with all pertinent statutes of the State of Illinois relative to employment in connection with public contracts including, but not limited to, the pertinent provisions of the Illinois Fair Employment Practices Act, as amended; and agree that no unfair employment practice as defined therein, be committed by the Contractor, its subcontractor(s), suppliers of materials or services to the Contractor or their subcontractors, or any labor organization furnishing skilled or unskilled labor to the Contractor or their subcontractors.

Before submitting proposals, prospective Contractor(s) shall carefully examine the proposed Contract documents, acquaint themselves with all governing laws, ordinances, etc. and otherwise thoroughly familiarize themselves with all matters which may affect the performance of the work. The act of submitting a bid shall be considered as meaning that the Contractor has so familiarized themselves and, therefore, no concession will be granted by LLD because of any claim of misunderstanding or lack of information. Contractor(s) is expected to read and study all specifications with special care and to observe

all their requirements. Discrepancies, ambiguities, errors, or omissions noted by the Contractor shall be reported promptly for correction or interpretation before the date of the opening of proposal.

## **Proposal Withdrawal**

Bids may be withdrawn by letter, telegram, or in person prior to the time and date established for the opening of bids.

## **Exception to preparation/Format**

The RFP describes the requirements and response format in sufficient detail to secure comparable proposals, recognizing that various proponent approaches may vary widely. Any proposal that differs from the described format may be considered non-responsive and rejected.

## **Request for Clarification**

All requests for clarification shall be electronically submitted to: [enunez@ccsdifference.com](mailto:enunez@ccsdifference.com). Electronic inquiries shall be considered submitted once an electronic reply confirming receipt is sent to the inquirer. The deadline for clarifications is **5:00 p.m., August 28<sup>th</sup>, 2024**.

## **Site Visits / Access**

The optional Pre-Bid Walkthrough is scheduled for 8/21/2024 at 9:30 am CST. Please submit assistance confirmation electronically at least 48 hours in advance of the prior mentioned site visit date to: [enunez@ccsdifference.com](mailto:enunez@ccsdifference.com). Electronic inquiries shall be considered submitted once an electronic reply confirming receipt is sent to the inquirer.

## **Submittal Requirements**

Proposals must be received at Lisle Library District, 777 Front St, Lisle, IL 60532, up to 1:00 p.m. local time, September 4th, 2024. Unsigned or late bids will not be considered. Prospective packages shall be submitted in a sealed envelope clearly marked. No facsimile of proposals will be accepted. All material considered Confidential or Proprietary shall be identified within the proposal. Oral, telephonic, telegraphic, or facsimile transmitted bids will not be accepted. The bids shall be in a sealed envelope, properly marked with the title:

SEALED BID FOR:  
HVAC System Upgrades

## **Implied Requirements**

Any product or service that is not specifically addressed in the RFP, but which is necessary to provide functional capabilities proposed by the Contractor, must be included in the proposal.

### **Bid and Presentation Costs**

LLD is not liable in any way for any costs incurred by the Contractors in the preparation of their proposals in response to this RFP, nor for the presentation of their proposals and/or participation in any discussion or negotiations.

### **Acceptance of Bid Content**

The content of the Bid of the successful Contractor will become part of any contract awarded because of these specifications.

### **Basis of Award**

Based on its evaluation of the bids, LLD intends to award the project in the based interest of Library, based on Cost, Scope, Quality and Schedule considerations.

## **002400 Procurement Scope**

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### **Existing Conditions**

Space heating and cooling for the Lisle Library District is provided by (4) existing Air Handling Units (AHUs) located in two mechanical rooms on the first floor. Each AHU serves a separate portion of the building and provides all ventilation, cooling, and heating via individual zone VAV boxes, VRT boxes and Fan Powered VAV boxes with associated thermostats by Schneider located throughout. The hot water heating coils for the building are supplied by (1) Weil-McLain Boiler and (1) Bryan Boiler with associated inline pumps.

Each AHU is manufactured by Trane and (3) of the units operate as a variable air volume system with the remaining (1) operating as a multizone unit. Each AHU is equipped with a Direct-Expansion (DX) coil for cooling and a hot water coil for heating that is provided by the building's existing boiler plant.

Condenser units (CU) associated with each AHU are located on grade in mechanical enclosures located outside of each mechanical room and are manufactured by Trane and Carrier. It should be noted that the western mechanical enclosure is located under a metal grating.

Power for all equipment is fed from a 208/120V Switchboard located in the eastern mechanical room directly adjacent to the existing AHU equipment and boiler plant.

### **Replacement Scope of Work**

It should be noted that the design-build Prime Contractor is responsible for final design, permitting, construction, commissioning, warranty, and maintenance of new equipment provided under this project. The following scope of work is developed as a basis of design and is a part of the project documents and Owner Project Requirements (OPR).

The intent of the project is to replace one or more of the existing Condensing Units with new, "like-for-like" equipment. The intent is not to change cooling capacities unless it is deemed necessary by the design-build contractor. The following services shall be provided by the successful Prime design-build contractor:

- i. Mechanical engineering
- ii. Electrical engineering
- iii. HVAC/Electrical/Controls Demolition
- iv. Mechanical refrigerant piping
- v. Electrical modifications as necessary for new equipment
- vi. Low Voltage/Controls

The following is a proposed scope of work for the AHU replacement described above. This scope of work is ultimately the responsibility of the design-build contractor and their sub-contractors for a fully functioning system:

### **General Scope:**

- i. Contractor shall be responsible for all site work required for the placement and installation of new outdoor condensing units associated with each existing AHU. Condensing units shall be provided adequate airflow and service clearances required by the manufacturer.

- ii. Contractor shall be responsible for all new building penetrations associated with the demo and new work of new refrigerant line sets. Building openings associated with this project shall be sealed and made weathertight to match existing conditions.
- iii. Contractor is responsible for the relocation, temporary supporting, reinstallation, and re-supporting of any conduit, doors to provide access to the mechanical space, hydronic piping, or other items required to install new CU equipment in the Mechanical enclosures.
- iv. Contractor shall modify any equipment pads, or provide new, for all new CU equipment.

**Mechanical Scope:**

- i. Contractor shall demolish and dispose of the existing CU-2E Trane Condensing Unit that serves AHU-2E and is located in the Eastern mechanical enclosure in its entirety. This shall be as required for the installation of new equipment. Contractor shall provide new CU of equal size to the existing units. Basis of design shall be Carrier. Other manufacturers will be considered based on cost, availability, lead times, physical dimensions, etc. Cooling capacities, and airflows shall, at a minimum, be equal to the existing CU equipment.
- ii. Contractor shall demolish and dispose of the existing CU-1E Carrier Condensing Unit that serves AHU-1E and is located in the Eastern mechanical enclosure in its entirety. This shall be as required for the installation of new equipment. Contractor shall provide new CU of equal size to the existing units. Basis of design shall be Carrier. Other manufacturers will be considered based on cost, availability, lead times, physical dimensions, etc. Cooling capacities, and airflows shall, at a minimum, be equal to the existing CU equipment.
- iii. Contractor shall demolish and dispose of the existing CU-1W Carrier Condensing Unit that serves AHU-1W and is located in the Western mechanical enclosure in its entirety. This shall be as required for the installation of new equipment. Contractor shall provide new CU of equal size to the existing units. Basis of design shall be Carrier. Other manufacturers will be considered based on cost, availability, lead times, physical dimensions, etc. Cooling capacities, and airflows shall, at a minimum, be equal to the existing CU equipment.
- iv. Contractor shall demolish and dispose of the existing CU-2W Carrier Condensing Unit that serves AHU-2W and is located in the Western mechanical enclosure in its entirety. This shall be as required for the installation of new equipment. Contractor shall provide new CU of equal size to the existing units. Basis of design shall be Carrier. Other manufacturers will be considered based on cost, availability, lead times, physical dimensions, etc. Cooling capacities, and airflows shall, at a minimum, be equal to the existing CU equipment.
- v. Contractor shall demo and install new refrigerant line sets associated with each new outdoor condenser unit. Contractor shall coordinate the line sizing, routing, and refrigerant charge with the manufacturer as required.
- vi. Contractor to remove and replace existing DX coil installed in existing AHUs. New DX cooling coil to match existing air pressure drop of the existing coil. Contractor to measure static pressure drop of the existing coil and existing cabinet size prior to ordering of new coil. New DX cooling coils that require 2 stages shall be provided in interlaced configuration.
- vii. Contractor shall provide new DDC Controls, refrigerant control valves and any other controls required for a fully functional system. a. Intent is for CU controls to be integrated into the existing BAS
- viii. All new refrigerant piping shall be insulated per energy code minimum requirements.
  - a. Exterior refrigerant piping insulation shall be closed cell HT Armaflex or equal. No additional jacketing is required. Indoor insulation shall be closed cell Armaflex or equal.



### **Electrical Scope:**

- i. Contractor shall demolish all conduit and wiring as required for new condenser unit installation. Coordinate demolition with the mechanical contractor.
- ii. Contractor shall provide new conduit and wiring as required for new condenser unit installation. Coordinate new work with mechanical contractor.

### **Minimum Requirements**

- i. Design Build Contractor Responsibilities: As this project is a design-build project, the successful contractor will be responsible for the overall execution of the project, including final equipment selections, design, construction, operation, commissioning, warranties and preventative maintenance.
- ii. Code Compliance: This project shall comply with all relevant local and state codes including the International Energy Conservation Code (IECC), International Mechanical Code (IMC) and all other applicable building codes.
- iii. Shop Drawings: The successful contractor shall provide shop drawings for review by the owner and owner's representative.
- iv. Submittals: Similar to shop drawings, final submittals shall be provided prior to the release of equipment for review by the owner and owner's representative.
- v. Responsible for Permit: The successful contractor shall be responsible for obtaining required permits for this work including any permit drawings that may be required.
- vi. Warranties: The entire project shall be provided with a parts and labor warranty for the 1st year, which shall include preventative maintenance as recommended by the unit manufacturer.
- vii. Asbestos: This contractor shall not be responsible for asbestos abatement. However, if required, the successful contractor shall assist in identifying where asbestos requires removal.
- viii. Project Meetings: The project manager is required to attend any project meetings.
- ix. Owners' specific requirements:
  - a. AIA Contract: Refer to the attached Owner's AIA A142 contract. Submission of a bid assumes the contractor agrees to utilize the Owner's contract.
- x. Building Rules and Regulations: The successful contractor shall work within the rules and regulations of the building in terms of work hours, entry into areas, storage and staging, protection of finishes and parking.
- xi. If the library is to select more than one condensing unit to replace, the contractor shall complete the work on one Air Handling unit prior to beginning work on the next unit to minimize impact to the library.
- xii. As-built Drawings: After the completion of the construction phase, the contractor should include as-built Drawings as part of the project close-out documents submittal.
- xiii. For each Air Handling Unit, the acceptable allowable fan downtime shall be 4-6 Hours.

## **003100 Available Project Information**

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### **Summary**

This document summarizes information available to Bidders:

- xiv. Contract documents:
  - a. Request for proposal dated 08-13-2024
  
- xv. Reference documents:
  - a. 232300 – Refrigerant Piping Specifications (**Attachment A**)
  - b. 236213 – Packed Air-Cooled Refrigerant Compressor and Condensing Unit Specifications. (**Attachment B**)
  - c. Layout Reference Drawing (**Attachment C**)
  - d. Rider to Owner’s contract (**Attachment D**)

## 004100 Bid Form

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RFP: HVAC System Upgrades  
Proposal Due Date /Time: September 4<sup>th</sup>, 2024, by 1:00pm.

For consideration, Bids must be received no later than the bid due time as set forth above.

You are invited to submit a Bid for the above described work subject to the terms and conditions set forth in the Instruction to Bidders.

### **Bidder Identification:**

Name:  
Address:  
Address:  
City, State, Zip:  
Contact Name:  
Telephone:  
Email address:

### **Bid Submittal Requirements**

The Undersigned hereby confirms that all requirements of the bid submittal listed in the Request for Proposal have been included in the submitted Proposal. Failure to include any of the requirement materials may be considered cause for rejection of the proposal. Documents that need to be submitted with this proposal include:

- Signed and completed Bid Form
- Contractor critical path schedule
- Bid Bond in the Sum of 10% of the base bid amount
- Certification of prevailing wage requirements\*
- Certification of jobsite Covid-19 requirements compliance\*
- Certification of Illinois Preference Act Requirements\*
- Non-Collusion Affidavit signed and notarized\*
- Bidder eligibility Certificate\*
- Certificate of compliance with Illinois Frug-Free Workplace Act\*
- Certificate regarding non-discrimination in employment – protected categories\*
- Certificate regarding sexual harassment policy\*
- Contractor and subcontractor substance abuse prevention policy\*
- Certificate regarding criminal background investigation
- Documentation that contractor's insurance rating is 1.0 or less

- Letter from president of the company certifying absence of any filings for protection from creditors under Federal bankruptcy laws and/or placement under receivership or similar restrictions in the last five years.
- Letter from president of the company certifying absence of contracts terminated by owner for nonperformance in the past five years, except where not due to the material fault of the bidders.
- Letter from bonding company certifying absence of claims on bidder's bond in the past five years, except where not due to the material fault of the bidder.
- Bidder exclusions and clarifications (if any)
- Bidder comments or requested modifications to standard AIA A142, if any.
- Completed AIA Document A305-1986\*

**\* : Document attached at the end of the 004113 - Bid Form Section.**

**Base Bid**

The Lisle Library District reserves the right to one or more, and any combination of the following Base Bid Items. There is no minimum guarantee in terms of the volume, scale or dollar amount of the work that will be awarded

**Base Bid CU-1E**

The Undersigned proposes to furnish and perform all Work necessary for the completion of the General Contract as shown and specified in accordance with the Contract Documents for the BASE BID CU-1E LUMP SUM of:

\$ \_\_\_\_\_  
\_\_\_\_\_ Dollars

and, if this proposal is accepted, agrees to execute a formal Contract subject to modifications as may be exercised by the Owner under alternate proposals.

**Base Bid CU-2E**

The Undersigned proposes to furnish and perform all Work necessary for the completion of the General Contract as shown and specified in accordance with the Contract Documents for the BASE BID CU-2E LUMP SUM of:

\$ \_\_\_\_\_  
\_\_\_\_\_ Dollars

and, if this proposal is accepted, agrees to execute a formal Contract subject to modifications as may be exercised by the Owner under alternate proposals.

**Base Bid CU-1W**

The Undersigned proposes to furnish and perform all Work necessary for the completion of the General Contract as shown and specified in accordance with the Contract Documents for the BASE BID CU-1W LUMP SUM of:

\$ \_\_\_\_\_  
\_\_\_\_\_ Dollars

and, if this proposal is accepted, agrees to execute a formal Contract subject to modifications as may be exercised by the Owner under alternate proposals.

**Base Bid CU-2W**

The Undersigned proposes to furnish and perform all Work necessary for the completion of the General Contract as shown and specified in accordance with the Contract Documents for the BASE BID CU-2W LUMP SUM of:

\$ \_\_\_\_\_  
\_\_\_\_\_ Dollars

and, if this proposal is accepted, agrees to execute a formal Contract subject to modifications as may be exercised by the Owner under alternate proposals.

**Alternate No. 1**

Deduct Alternate 1 shall include the credit granted to the owner in the case of awarding the totality of the base bid contract (All 4 Condensing Units). The prior mentioned credit shall represent the savings resulting from the replacement of the (4) Units **at once**, in lieu of replacing the units in a “one by one” basis.

Add Alternate                       Deduct Alternate (check one)

\_\_\_\_\_ DOLLARS  
( \$ \_\_\_\_\_ )

### Proposed Unit Costs

Proposed Labor unit rates for modifications to scope.

UNIT COST SHEET		
Item	Unit Cost	Comments
Superintendent	\$ (hr)	
Technician	\$ (hr)	
Foreman	\$ (hr)	
Journeyman	\$ (hr)	
Laborer	\$ (hr)	

### Proposed Labor & Material Markup Rates

Markups for modifications to scope.

MARKUP SHEET		
Equipment	Cost	Comments
OH&P	%	
Insurance	%	
Bond	%	

## Prevailing Wage Requirement

Each contractor or subcontractor performing work on this project shall comply in all respects with all laws governing the employment of Labor, Social Security, and Unemployment Insurance of both the State and Federal government. There shall be paid to each employee performing construction work or transportation of materials and equipment on this project at the site of the Project, no less than the minimum wage for the classifications of labor employed in compliance with 820 ILCS 130/1 et seq., as now existing or hereafter amended.

## Tax Exemption

The Owner is exempt from sales tax and the Undersigned acknowledges that sales taxes have not been included in the Bid.

## Contract Security

The contractor shall attach to the Form of Proposal a Bid Bond, in the amount not less than 10% of the Base Bid amount, payable to the LLD, if the undersigned fails to execute the Standard Form of Owner/Contractor Agreement (AIA Document A142), as modified herein by the Supplementary Conditions, and which is hereby made a part of this Contract Document by reference, and furnish evidence of his ability to become bonded and provide insurance coverage as specified, within five days after Owner's notification of the intent to award the contract to the contractor.

## Bid Affirmation

In submitting this proposal, it is understood that the right is reserved by LLD to reject any and all Bids for any reason in the best interest of the library. The undersigned proposes and agrees to execute and deliver the contract in the prescribed form within ten (10) days after the award of the contract.

The undersigned agrees not to withdraw the Bid for 60 days.

It is hereby affirmed that the above proposal has been made in accordance with the terms and conditions set forth on the face hereof and in the bidding documents listed in this Request to Bid and the bidder will accept any awards made to him as a result of this quotation.

Bidder's Name:  
Address:  
City, State Zip

Authorized Signature:

Name: *(Print/Type)*

Title:

If a corporation: Incorporated in The State of

ATTEST

Secretary:

The Bidder as listed above **IS** or **IS NOT** (*circle one*) Union signatory.



# AIA<sup>®</sup> Document A305<sup>™</sup> – 1986

## Contractor's Qualification Statement

The Undersigned certifies under oath that the information provided herein is true and sufficiently complete so as not to be misleading.

**SUBMITTED TO:**

**ADDRESS:**

**SUBMITTED BY:**

**NAME:**

**ADDRESS:**

**PRINCIPAL OFFICE:**

- Corporation
- Partnership
- Individual
- Joint Venture
- Other

**NAME OF PROJECT** (if applicable):

**TYPE OF WORK** (file separate form for each Classification of Work):

- General Construction
- HVAC
- Electrical
- Plumbing
- Other (please specify)

**ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences.

Consultation with an attorney is encouraged with respect to its completion or modification.

This form is approved and recommended by the American Institute of Architects (AIA) and The Associated General Contractors of America (AGC) for use in evaluating the qualifications of contractors. No endorsement of the submitting party or verification of the information is made by AIA or AGC.

**§ 1. ORGANIZATION**

**§ 1.1** How many years has your organization been in business as a Contractor?

**§ 1.2** How many years has your organization been in business under its present business name?

**§ 1.2.1** Under what other or former names has your organization operated?

**§ 1.3** If your organization is a corporation, answer the following:

**§ 1.3.1** Date of incorporation:

**§ 1.3.2** State of incorporation:

**§ 1.3.3** President's name:

**§ 1.3.4** Vice-president's name(s)

**§ 1.3.5** Secretary's name:

**§ 1.3.6** Treasurer's name:

**§ 1.4** If your organization is a partnership, answer the following:

**§ 1.4.1** Date of organization:

**§ 1.4.2** Type of partnership (if applicable):

**§ 1.4.3** Name(s) of general partner(s)

**§ 1.5** If your organization is individually owned, answer the following:

**§ 1.5.1** Date of organization:

§ 1.5.2 Name of owner:

§ 1.6 If the form of your organization is other than those listed above, describe it and name the principals:

## § 2. LICENSING

§ 2.1 List jurisdictions and trade categories in which your organization is legally qualified to do business, and indicate registration or license numbers, if applicable.

§ 2.2 List jurisdictions in which your organization's partnership or trade name is filed.

## § 3. EXPERIENCE

§ 3.1 List the categories of work that your organization normally performs with its own forces.

§ 3.2 Claims and Suits. (If the answer to any of the questions below is yes, please attach details.)

§ 3.2.1 Has your organization ever failed to complete any work awarded to it?

§ 3.2.2 Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers?

§ 3.2.3 Has your organization filed any law suits or requested arbitration with regard to construction contracts within the last five years?

§ 3.3 Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? (If the answer is yes, please attach details.)

§ 3.4 On a separate sheet, list major construction projects your organization has in progress, giving the name of project, owner, architect, contract amount, percent complete and scheduled completion date.

§ 3.4.1 State total worth of work in progress and under contract:

§ 3.5 On a separate sheet, list the major projects your organization has completed in the past five years, giving the name of project, owner, architect, contract amount, date of completion and percentage of the cost of the work performed with your own forces.

§ 3.5.1 State average annual amount of construction work performed during the past five years:

§ 3.6 On a separate sheet, list the construction experience and present commitments of the key individuals of your organization.

**§ 4. REFERENCES**

**§ 4.1 Trade References:**

**§ 4.2 Bank References:**

**§ 4.3 Surety:**

**§ 4.3.1 Name of bonding company:**

**§ 4.3.2 Name and address of agent:**

**§ 5. FINANCING**

**§ 5.1 Financial Statement.**

**§ 5.1.1 Attach a financial statement, preferably audited, including your organization's latest balance sheet and income statement showing the following items:**

Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses);

Net Fixed Assets;

Other Assets;

Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes);

Other Liabilities (e.g., capital, capital stock, authorized and outstanding shares par values, earned surplus and retained earnings).

**§ 5.1.2 Name and address of firm preparing attached financial statement, and date thereof:**



## **LISLE LIBRARY DISTRICT**

### **Certified Payroll for Public Works Projects**

Dear Contractor/Subcontractor,

As you may know, the Public Act 94-0515 amend the Prevailing Wage Act. Effective August 10, 2005, all contractors and their subcontractors who are engaged in public works projects must provide a certified monthly payroll report either in person, by mail or electronically for our records.

Please refer to the two (2) attached exhibits.

101874

# LISLE LIBRARY DISTRICT

## Wage Rates

Each CONTRACTOR or Subcontractor performing Work on this Project shall comply in all respects with all laws governing the employment of Labor, Social Security, and Unemployment Insurance of both the State and Federal government. There shall be paid to each employee engaged in Work under this Contract at the site of the Project, no less than the minimum wage for the classifications of labor employed in compliance with 820 ILCS 130/1 et seq., as now existing or hereafter amended.

In accordance with 820 ILCS 130/5, The contractor and each subcontractor shall make and keep, for a period of not less than 3 years, records of all laborers, mechanics, and other workers employed by them on the Project; the records shall include each worker's name, address, telephone number when available, social security number, classification or classifications, the hourly wages paid in each period, the number of hours worked each day, and the starting and ending times of work each day.

The Contractor and each subcontractor shall submit monthly, in person, by mail, or electronically a certified payroll to the Library. The certified payroll shall consist of a complete copy of the records. The certified payroll shall be accompanied by a statement signed by the contractor or subcontractor which avers that:

- (i) such records are true and accurate;
- (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required; and
- (iii) the contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class B misdemeanor

Upon 2 business days' notice, the contractor and each subcontractor shall make available for inspection its records to the Library, its officers and agents, and to the Director of Labor and his deputies and agents at all reasonable hours at a location within this State. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor.

**For your reporting ease, our sample cover sheet is attached.**



**LISLE LIBRARY DISTRICT  
Contractor/Subcontractor Monthly Report Cover Sheet**

**Contractor/Subcontractor**

**Name:** \_\_\_\_\_

**Project Description** - Bid number or physical description and/or area where work is being done:

\_\_\_\_\_

**Dates of Work Covered By this Report:**

\_\_\_\_\_

**Name of the Person Making the Report:**

\_\_\_\_\_

**Telephone Number:**

\_\_\_\_\_

**Reporting Person's Title:**

\_\_\_\_\_

**All reports here-in are to be forwarded to:**

**LISLE LIBRARY DISTRICT  
777 Front St  
Lisle, IL 60532**

**\* The attached reports are to be in complete compliance with the Illinois Compiled Statute 820.I.L.C.S. 130/5.**

**LISLE LIBRARY DISTRICT**  
**Certification of Prevailing**  
**Wage Requirements**

I, \_\_\_\_\_, Contractor, hereby certifies that all laborers, workers and mechanics performing work under the contract shall not be paid less than the prevailing wage as found by the Illinois Department of Labor or the Board of Trustees and that Contractor and all subcontractors shall in all other respects comply with the *Prevailing Wage Act* in carry out work under the contract. If, during the course of work under this contract, the Department of Labor revises the prevailing rate of hourly wages to be paid under this contract, Contractor shall have the sole responsibility and duty to ensure that the revised prevailing rate of hourly wages is paid by Contractor and all subcontractors to each worker to whom a revised rate is applicable. Revisions to the prevailing wage as set forth above shall not result in an increase in the contract sum. Contractor shall protect, defend, indemnify and hold the Owner harmless for any claims or demands made as a result of Contractor's failure to comply with this certification.

Certified By: \_\_\_\_\_ Dated: \_\_\_\_\_  
(Contractor's Authorized Representative)

\_\_\_\_\_  
(Name of Contractor of Subcontractor's Representative)

\_\_\_\_\_  
(Title of Representative)

\_\_\_\_\_  
(Name of Contractor or Subcontractor)

Address of Contractor or Subcontractor:  
\_\_\_\_\_  
\_\_\_\_\_

SUBSCRIBED and SWORN TO before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
(Notary Public)

**LISLE LIBRARY DISTRICT**  
**Certification of Jobsite**  
**Covid-19 Requirements Compliance**

I, \_\_\_\_\_, Contractor, hereby certifies that all laborers, workers and mechanics performing work under the contract shall at all times while on the job site comply with applicable requirements of the National Center for Disease Control and Illinois Department of Public Health as they pertain to health and safety guidelines relative to control of the disease commonly known as Covid-19, and that Contractor and all subcontractors shall in all other respects comply with the these requirements as they carry out work under the contract. If, during the course of work under this contract, any of the above entities modify their requirements as they pertain to control to Covid-19, Contractor shall have the sole responsibility and duty to ensure that the revised requirements are stringently adhered to. Revisions to the requirements as set forth above shall not result in an increase in the contract sum. Individual workers who fail to adhere to these requirements will not be allowed access to the job site. Contractor shall protect, defend, indemnify and hold the Owner harmless for any claims or demands made as a result of Contractor's failure to comply with this certification.

Certified By: \_\_\_\_\_ Dated: \_\_\_\_\_  
(Contractor's Authorized Representative)

\_\_\_\_\_  
(Name of Contractor of Subcontractor's Representative)

\_\_\_\_\_  
(Title of Representative)

\_\_\_\_\_  
(Name of Contractor or Subcontractor)

Address of Contractor or Subcontractor:

\_\_\_\_\_  
\_\_\_\_\_

SUBSCRIBED and SWORN TO before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
(Notary Public)

**LISLE LIBRARY DISTRICT  
Certification of Illinois  
Preference Act Requirements**

I, \_\_\_\_\_, Contractor, hereby certifies that it will use at least 90% Illinois laborers on all public works projects that receive State funds or funds administered by the State during a period of excessive unemployment. Excessive unemployment is defined as any month immediately following two (2) consecutive calendar months that the Illinois unemployment rate exceeds 5%. Contractor shall protect, defend, indemnify and hold the Owner harmless for any claims or demands made as a result of Contractor's failure to comply with this certification.

Certified By: \_\_\_\_\_ Dated: \_\_\_\_\_  
(Contractor's Authorized Representative)

\_\_\_\_\_  
(Name of Contractor or Subcontractor's Representative)

\_\_\_\_\_  
(Title of Representative)

\_\_\_\_\_  
(Name of Contractor or Subcontractor)

Address of Contractor or Subcontractor:

\_\_\_\_\_  
\_\_\_\_\_

SUBSCRIBED and SWORN TO before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
(Notary Public)

**LISLE LIBRARY DISTRICT  
Non-Collusion Affidavit**

AFFIDAVIT: "I (we) hereby certify and affirm that my (our) proposal was prepared independently for this project and that it contains no fees or amounts other than for the legitimate execution of this work as specified and that it includes no understanding or agreements in restraint of trade."

(If an Individual)

Signature of Bidder \_\_\_\_\_ (Seal)

Business Address \_\_\_\_\_  
\_\_\_\_\_

---

(If a Partnership)

Firm Name \_\_\_\_\_ (Seal)

By \_\_\_\_\_

Business Addresses \_\_\_\_\_ (\_\_\_\_\_)

of all Partners \_\_\_\_\_ (\_\_\_\_\_)

of the Firm \_\_\_\_\_ (\_\_\_\_\_)

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(If a Corporation)

Corporate Name \_\_\_\_\_

By \_\_\_\_\_

Business Address \_\_\_\_\_

\_\_\_\_\_ (Corporate Seal)

Name of Officers: (President) \_\_\_\_\_  
(Secretary) \_\_\_\_\_  
(Treasurer) \_\_\_\_\_

Attest: \_\_\_\_\_  
(Secretary)

---

Name of Bidder \_\_\_\_\_

Date \_\_\_\_\_

**LISLE LIBRARY DISTRICT  
Bidder Eligibility Certificate**

720 ILCS 5/33E-11 requires that all contractors bidding for public agencies in the State of Illinois certify that they are not barred from bidding on public contracts for bid rigging or bid rotation.

The following certification must be completed, signed and submitted with the Bidder's Form of Proposal.  
FAILURE TO DO SO WILL RESULT IN DISQUALIFICATION OF THE BIDDER.

\_\_\_\_\_, as part of its bid on a contract for  
(Firm Name of Contractor)

**LISLE LIBRARY DISTRICT  
RENOVATION**

certifies that said contractor is not barred from bidding on the aforementioned contract as a result of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

Firm Name: \_\_\_\_\_

By: \_\_\_\_\_ (Typed or printed name)  
(Authorized Agent of Contractor)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

Subscribed and sworn to  
before me on this \_\_\_\_ day  
of \_\_\_\_\_, 2021.

\_\_\_\_\_  
(Notary Public)

**LISLE LIBRARY DISTRICT**  
**Certification of Compliance with Illinois**  
**Drug-Free Workplace Act**

[Contractors With 25 Or More Employees]

\_\_\_\_\_, having 25 or more employees, does hereby certify pursuant to Section 3 of the *Illinois Drug-Free Workplace Act* (30 ILCS 580/3) that [he, she, it] shall provide a drug-free workplace for all employees engaged in the performance of work under the contract by complying with the requirements of the *Illinois Drug-Free Workplace Act* and, further certifies, that [he, she, it] is not ineligible for award of this contract by reason of debarment for a violation of the *Illinois Drug-Free Workplace Act*.

\_\_\_\_\_  
By Authorized Agent

\_\_\_\_\_  
Date

SUBSCRIBED and SWORN TO before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
NOTARY PUBLIC

**LISLE LIBRARY DISTRICT**  
**Certificate Regarding Non-Discrimination in Employment**  
**- Protected Categories**

\_\_\_\_\_ [contractor], does hereby certify that [he, she, it] has a written policy that includes, at a minimum, the following information: (i) the definition of persons in a Protected Category in Employment under State and Federal law; (ii) the illegality of discrimination against persons in a Protected Category in Employment; (iii) an internal complaint process including penalties; (iv) the legal recourse, investigative and complaint process available through both the Illinois Department of Human Rights and Human Rights Commission and the U.S. Equal Employment Opportunity Commission; (v) directions on how to contact the Illinois Department of Human Rights and Human Rights Commission and the U.S. Equal Employment Opportunity Commission; and (vi) protection against retaliation.

Discrimination against Persons in a Protected Category in Employment can occur in the following categories: Age, Disability, Equal Pay/Compensation, Genetic Information, Harassment, National Origin, Pregnancy, Race/Color, Religion, and Sex-Based Discrimination.

\_\_\_\_\_  
By Authorized Agent

\_\_\_\_\_  
Date

SUBSCRIBED and SWORN TO before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
NOTARY PUBLIC



**LISLE LIBRARY DISTRICT**  
**Certificate Regarding Sexual Harassment Policy**

\_\_\_\_\_ [contractor], does hereby certify pursuant to Section 2-105 of the *Illinois Human Rights Act (775 ILCS 5/2-105)* that [he, she, it] has a written sexual harassment policy that includes, at a minimum, the following information: (i) the illegality of sexual harassment; (ii) the definition of sexual harassment under State law; (iii) a description of sexual harassment, utilizing examples; (iv) an internal complaint process including penalties; (v) the legal recourse, investigative and complaint process available through the Department of Human Rights and Human Rights Commission; (vi) directions on how to contact the Department of Human Rights and Human Rights Commission; and (vii) protection against retaliation.

\_\_\_\_\_  
By Authorized Agent

\_\_\_\_\_  
Date

SUBSCRIBED and SWORN TO before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
NOTARY PUBLIC

**LISLE LIBRARY DISTRICT  
CONTRACTOR AND SUBCONTRACTOR  
SUBSTANCE ABUSE PREVENTION POLICY**

Pursuant to P.A. 95-0635 (the "Substance Abuse Prevention on Public Works Act"), employees of the Contractor and employees of any Subcontractor are prohibited from the use of drugs or alcohol, as defined in the Act, while performing work on any public works project.

Before the Contractor or Subcontractor commences work, the Contractor and any Subcontractor shall have in place a written Substance Abuse Prevention Program for the prevention of substance abuse among its employees which meets or exceeds the requirements in P.A. 95-0635 or shall have a collective bargaining agreement in effect dealing with the subject matter of P.A. 05-0635.

The Contractor and any Subcontractor shall file with the public body engaged in the construction of the public works: a copy of the substance abuse prevention program along with a cover letter certifying that their program meets the requirements of the Act or a letter certifying that the Contractor or Subcontractor has a collective bargaining agreement in effect dealing with the subject matter of this Act. A certification form is attached and must be completed by the Contractor and each Subcontractor to this Contract.

101874

Date

Ms. Tatiana Weinstein, Director  
Lisle Library  
777 Front Street  
Lisle, Illinois 60532

Re: Substance Abuse Prevention Program

Pursuant to Public Act 95-0635, the undersigned hereby certifies that it is in compliance with the terms and provisions of the Substance Abuse Prevention on Public Works Act. In particular, the undersigned hereby represents and warrants to the Lisle Library as follows:

**[complete either A or B below]**

- A. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has signed collective bargaining agreements that are in effect for all of its employees, and that deal with the subject matter of Public Act 95-0635.

\_\_\_\_\_  
Contractor/Subcontractor

\_\_\_\_\_  
Name of Authorized Representative (type or print)

\_\_\_\_\_  
Title of Authorized Representative (type or print)

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Authorized Representative

- B. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has in place for all of its employees not covered by a collective bargaining agreement that deals with the subject of the Act, the attached substance abuse prevention program that meets or exceeds the requirements of Public Act 95-0635 **[attach a copy of the program]**.

\_\_\_\_\_  
Contractor/Subcontractor

\_\_\_\_\_  
Name of Authorized Representative (type or print)

\_\_\_\_\_  
Title of Authorized Representative (type or print)

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Authorized Representative

**LISLE LIBRARY DISTRICT**  
**Certificate Regarding Criminal Background Investigations**

Contractor hereby represents, warrants, and certifies that no officer or director thereof has any knowledge that any employee thereof has been convicted of committing or attempting to commit "Criminal Code of 2012," 720 ILCS, Sections 5/11-6 (Indecent solicitation of a child), 5/11-30 (Public indecency), 5/11-14 (Prostitution), 5/11-18 (Patronizing a prostitute), 5/11-18.1 (Patronizing a minor engaged in Prostitution, 5/14-3 (Promoting prostitution), 5/11-14.4 (Promoting juvenile prostitution), 5/11-19.1 (Sexual exploitation of a child), 5/11-20 (Obscenity), 5/11-20.1 (Child Pornography), 5/11-1.30 (Aggravated criminal sexual assault), 5/11-1.50 (Criminal sexual abuse), and 5/11-1.60 (Aggravated criminal sexual abuse), and/or those offenses defined in the "Cannabis Control Act," 720 ILCS, 550/1 et. seq. (except the "Illinois Controlled Substances Act," 720 ILCS 570/100 et. seq. and/or any offense committed or attempted in any other state or against the laws of the United States, which if committed or attempted in this State, would have been punishable as one or more of the foregoing offenses. Contractor further agrees that it shall not employ any person who have or may have direct, daily contact with the pupils and for whom a criminal background investigation has not been conducted pursuant hereto, and further represents and agrees that all applicants for any such employment shall furnish with their applications the attached written "Authorization for Criminal Background Investigations" form authorizing the Board of Trustees to request a fingerprint-based criminal background investigation of said applicant pursuant to State of Illinois statues and to receive criminal history record information pursuant thereto to determine if the applicant has been convicted of committing or attempting to commit any of the criminal or drug offenses enumerated above. Contractor shall incur any costs and expenses associated with the fingerprint-based criminal background investigation. Contractor further represents, warrants, and certifies that no applicant for employment with respect to whom the criminal investigation reveals any conviction for committing and/or attempting to commit any of the above enumerated offenses, shall be employed thereby in any position that involves or may involve contact with minors. This certification is executed on the date hereinafter indicated by the designated contractor by its duly authorized officer.

By: \_\_\_\_\_

Its: \_\_\_\_\_

Dated: \_\_\_\_\_

**LISLE LIBRARY DISTRICT**  
**Authorization for Criminal Background Investigations**

AUTHORIZATION FOR CRIMINAL BACKGROUND INVESTIGATION INFORMATION

The undersigned hereby authorizes the Board of Trustees, Lisle Library District to request a fingerprint-based criminal background investigation from the Illinois State Police, pursuant to State of Illinois statues, and to receive criminal history record information pursuant thereto.

By: \_\_\_\_\_  
(Printed/Typed Name of Applicant Employee)

By: \_\_\_\_\_  
(Signature of Applicant or Employee)

Dated: \_\_\_\_\_

NOTE: SIGNATURE NOT REQUIRED FOR SUBMITTAL WITH BID. THIS IS THE FORM REFERRED TO FOR USE WITH EMPLOYMENT APPLICATIONS.

## **007300 Supplementary Conditions**

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### **Project Schedule**

The Contractor shall include all necessary provisions, including any necessary overtime to complete the base scope per the dates below:

Project Award: 9/18/2024

Shop drawings completion: 10/16/2024

Contract Required Substantial Completion: No later than 8 weeks after on-site mobilization.

The Contractor shall submit a Construction Schedule with the Bid. The schedule shall identify the critical path and allow for winter and inclement weather.

### **Site Supervision**

The Contractor shall provide site supervision as required to manage and oversee the work.

### **Prevailing Wage Rates**

This Contract calls for the construction of a “public work”, within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01, et seq. (the “Act”). The Act requires Contractors and Subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the “prevailing rate of wages” (hourly cash wages plus fringe benefits) in the county where the work is performed. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor’s website at: <http://www.state.il.us/agency/idol/rates/rates.HTM>. All Contractors and Subcontractors rendering services under this Contract must comply with all requirements of the Act, including but not limited to, all wage, notice and record keeping duties.

The schedule of prevailing wage rates current as of the time of these Specifications is attached hereto and made a part hereof. Should a change in the schedule of prevailing wage rates occur during the term of any Contract and cause an increase in the cost of labor to any Contract, Subcontractor or sub-Subcontractor, such an increase shall not be the basis for any change order or change in the construction cost to Owner.

### **Preference in Employment**

No person shall be refused or denied employment in any capacity on the grounds of unlawful discrimination, as that term is defined in the Illinois Human Rights Act, nor be subjected to unlawful discrimination in any manner, in connection with the contracting for or the performance of any work or service of any kind, by, for, on behalf of, or for the benefit of the Owner.

The Illinois Human Rights Act applies fully to this Contract and this Contract shall be performed in all respects in compliance with the Illinois Human Rights Act 775 ILCS 5/1-101, et seq., and the Illinois Public Works Employment Discrimination Act 775 ILCS 10/0.01, et seq.

### **Review of Project Site and Contract Documents**

By preparing his bid on the Project, the Contractor acknowledges and agrees that the Contract Specifications and

drawings are complete, and sufficient to enable the Contractor to determine the cost of the work and to enable him to construct the work, in accordance with all applicable laws and regulations governing the work, and otherwise to fulfill his obligations under and as provided in the Contract. The Contractor further acknowledges that he has visited and examined the site, including all physical and other conditions affecting the work and is fully familiar with all of the conditions affecting the same and has considered all these factors in preparing his bid.

In connection therewith, the Contractor specifically represents and warrants to Owner that he has, by careful examination, satisfied himself as to: (1) the nature, location, and character of the project and the site, including, without limitation, the surface conditions of the site and all structures and obstructions thereon and thereunder, both natural and manmade, and surface water conditions of the site and the surrounding area, and subsurface conditions and subsurface water conditions; (2) the nature, location, and character of the general area in which the Project is located, including without limitation, its climatic conditions, available labor supply and labor costs, and available equipment supply and equipment costs; and (3) the quality and quantity of all materials, supplies, tools, equipment, labor, and professional services necessary to complete the work in the manner and within the cost and time frame required by the Contract. All work shall conform to the Contract, including the drawings and Specifications. No change therefrom shall be made without Owner's and Engineer's prior written approval.

## **Execution of Contract**

The Contract shall be executed by the successful bidder and returned together with the Contract Bond within five (5) days after the Contract has been mailed to the bidder.

## **Failure to Execute Contract**

Failure of the successful bidder to execute the Contract and file acceptable Bonds within five (5) days after the Contract has been mailed to the bidder shall be just cause for the cancellation of the award and the forfeiture of the Proposal Guaranty, which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised and constructed under Contract, or otherwise, as the Owner may decide.

## **Guarantee of Work**

Any defective material, or workmanship, or any unfaithful or imperfect work, which may be discovered before the final acceptance of the work and/or within one (1) year thereafter, shall be corrected immediately on the requirements of the Owner, without extra charge, notwithstanding that it may have been overlooked in the previous inspections and estimates. Failure to review construction shall not relieve the Contractor from any obligation to perform sound and reliable work as herein described.

To insure compliance with this provision, the Contract Bond shall remain in effect for a period of one (1) year from the date of final acceptance, which shall be defined as the date of the final payment estimate.

The Contractor warrants to the Owner that all materials and equipment furnished under the Contract will be new and, in the case of equipment, in good working order, that all materials, equipment and labor furnished under the Contract will be free from defects of any kind and shall be in strict conformance with the Contract requirements. This warranty shall not be restricted by the limitations of any manufacturer's warranty or the one (1) year follow up warranty noted above, and shall be enforceable within the Statute of Limitation period as prescribed by law. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Liability or refusal of a Subcontractor or equipment supplier responsible for the defective work or materials, to correct or replace same, shall not excuse the Contractor from performing under this warranty.

## Existing Utilities

Existing public utilities, such as water mains, sewers, gas lines, street lights, telephone lines, electric power lines, cable television, etc., shall be protected against damage during the construction of this project. Whenever the location of an existing utility is known, the approximate location of said utility is indicated on the Plans. This information is given only for the convenience of the bidder and the Owner assumes no responsibility as to the accuracy of the information provided. The Contractor shall consider in his bid the location of all permanent and temporary utility appurtenances in their present or relocated positions, whether shown on the Plans or not, and no additional compensation will be allowed for delays, inconvenience, or special construction methods required in prosecuting the work due to the existence of said utilities.

The Contractor shall contact the Owners of all public and private utilities and obtain locations of all utilities within the limits of the proposed construction and make arrangements, if necessary, to adjust or move any existing utility at the utility company's expense. Any expense incurred by the Contractor in connection with making arrangements shall be borne by the Contractor and considered incidental to the Contract. It shall be this Contractor's responsibility to determine the actual location of all such facilities in the field.

The adjustment of all facilities of Nicor, AT&T, ComEd, Cable Television, etc., shall be done by the respective utility company and, if a conflict is known, are indicated on the Plans as to be done "**BY OTHERS**". All other utility adjustments to sewer, water, and other local facilities under the control of the Owner shall be performed under this Contract and will be paid for under the respective items in the Contract, unless otherwise indicated on the Plans or directed by the Engineer.

The Contractor shall contact **J.U.L.I.E. (1-800-892-0123)** at least 72 hours prior to commencement of work, for public utility locations. The Contractor shall also contact the Water Department of the Owner for location of their facilities, the Department of Public Works of the Owner for location of street lighting cable and sanitary sewers, and the Sanitary District, County, or local Water Commission for location of their facilities if not serviced by a municipal system. In areas on or adjacent to State or County highways, the Contractor shall notify the Electrical Department of the appropriate agency for location of traffic signal equipment. Any cost incurred for the locating of electric or traffic control facilities shall be borne by the Contractor, and no extra compensation shall be allowed.



## **DIVISION 010000**

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### **SECTION 013300 SUBMITTAL PROCEDURES**

#### **PART 1 – GENERAL**

##### **1.1 SUMMARY**

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections:
  - 1. Section 012900 "Payment Procedures" for submitting Applications for Payment and the Schedule of Values.
  - 2. Section 013200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule.
  - 3. Section 017823 "Operation and Maintenance Data" for submitting operation and maintenance manuals
  - 4. Section 017839 "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
  - 5. Section 017900 "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel

##### **1.2 DEFINITIONS**

- A. Action Submittals: Written and graphic information and physical samples that requires Architect/Engineer's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect/Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- D. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

##### **1.3 ACTION SUBMITTALS**

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect/Engineer and additional time for

handling and reviewing submittals required by those corrections.

1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
2. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
  - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
4. Format: Arrange the following information in a tabular format.
  - a. Scheduled date for first submittal
  - b. Specification Section number and title.
  - c. Submittal category: Action; informational.
  - d. Name of subcontractor.
  - e. Description of the Work covered.
  - f. Scheduled date for Architect/Engineer's final release or approval.
  - g. Scheduled date of fabrication.
  - h. Scheduled dates for purchasing.
  - i. Scheduled dates for installation.
  - j. Activity or event number.

#### 1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect/Engineer's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Architect/Engineer for Contractor's use in preparing submittals.
  1. Architect/Engineer will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings.
    - a. Architect/Engineer makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
    - b. Digital Drawing Software Program: Coordinate with Architect/Engineer.
    - c. Contractor shall execute a data licensing agreement in the form of Agreement form acceptable to Owner and Architect/Engineer.
    - d. The following digital data files will be furnished for each appropriate discipline.
      - 1) Floor plans.
      - 2) Reflected ceiling plans.
- B. Prepare product submittals individually, by specification section and sub-section. Do not combine products from different specification sections.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
  4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Architect/Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- D. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow 15 days for review of each resubmittal.
  4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 20 days for initial review of each submittal.
  5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 15 days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
- E. Paper Submittals: Place a permanent label or title block on each submittal for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
  2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect/Engineer.
  3. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name and address of Architect/Engineer.
    - d. Name of Construction Manager
    - e. Name and address of Contractor.
    - f. Name and address of subcontractor.
    - g. Name and address of supplier.
    - h. Name of manufacturer.

- i. Submittal number or other unique identifier, including revision identifier.
    - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an additional sequential number after another decimal point (e.g., 061000.01.01).
  - j. Number and title of appropriate Specification Section.
  - k. Drawing number and detail references, as appropriate.
  - l. Location(s) where product is to be installed, as appropriate.
  - m. Contractor's review stamp
4. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Architect/Engineer observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
- a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect/Engineer
5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect/Engineer will discard submittals received from sources other than Contractor.
- a. Transmittal Form for Paper Submittals: Use AIA Document G810.
  - b. Transmittal Form: Provide locations on form for the following information:
    - 1) Project name.
    - 2) Date.
    - 3) Destination (To:).
    - 4) Source (From:).
    - 5) Name and address of Architect/Engineer.
    - 6) Name of Construction Manager.
    - 7) Name of Contractor
    - 8) Name of firm or entity that prepared submittal
    - 9) Names of subcontractor, manufacturer, and supplier.
    - 10) Category and type of submittal.
    - 11) Submittal purpose and description.
    - 12) Specification Section number and title.
    - 13) Specification paragraph number or drawing designation and generic name for each of multiple items
    - 14) Drawing number and detail references, as appropriate.
    - 15) Indication of full or partial submittal.
    - 16) Transmittal number, numbered consecutively.
    - 17) Submittal and transmittal distribution record.
    - 18) Remarks.
    - 19) Signature of transmitter.
- F. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:

1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
  2. Name file with submittal number or other unique identifier, including revision identifier.
    - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
  3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect/Engineer.
  4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information.
    - a. Project name.
    - b. Date.
    - c. Name and address of Architect/Engineer.
    - d. Name of Construction Manager.
    - e. Name of Contractor.
    - f. Name of firm or entity that prepared submittal.
    - g. Names of subcontractor, manufacturer, and supplier.
    - h. Category and type of submittal.
    - i. Submittal purpose and description.
    - j. Specification Section number and title.
    - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
    - l. Drawing number and detail references, as appropriate.
    - m. Location(s) where product is to be installed, as appropriate.
    - n. Related physical samples submitted directly.
    - o. Indication of full or partial submittal.
    - p. Transmittal number, numbered consecutively.
    - q. Submittal and transmittal distribution record.
    - r. Contractor's review stamp.
    - s. Other necessary identification.
    - t. Remarks.
  5. Metadata: Include the following information as keywords in the electronic submittal file metadata.
    - a. Project name.
    - b. Number and title of appropriate Specification Section.
    - c. Manufacturer name.
    - d. Product name
- G. Options: Identify options requiring selection by Architect/Engineer.
- H. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect/Engineer on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same label information as related submittal.

- I. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
  - 1. Note date and content of previous submittal.
  - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  - 3. Contractor's review stamp.
  - 4. Resubmit submittals until they are marked with approval notation from Architect/Engineer's action stamp.
  
- J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
  
- K. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals are marked with approval notation from Architect/Engineer's action stamp.

## PART 2 – PRODUCTS

### **2.1 SUBMITTAL PROCEDURES**

- A. General: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
  - 1. Submit electronic submittals via email as PDF electronic files
    - a. Architect/Engineer will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
  - 2. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
    - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
  
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - 2. Mark each copy of each submittal to show which products and options are applicable.
  - 3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Manufacturer's certificates as indicated below.
    - d. Standard color charts.
    - e. Statement of compliance with specified referenced standards.
    - f. Testing by recognized testing agency.

- g. Application of testing agency labels and seals.
      - h. Notation of coordination requirements.
      - i. Availability and delivery time information
  - 4. For equipment, include the following in addition to the above, as applicable
    - a. Wiring diagrams showing factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  - 5. Submit Product Data before or concurrent with Samples.
  - 6. Submit Product Data in the following format.
    - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal of Architect/Engineer's digital data drawing files is otherwise permitted. Shop drawings to indicate all adjacent construction and demonstrate adjacent construction has been coordinated between all trades.
  - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
  - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
  - 3. Submit Shop Drawings in the following format.
    - a. One paper copy to be received within 2 days of sending the electronic file.
    - b. PDF electronic file.
  - 4. BIM File Incorporation: Develop and incorporate Shop Drawing files into Building Information Model established for Project.
    - a. Prepare Shop Drawings in the following format: Same digital data software program, version, and operating system as the original Drawings.
    - b. Prepare Shop Drawings in the following format: Same digital data software program, version, and operating system as the original Drawings.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
2. Identification: Attach label on unexposed side of Samples that includes the following:
  - a. Generic description of Sample.
  - b. Product name and name of manufacturer.
  - c. Sample source.
  - d. Number and title of appropriate Specification Section.
  - e. Specification paragraph number and generic name of each item.
3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
  - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
  - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
  - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect/Engineer will return submittal with options selected.
6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - a. Number of Samples: Submit three sets of Samples. Architect/Engineer will retain two Sample set; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.
    - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
    - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.



- E. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
  - 1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated..
  - 2. Manufacturer and product name, and model number if applicable.
  - 3. Submit product schedule in the following format.
    - a. PDF electronic file.
- F. Coordination Drawing Submittals: Comply with requirements specified in Section 013100 "Project Management and Coordination."
- G. Contractor's Construction Schedule: Comply with requirements specified in 013200 "Construction Progress Documentation."
- H. Application for Payment and Schedule of Values: Comply with requirements specified in Section 012900 "Payment Procedures."
- I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 014000 "Quality Requirements."
- J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 017700 "Closeout Procedures."
- K. Maintenance Data: Comply with requirements specified in Section 017823 "Operation and Maintenance Data."
- L. LEED Submittals: Comply with requirements specified in Section 018113 "Sustainable Design Requirements."
- M. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of Architect/Engineers and owners, and other information specified.
- N. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- O. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- P. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents and approves the use and application/installation of their products as indicated in the contract drawings and shop drawings. Manufacturer to sign and submit form included in this section stating compliance/approval prior to shop drawing submittal. Include evidence of manufacturing experience where required.

- Q. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- R. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- S. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- T. Product Test Reports: Submit written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- U. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - 1. Name of evaluation organization.
  - 2. Date of evaluation.
  - 3. Time period when report is in effect.
  - 4. Product and manufacturers' names.
  - 5. Description of product.
  - 6. Test procedures and results.
  - 7. Limitations of use.
- V. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- W. Compatibility Test Reports: : Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- X. Field Test Reports: Submit written reports, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- Y. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

## 2.2 DELEGATED DESIGN services

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect/Engineer.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file, paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
  1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.
- C. BIM File Incorporation: Incorporate delegated-design drawing and data files into Building Information Model established for Project.
  1. Prepare delegated-design drawings in the following format: Same digital data software program, version, and operating system as the original Drawings.

### PART 3 – EXECUTION

#### **3.1 CONTRACTOR'S REVIEW**

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect/Engineer.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 01 77 00 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

#### **3.2 ARCHITECT/ENGINEER'S ACTION**

- A. Action Submittals: Architect/Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect/Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- B. Informational Submittals: Architect/Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect/Engineer will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect/Engineer.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may be returned by the Architect/Engineer without action.

**END OF SECTION**

## **SECTION 017700 - CLOSEOUT PROCEDURES**

### PART 1 – GENERAL

#### **1.1 SUMMARY**

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Substantial Completion procedures.
2. Final completion procedures.
3. Warranties.
4. Maintenance stock.
5. Final cleaning.
6. Repair of the Work.

B. Related Sections:

1. Section 013233 "Photographic Documentation" for submitting Final Completion construction photographic documentation.
2. Section 017300 "Execution" for progress cleaning of Project site.
3. Section 017400 "Warranties and Bonds for MEP/FP and Security" for specific requirements for MEP/FP and security warranties and bonds.
4. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.
5. Section 017839 "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
6. Section 017900 "Demonstration and Training" for requirements for instructing Owner's personnel

#### **1.2 Action Submittals**

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

#### **1.3 CLOSEOUT SUBMITTALS**

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection

#### **1.4 Maintenance Material Submittals**

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

- B. Refer to individual specification section for maintenance material submittal requirements.

1.5 SUBSTANTIAL COMPLETION procedures

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of items on the list, and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion List items below that are incomplete at time of request.
  - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
  - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items and deliver to location designated by Architect/Engineer. Label with manufacturer's name and model number where applicable.
    - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Architect/Engineer's signature for receipt of submittals.
  - 5. Submit test/adjust/balance records.
  - 6. Submit sustainable design submittals required in Section 018113 "Sustainable Design Requirements and in individual Sections.
  - 7. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request
  - 1. Advise Owner of pending insurance changeover requirements.
  - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  - 3. Complete startup and testing of systems and equipment.
  - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
  - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Section 017900 "Demonstration and Training."

6. Advise Owner of changeover in heat and other utilities.
7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
9. Complete final cleaning requirements, including touchup painting.
10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection for Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect/Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect/Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect/Engineer, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for final completion.

#### 1.6 FINAL COMPLETION procedures

A. Submittals Prior to Final Completion: Before requesting final inspection for determining date of final completion, complete the following:

1. Submit a final Application for Payment according to Section 012900 "Payment Procedures."
2. Certified List of Incomplete Items: Submit certified copy of Architect/Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect/Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report and warranty.
5. Instruct Owner's personnel in operation, adjustment, maintenance of products, equipment, and systems. Submit demonstration and video recordings.

B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect/Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect/Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

**1.7 LIST OF INCOMPLETE ITEMS (PUNCH LIST)**

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
  - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
  - 3. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Architect/Engineer.
    - d. Name of Contractor.
    - e. Page number.
  - 4. Submit list of incomplete items in the following format.
    - a. MS Excel electronic file. Architect/Engineer will return annotated file.

**1.8 SUBMITTAL OF PROJECT WARRANTIES**

- A. Time of Submittal: Submit written warranties on request of Architect/Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
  - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
  - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
  - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
  - 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals

PART 2 – PRODUCTS

**2.1 MATERIALS**

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
  - 1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 – EXECUTION

**3.1 FINAL CLEANING**

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Remove snow and ice to provide safe access to building.
    - f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
    - h. Sweep concrete floors broom clean in unoccupied spaces.
    - i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.



- j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision- obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
  - k. Remove labels that are not permanent.
  - l. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
  - m. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
  - n. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
  - o. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection.
    - 1) Clean HVAC system in compliance with NADCA Standard 1992-01. Provide written report on completion of cleaning
  - p. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
  - q. Leave Project clean and ready for occupancy.
- C. Demonstration and Training: Demonstrate and train Owner's personnel in proper operation and maintenance of building equipment. Refer to individual specification sections for additional requirements.
- D. Pest Control: Comply with pest control requirements in Section 015000 "Temporary Facilities and Controls." Prepare written report.
- E. Construction Waste Disposal: Comply with waste disposal requirements in Section 017419 "Construction Waste Management and Disposal."

### 3.2 REPAIR OF WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
  - 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
  - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
    - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.

3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures

**END OF SECTION**

## **SECTION 017823 OPERATION - AND MAINTENANCE DATA**

### PART 1 – GENERAL

#### **1.1 SUMMARY**

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
  - 1. Operation and maintenance documentation directory.
  - 2. Emergency manuals.
  - 3. Operation manuals for systems, subsystems, and equipment.
  - 4. Product maintenance manuals.
  - 5. Systems and equipment maintenance manuals.
  
- B. Related Requirements:
  - 1. Section 013300 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.

#### **1.2 DEFINITIONS**

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
  
- B. Subsystem: A portion of a system with characteristics similar to a system.

#### **1.3 CLOSEOUT SUBMITTALS**

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
  - 1. Commissioning Authority will comment on whether content of operations and maintenance submittals are acceptable.
  - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
  
- B. Format: Submit operations and maintenance manuals in the following format:
  - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Commissioning Authority.
    - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
    - b. Enable inserted reviewer comments on draft submittals.

2. One set of prints.
- C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Commissioning Authority will comment on whether general scope and content of manual are acceptable.
- D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Commissioning Authority will return copy with comments.
  1. Correct or revise each manual to comply with Commissioning Authority's comments. Submit copies of each corrected manual within 15 days of receipt of Commissioning Authority's comments and prior to commencing demonstration and training.

## PART 2 – PRODUCTS

### 2.1 **OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY**

- A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:
  1. List of documents.
  2. List of systems.
  3. List of equipment.
  4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

### 2.2 **REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS**

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

1. Title page.
2. Table of contents.
3. Manual contents.

B. Title Page: Include the following information:

1. Subject matter included in manual.
2. Name and address of Project.
3. Name and address of Owner.
4. Date of submittal.
5. Name and contact information for Contractor.
6. Name and contact information for Construction Manager.
7. Name and contact information for Commissioning Authority.
8. Names and contact information for major consultants to the Architect/Engineer that designed the systems contained in the manuals.
9. Cross-reference to related systems in other operation and maintenance manuals.

C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

E. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.

1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

F. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.

1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with

clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

- a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.

- b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, subject matter of contents, and indicate Specification Section number on bottom of spine. Indicate volume number for multiple-volume sets.
2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
4. Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
  - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
  - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

### 2.3 **EMERGENCY MANUALS**

- A. Content: Organize manual into a separate section for each of the following:
  1. Type of emergency.
  2. Emergency instructions.
  3. Emergency procedures.
- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
  1. Fire.
  2. Flood.
  3. Gas leak.
  4. Water leak.
  5. Power failure.
  6. Water outage.
  7. System, subsystem, or equipment failure.
  8. Chemical release or spill.
- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.

- D. Emergency Procedures: Include the following, as applicable:
1. Instructions on stopping.
  2. Shutdown instructions for each type of emergency.
  3. Operating instructions for conditions outside normal operating limits.
  4. Required sequences for electric or electronic systems.
  5. Special operating instructions and procedures.

## 2.4 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
  2. Performance and design criteria if Contractor has delegated design responsibility.
  3. Operating standards.
  4. Operating procedures.
  5. Operating logs.
  6. Wiring diagrams.
  7. Control diagrams.
  8. Piped system diagrams.
  9. Precautions against improper use.
  10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
1. Product name and model number. Use designations for products indicated on Contract Documents.
  2. Manufacturer's name.
  3. Equipment identification with serial number of each component.
  4. Equipment function.
  5. Operating characteristics.
  6. Limiting conditions.
  7. Performance curves.
  8. Engineering data and tests.
  9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
1. Startup procedures.
  2. Equipment or system break-in procedures.
  3. Routine and normal operating instructions.
  4. Regulation and control procedures.
  5. Instructions on stopping.
  6. Normal shutdown instructions.
  7. Seasonal and weekend operating instructions.
  8. Required sequences for electric or electronic systems.
  9. Special operating instructions and procedures.

- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

## 2.5 **PRODUCT MAINTENANCE MANUALS**

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- C. Product Information: Include the following, as applicable:
  - 1. Product name and model number.
  - 2. Manufacturer's name.
  - 3. Color, pattern, and texture.
  - 4. Material and chemical composition.
  - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
  - 1. Inspection procedures.
  - 2. Types of cleaning agents to be used and methods of cleaning.
  - 3. List of cleaning agents and methods of cleaning detrimental to product.
  - 4. Schedule for routine cleaning and maintenance.
  - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
  - 1. Include procedures to follow and required notifications for warranty claims.

## 2.6 **SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS**

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.



- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
  
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
  - 1. Standard maintenance instructions and bulletins.
  - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
  - 3. Identification and nomenclature of parts and components.
  - 4. List of items recommended to be stocked as spare parts.
  
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
  - 1. Test and inspection instructions.
  - 2. Troubleshooting guide.
  - 3. Precautions against improper maintenance.
  - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
  - 5. Aligning, adjusting, and checking instructions.
  - 6. Demonstration and training video recording, if available.
  
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
  - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
  - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
  
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
  
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
  
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
  - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 – EXECUTION

**3.1 MANUAL PREPARATION**

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
  - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
  - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
  - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
  - 1. Do not use original project record documents as part of operation and maintenance manuals.
  - 2. Comply with requirements of newly prepared record Drawings in Section 017839 "Project Record Documents."
- G. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

**END OF SECTION**

## **SECTION 017839 - PROJECT RECORD DOCUMENTS**

### PART 1 – GENERAL

#### **1.1 SUMMARY**

- A. Section includes administrative and procedural requirements for project record documents, including the following:
  - 1. Record Drawings.
  - 2. Record Specifications.
  - 3. Record Product Data.
  - 4. Miscellaneous record submittals.
  
- B. Related Sections:
  - 1. Section 017700 "Closeout Procedures" for general closeout procedures.

#### **1.2 CLOSEOUT SUBMITTALS**

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit copies of record Drawings as follows.
    - a. Initial Submittal
      - 1) Submit PDF electronic files of scanned record prints and one of file prints.
      - 2) Architect/Engineer will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
    - b. Final Submittal
      - 1) Submit PDF electronic files of scanned record prints and one set(s) of prints.
      - 2) Print each drawing, whether or not changes and additional information were recorded.
  
- B. Record Specifications: Submit annotated PDF electronic files and one set of prints of Project's Specifications, including addenda and contract modifications.
  
- C. Record Product Data: Submit annotated PDF electronic files and directories of each submittal and one set of prints.
  - 1. Where record Product Data is required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
  
- D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit annotated PDF electronic files and directories of each submittal and one set of prints.

- E. Reports: Submit written report weekly indicating items incorporated into project record documents concurrent with progress of the Work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.

## PART 2 – PRODUCTS

### 2.1 **RECORD DRAWINGS**

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
  - 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an understandable drawing technique.
    - c. Record data as soon as possible after obtaining it.
    - d. Cross-reference record prints to corresponding archive photographic documentation.
  - 2. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Depths of foundations below first floor.
    - d. Locations and depths of underground utilities.
    - e. Revisions to routing of piping and conduits.
    - f. Revisions to electrical circuitry.
    - g. Actual equipment locations.
    - h. Duct size and routing.
    - i. Locations of concealed internal utilities.
    - j. Changes made by Change Order or Construction Change Directive.
    - k. Changes made following Architect/Engineer's written orders.
    - l. Details not on the original Contract Drawings.
    - m. Field records for variable and concealed conditions.
    - n. Record information on the Work that is shown only schematically.
  - 3. Mark the Contract Drawings or Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
  - 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  - 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  - 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
  - 1. Record Prints: Organize record prints and newly prepared record drawings into manageable sets. Include identification on cover sheets.
  - 2. Format: Annotated PDF electronic file with comment function enabled.
  - 3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
  - 4. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect/Engineer.
    - e. Name of Contractor.

## 2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
  - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
  - 4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
  - 5. Note related Change Orders, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as annotated PDF electronic file or scanned PDF electronic file(s) of marked-up paper copy of Specifications and one set of prints.

## 2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  - 3. Note related Change Orders, Record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as annotated PDF electronic file or scanned PDF electronic file(s) of marked-up paper copy of Product Data and one set of prints.

1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

#### 2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as PDF electronic file or scanned PDF electronic file(s) of marked-up miscellaneous record submittals and one set of prints.
  1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

### PART 3 – EXECUTION

#### 3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and modifications to project record documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: The Contractor shall maintain at the site for the Owner one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed. Provide access to project record documents for Architect/Engineer's reference during normal working hours.

**END OF SECTION**

## **SECTION 017900 - DEMONSTRATION AND TRAINING**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
  - 1. Demonstration of operation of systems, subsystems, and equipment.
  - 2. Training in operation and maintenance of systems, subsystems, and equipment.
  - 3. Demonstration and training video recordings.

#### **1.2 INFORMATIONAL SUBMITTALS**

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
  - 1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.
- B. Qualification Data: For Facilitator, instructor, and videographer.
- C. Attendance Record: For each training module, submit list of participants and length of instruction time.
- D. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.

#### **1.3 CLOSEOUT SUBMITTALS**

- A. Demonstration and Training Video Recordings: Submit two copies within seven days of end of each training module.
  - 1. Identification: On each copy, provide an applied label with the following information:
    - a. Name of Project.
    - b. Name and address of videographer.
    - c. Name of Architect/Engineer.
    - d. Name of Construction Manager
    - e. Name of Contractor.
    - f. Date of video recording.
  - 2. Transcript: Prepared in PDF electronic format. Include a cover sheet with same

label information as the corresponding video recording and a table of contents with links to corresponding training components. Include name of Project and date of video recording on each page.

3. At completion of training, submit complete training manual(s) for Owner's use in PDF electronic file format on compact disc.

#### 1.4 **QUALITY ASSURANCE**

- A. **Facilitator Qualifications:** A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. **Instructor Qualifications:** A factory-authorized service representative, complying with requirements in Section 014000 "Quality Requirements," experienced in operation and maintenance procedures and training.
- C. **Videographer Qualifications:** A professional videographer who is experienced photographing demonstration and training events similar to those required.
- D. **Preinstruction Conference:** Conduct conference at Project site to comply with requirements in Section 013100 "Project Management and Coordination." Review methods and procedures related to demonstration and training including, but not limited to, the following:
  1. Inspect and discuss locations and other facilities required for instruction.
  2. Review and finalize instruction schedule and verify availability of educational materials, instructors' personnel, audiovisual equipment, and facilities needed to avoid delays.
  3. Review required content of instruction.
  4. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

#### 1.5 **COORDINATION**

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect/Engineer.



PART 2 – PRODUCTS

**2.1 INSTRUCTION PROGRAM**

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.
  
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:
  - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
    - a. System, subsystem, and equipment descriptions.
    - b. Performance and design criteria if Contractor is delegated design responsibility.
    - c. Operating standards.
    - d. Regulatory requirements.
    - e. Equipment function.
    - f. Operating characteristics.
    - g. Limiting conditions.
    - h. Performance curves.
  
  - 2. Documentation: Review the following items in detail:
    - a. Emergency manuals.
    - b. Operations manuals.
    - c. Maintenance manuals.
    - d. Project record documents.
    - e. Identification systems.
    - f. Warranties and bonds.
    - g. Maintenance service agreements and similar continuing commitments.
  
  - 3. Emergencies: Include the following, as applicable:
    - a. Instructions on meaning of warnings, trouble indications, and error messages.
    - b. Instructions on stopping.
    - c. Shutdown instructions for each type of emergency.
    - d. Operating instructions for conditions outside of normal operating limits.
    - e. Sequences for electric or electronic systems.
    - f. Special operating instructions and procedures.

4. Operations: Include the following, as applicable:
  - a. Startup procedures.
  - b. Equipment or system break-in procedures.
  - c. Routine and normal operating instructions.
  - d. Regulation and control procedures.
  - e. Control sequences.
  - f. Safety procedures.
  - g. Instructions on stopping.
  - h. Normal shutdown instructions.
  - i. Operating procedures for emergencies.
  - j. Operating procedures for system, subsystem, or equipment failure.
  - k. Seasonal and weekend operating instructions.
  - l. Required sequences for electric or electronic systems.
  - m. Special operating instructions and procedures.
  
5. Adjustments: Include the following:
  - a. Alignments.
  - b. Checking adjustments.
  - c. Noise and vibration adjustments.
  - d. Economy and efficiency adjustments.
  
6. Troubleshooting: Include the following:
  - a. Diagnostic instructions.
  - b. Test and inspection procedures.
  
7. Maintenance: Include the following:
  - a. Inspection procedures.
  - b. Types of cleaning agents to be used and methods of cleaning.
  - c. List of cleaning agents and methods of cleaning detrimental to product.
  - d. Procedures for routine cleaning
  - e. Procedures for preventive maintenance.
  - f. Procedures for routine maintenance.
  - g. Instruction on use of special tools.
  
8. Repairs: Include the following:
  - a. Diagnosis instructions.
  - b. Repair instructions.
  - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
  - d. Instructions for identifying parts and components.
  - e. Review of spare parts needed for operation and maintenance.

PART 3 – EXECUTION

**3.1 PREPARATION**

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017823 "Operations and Maintenance Data."
- B. Set up instructional equipment at instruction location.

**3.2 INSTRUCTION**

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
  - 1. Architect/Engineer will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.
  - 2. Owner will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
  - 1. Schedule training with Owner with at least seven days' advance notice.
- D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.
- E. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of an oral performance-based test.
- F. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

**3.3 DEMONSTRATION AND TRAINING VIDEO RECORDINGS**

- A. General: Engage a qualified commercial videographer to record demonstration and training video recordings. Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
  - 1. At beginning of each training module, record each chart containing learning objective and lesson outline.

- B. Video: Provide minimum 640 x 480 video resolution converted to a format file type acceptable to Owner, on electronic media.
1. Electronic Media: Read-only format compact disc acceptable to Owner, with commercial-grade graphic label.
  2. File Hierarchy: Organize folder structure and file locations according to project manual table of contents. Provide complete screen-based menu.
  3. File Names: Utilize file names based upon name of equipment generally described in video segment, as identified in Project specifications.
  4. Contractor and Installer Contact File: Using appropriate software, create a file for inclusion on the Equipment Demonstration and Training DVD that describes the following for each Contractor involved on the Project, arranged according to Project table of contents:
    - a. Name of Contractor/Installer.
    - b. Business address.
    - c. Business phone number.
    - d. Point of contact.
    - e. E-mail address.
- C. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to adequately cover area of demonstration and training. Display continuous running time.
1. Film training session(s) in segments not to exceed 15 minutes.
    - a. Produce segments to present a single significant piece of equipment per segment.
    - b. Organize segments with multiple pieces of equipment to follow order of Project Manual table of contents.
    - c. Where a training session on a particular piece of equipment exceeds 15 minutes, stop filming and pause training session. Begin training session again upon commencement of new filming segment.
- D. Light Levels: Verify light levels are adequate to properly light equipment. Verify equipment markings are clearly visible prior to recording.
1. Furnish additional portable lighting as required.
- E. Narration: Describe scenes on video recording by audio narration by microphone while or dubbing audio narration off site after video recording is recorded. Include description of items being viewed.
- F. Transcript: Provide a transcript of the narration. Display images and running time captured from videotape opposite the corresponding narration segment.
- G. Preproduced Video Recordings: Provide video recordings used as a component of training modules in same format as recordings of live training.

**END OF SECTION**

# Attachment A

## SECTION 232300 REFRIGERANT PIPING

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Piping.
- B. Refrigerant.
- C. Moisture and liquid indicators.
- D. Valves.
- E. Strainers.
- F. Check valves.
- G. Pressure regulators.
- H. Pressure relief valves.
- I. Filter-driers.
- J. Expansion valves.
- K. Engineered wall seals and insulation protection.
- L. Exterior penetration accessories.

#### 1.02 RELATED REQUIREMENTS

- A. Section 236213 - Packaged Air-Cooled Refrigerant Compressor and Condenser Units.

#### 1.03 REFERENCE STANDARDS

- A. AHRI 710 (I-P) - Performance Rating of Liquid-Line Driers; 2009.
- B. AHRI 711 (SI) - Performance Rating of Liquid-Line Driers; 2009.
- C. AHRI 760 (I-P) - Performance Rating of Solenoid Valves for Use with Volatile Refrigerants; 2014.
- D. ASHRAE Std 15 - Safety Standard for Refrigeration Systems; 2022, with Addendum (2024).
- E. ASME BPVC-IX - Boiler and Pressure Vessel Code, Section IX - Qualification Standard for Welding, Brazing, and Fusing Procedures; Welders; Brazers; and Welding, Brazing, and Fusing Operators; 2023.
- F. ASME B16.22 - Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings; 2021.
- G. ASME B16.26 - Cast Copper Alloy Fittings for Flared Copper Tubes; 2018.
- H. ASME B31.5 - Refrigeration Piping and Heat Transfer Components; 2022.
- I. ASME B31.9 - Building Services Piping; 2020.
- J. ASTM B88 - Standard Specification for Seamless Copper Water Tube; 2022.
- K. ASTM B88M - Standard Specification for Seamless Copper Water Tube (Metric); 2020.
- L. ASTM B280 - Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service; 2023.
- M. ASTM E283/E283M - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2019.
- N. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000 (Reapproved 2023).
- O. ASTM E2178 - Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials; 2021a.
- P. AWS A5.8M/A5.8 - Specification for Filler Metals for Brazing and Braze Welding; 2019.

# Attachment A

- Q. MSS SP-58 - Pipe Hangers and Supports - Materials, Design, Manufacture, Selection, Application, and Installation; 2018, with Amendment (2019).
- R. UL 207 - Standard for Refrigerant-Containing Components and Accessories, Nonelectrical; Current Edition, Including All Revisions.

## 1.04 SUBMITTALS

- A. Product Data: Provide general assembly of specialties, including manufacturer's catalogue information. Provide manufacturer's catalog data including load capacity.
- B. Shop Drawings: Indicate schematic layout of system, including equipment, critical dimensions, and sizes.

## 1.05 QUALITY ASSURANCE

- A. Designer Qualifications: Design piping system under direct supervision of a Professional Engineer experienced in design of this type of work.

## 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store piping and specialties in shipping containers with labeling in place.
- B. Protect piping and specialties from entry of contaminating material by leaving end caps and plugs in place until installation.
- C. Dehydrate and charge components such as piping and receivers, seal prior to shipment, until connected into system.

## PART 2 PRODUCTS

### 2.01 SYSTEM DESCRIPTION

- A. Where more than one piping system material is specified ensure system components are compatible and joined to ensure integrity of system is not jeopardized. Provide necessary joining fittings. Ensure flanges, union, and couplings for servicing are consistently provided.
- B. Provide pipe hangers and supports in accordance with ASME B31.5 unless indicated otherwise.
- C. Liquid Indicators:
  - 1. Use line size liquid indicators in main liquid line leaving condenser.
  - 2. If receiver is provided, install in liquid line leaving receiver.
- D. Valves:
  - 1. Use service valves on suction and discharge of compressors.
  - 2. Use gauge taps at compressor inlet and outlet.
  - 3. Use gauge taps at hot gas bypass regulators, inlet and outlet.
  - 4. Use check valves on compressor discharge.
- E. Refrigerant Charging (Packed Angle) Valve: Use in liquid line between receiver shut-off valve and expansion valve.
- F. Strainers:
  - 1. Use line size strainer upstream of each automatic valve.
  - 2. Where multiple expansion valves with integral strainers are used, use single main liquid line strainer.
- G. Pressure Relief Valves: Use on ASME receivers and pipe to outdoors.
- H. Filter-Driers:
  - 1. Use a filter-drier immediately ahead of liquid-line controls, such as thermostatic expansion valves, solenoid valves, and moisture indicators.
- I. Flexible Connectors: Utilize at or near compressors where piping configuration does not absorb vibration.

### 2.02 REGULATORY REQUIREMENTS

- A. Comply with ASME B31.9 for installation of piping system.

# Attachment A

- B. Welding Materials and Procedures: Comply with ASME BPVC-IX and applicable state labor regulations.
- C. Welders Certification: In accordance with ASME BPVC-IX.
- D. Products Requiring Electrical Connection: Listed and classified by UL, as suitable for the purpose indicated.

## 2.03 PIPING

- A. Copper Tube: ASTM B280, H58 hard drawn or O60 soft annealed.
  - 1. Fittings: ASME B16.22 wrought copper.
  - 2. Joints: Braze, AWS A5.8M/A5.8 BCuP silver/phosphorus/copper alloy.
  - 3. Push-to-Connect Fittings: Complying with UL 207.
- B. Copper Tube to 7/8-inch (22 mm) OD: ASTM B88 (ASTM B88M), Type K (A), annealed.
  - 1. Fittings: ASME B16.26 cast copper.
  - 2. Joints: Flared.
  - 3. Push-to-Connect Fittings: Complying with UL 207.
- C. Pipe Supports and Anchors:
  - 1. Provide hangers and supports that comply with MSS SP-58.
    - a. If type of hanger or support for a particular situation is not indicated, select appropriate type using MSS SP-58 recommendations.
  - 2. Hangers for Pipe Sizes 2 Inches (50 mm) and Over: Carbon steel, adjustable, clevis.
  - 3. Multiple or Trapeze Hangers: Steel channels with welded spacers and hanger rods.
  - 4. Wall Support for Pipe Sizes to 3 Inches (75 mm): Cast iron hook.
  - 5. Vertical Support: Steel riser clamp.
  - 6. Copper Pipe Support: Carbon steel ring, adjustable, copper plated.
  - 7. Hanger Rods: Mild steel threaded both ends, threaded one end, or continuous threaded.
  - 8. Inserts: Malleable iron case of galvanized steel shell and expander plug for threaded connection with lateral adjustment, top slot for reinforcing rods, lugs for attaching to forms; size inserts to suit threaded hanger rods.

## 2.04 REFRIGERANT

- A. Refrigerant: Use only refrigerants that have ozone depletion potential (ODP) of zero and global warming potential (GWP) of less than 50.

## 2.05 MOISTURE AND LIQUID INDICATORS

- A. Indicators: Single port type, UL listed, with copper or brass body, flared or soldered ends, sight glass, color coded paper moisture indicator with removable element cartridge and plastic cap; for maximum temperature of 200 degrees F (93 degrees C) and maximum working pressure of 500 psi (3450 kPa).

## 2.06 VALVES

- A. Manufacturers:
  - 1. Hansen Technologies Corporation;
  - 2. Henry Technologies;
  - 3. Flomatic Valves;
  - 4. Parker Hannifin - Sporlan Division;
- B. Ball Valves:
  - 1. Two piece bolted forged brass body with teflon ball seals and copper tube extensions, brass bonnet and seal cap, chrome plated ball, stem with neoprene ring stem seals; for maximum working pressure of 500 psi (3450 kPa) and maximum temperature of 300 degrees F (149 degrees C).
- C. Service Valves:
  - 1. Forged brass body with copper stubs, brass caps, removable valve core, integral ball check valve, flared or soldered ends, for maximum pressure of 500 psi (3450 kPa).

# Attachment A

## 2.07 STRAINERS

- A. Manufacturers:
  - 1. Hansen Technologies Corporation;
  - 2. Parker Hannifin - Sporlan Division;
- B. Straight Line or Angle Line Type:
  - 1. Brass or steel shell, steel cap and flange, and replaceable cartridge, with screen of stainless steel wire or monel reinforced with brass; for maximum working pressure of 430 psi (2960 kPa).

## 2.08 CHECK VALVES

- A. Manufacturers:
  - 1. Hansen Technologies Corporation;
  - 2. Parker Hannifin;
  - 3. Substitutions: See Section 016000 - Product Requirements.

## 2.09 PRESSURE REGULATORS

- A. Manufacturers:
  - 1. Hansen Technologies Corporation;
  - 2. Parker Hannifin;
- B. Brass body, stainless steel diaphragm, direct acting, adjustable over 0 to 80 psi (0 to 550 kPa) range, for maximum working pressure of 450 psi (3100 kPa).

## 2.10 PRESSURE RELIEF VALVES

- A. Manufacturers:
  - 1. Hansen Technologies Corporation;
  - 2. Henry Technologies;
  - 3. Sherwood Valve/Harsco Corporation;
- B. Straight Through or Angle Type: Brass body and disc, neoprene seat, factory sealed and stamped with ASME UV and National Board Certification NB, selected to ASHRAE Std 15, with standard setting of 235 psi (1620 kPa).

## 2.11 FILTER-DRIERS

- A. Performance:
  - 1. Flow Capacity - Liquid Line: As indicated in schedule, minimum, rated in accordance with AHRI 710 (I-P) (AHRI 711 (SI)).
  - 2. Pressure Drop: 2 psi (14 kPa), maximum, when operating at full connected evaporator capacity.
  - 3. Design Working Pressure: 350 psi (2410 kPa), minimum.
- B. Cores: Molded or loose-fill molecular sieve desiccant compatible with refrigerant, activated alumina, activated charcoal, and filtration to 40 microns, with secondary filtration to 20 microns; of construction that will not pass into refrigerant lines.
- C. Construction: UL listed.
  - 1. Connections: As specified for applicable pipe type.

## 2.12 EXPANSION VALVES

- A. Manufacturers:
  - 1. Flow Controls Division of Emerson Electric;
  - 2. Parker Hannifin - Sporlan Division;
- B. Angle or Straight Through Type: AHRI 760 (I-P); design suitable for refrigerant, brass body, internal or external equalizer, bleed hole, adjustable superheat setting, replaceable inlet strainer, with nonreplaceable capillary tube and remote sensing bulb and remote bulb well.
- C. Selection: Evaluate refrigerant pressure drop through system to determine available pressure drop across valve. Select valve for maximum load at design operating pressure and minimum



# Attachment A

10 degrees F (6 degrees C) superheat. Select to avoid being undersized at full load and excessively oversized at part load.

## 2.13 ELECTRONIC EXPANSION VALVES

- A. Manufacturers:
  - 1. Flomatic Valves;
- B. Valve:
  - 1. Brass body with flared or soldered connection, needle valve with floating needle and machined seat, stepper motor drive.

## 2.14 ENGINEERED WALL SEALS AND INSULATION PROTECTION

- A. Pipe Penetration Wall Seal: Seals HVAC piping wall penetrations with compression gasket wall mounted rigid plastic outlet cover.
  - 1. Outlet Cover Color: Gray.
  - 2. Water Penetration: Comply with ASTM E331.
  - 3. Air Leakage: Comply with ASTM E283/E283M.
  - 4. Air Permeance: Comply with ASTM E2178.

## 2.15 EXTERIOR PENETRATION ACCESSORIES

- A. Flashing Panels for Exterior Wall Penetrations: Premanufactured components and accessories as required to preserve integrity of building envelope; suitable for conduits and facade materials to be installed.

## PART 3 EXECUTION

### 3.01 PREPARATION

- A. Ream pipe and tube ends. Remove burrs. Bevel plain-end ferrous pipe.
- B. Remove scale and dirt on inside and outside before assembly.
- C. Prepare piping connections to equipment with flanges or unions.

### 3.02 INSTALLATION

- A. Install refrigeration specialties in accordance with manufacturer's instructions.
- B. Route piping in orderly manner, with plumbing parallel to building structure, and maintain gradient.
- C. Install piping to conserve building space and avoid interference with use of space.
- D. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.
- E. Pipe Hangers and Supports:
  - 1. Install in accordance with ASME B31.5.
  - 2. Support horizontal piping as indicated.
  - 3. Install hangers to provide minimum 1/2 inch (13 mm) space between finished covering and adjacent work.
  - 4. Place hangers within 12 inches (300 mm) of each horizontal elbow.
- F. Arrange piping to return oil to compressor. Provide traps and loops in piping, and provide double risers as required. Slope horizontal piping 0.40 percent in direction of flow.
- G. Provide clearance for installation of insulation and access to valves and fittings.
- H. Flood piping system with nitrogen when brazing.
- I. Where pipe support members are welded to structural building frame, brush clean, and apply one coat of zinc rich primer to welding.
- J. Insulate piping.
- K. Follow ASHRAE Std 15 procedures for charging and purging of systems and for disposal of refrigerant.

# Attachment A

## 3.03 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements, for additional requirements.
- B. Test refrigeration system in accordance with ASME B31.5.
- C. Pressure test system with dry nitrogen to 200 psi (1380 kPa). Perform final tests at 27 inches (92 kPa) vacuum and 200 psi (1380 kPa) using halide torch. Test and repair piping until no leakage.

**END OF SECTION**

# Attachment B

## SECTION 236213 PACKAGED AIR-COOLED REFRIGERANT COMPRESSOR AND CONDENSER UNITS

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Condensing unit package.
- B. Charge of refrigerant and oil.
- C. Controls and control connections.
- D. Refrigerant piping connections.
- E. Motor starters.
- F. Electrical power connections.

#### 1.02 RELATED REQUIREMENTS

- A. Section 232300 - Refrigerant Piping.

#### 1.03 REFERENCE STANDARDS

- A. AHRI 210/240 - Performance Rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment; 2023.
- B. ASHRAE Std 15 - Safety Standard for Refrigeration Systems; 2022, with Addendum (2024).
- C. ASHRAE Std 23 - Methods for Performance Testing Positive Displacement Refrigerant Compressors and Compressor Units; 2022.
- D. ASHRAE Std 90.1 I-P - Energy Standard for Buildings Except Low-Rise Residential Buildings; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

#### 1.04 SUBMITTALS

- A. Product Data: Provide rated capacities, weights specialties and accessories, electrical nameplate data, and wiring diagrams. To ensure capacities are complementary, include equipment served by condensing units in submittal or submit at the same time.
- B. Shop Drawings: Indicate components, assembly, dimensions, weights and loadings, required clearances, and location and size of field connections. Include schematic layouts showing condensing units, cooling coils, refrigerant piping, and accessories required for complete system.
- C. Design Data: Indicate pipe and equipment sizing.
- D. Manufacturer's Instructions: Submit manufacturer's complete installation instructions.
- E. Warranty: Submit manufacturer's warranty and ensure forms have been filled out in Owner's name and registered with manufacturer.

#### 1.05 QUALITY ASSURANCE

- A. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

#### 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturer's installation instructions for rigging, unloading, and transporting units.

#### 1.07 WARRANTY

- A. Provide a five year warranty to include coverage for refrigerant compressors.

### PART 2 PRODUCTS

#### 2.01 MANUFACTURERS

- A. Carrier, a part of UTC Building and Industrial Systems, a unit of United Technologies Corp;

# Attachment B

- B. Trane Technologies, PLC;
- C. York International Corporation/Johnson Controls, Inc;

## 2.02 MANUFACTURED UNITS

- A. Units: Self-contained, packaged, factory-assembled and pre-wired units suitable for outdoor use consisting of cabinet, compressors, condensing coil and fans, integral subcooling coil, controls, liquid receiver, wind deflector, and screens.
- B. Construction and Ratings: In accordance with AHRI 210/240. Test in accordance with ASHRAE Std 23.
- C. Performance Ratings: Energy Efficiency Rating (EER) and Coefficient of Performance (COP) not less than prescribed by ASHRAE Std 90.1.

## 2.03 CASING

- A. House components in welded steel frame with galvanized steel panels with weather resistant, baked enamel finish.
- B. Mount starters, disconnects, and controls in weatherproof panel provided with full opening access doors. Provide mechanical interlock to disconnect power when door is opened.
- C. Provide removable access doors or panels with quick fasteners and piano hinges.

## 2.04 CONDENSER COILS

- A. Coils: Aluminum fins mechanically bonded to seamless copper tubing. Provide subcooling circuits. Air test under water to 425 psig (2900 kPa), and vacuum dehydrate. Seal with holding charge of nitrogen.
- B. Coil Guard: Expanded metal with lint screens.

## 2.05 FAN REQUIREMENTS

- A. Vertical discharge, direct-driven propeller-type condenser fans with fan guard on discharge. Equip with roller or ball bearings with grease fittings extended to outside of casing.
- B. Weatherproof motors suitable for outdoor use, single phase permanent split capacitor or 3 phase, with permanent lubricated ball bearings and built in current and thermal overload protection.

## 2.06 COMPRESSORS

- A. Compressor: Semi-hermetic reciprocating type.
- B. Mounting: Statically and dynamically balance rotating parts and mount on spring vibration isolators.
- C. Lubrication System: Reversible, positive displacement oil pump with oil charging valve, oil level sight glass, and magnetic plug or strainer.
- D. Motor: Constant speed 1800 rpm suction gas cooled with electronic sensor and winding over temperature protection, designed for across-the-line starting.
  - 1. Furnish with starter, see Section 230513.
- E. Capacity Reduction Equipment: Suction valve unloaders, with lifting mechanism operated by electrically actuated solenoid valve, with unloaded compressor start; controlled from suction pressure.
- F. Sump Oil Heater: Evaporates refrigerant returning to sump during shut down. Energizes heater continuously when compressor is not operating.

## 2.07 REFRIGERANT CIRCUIT

- A. Provide each unit with one refrigerant circuit, factory-supplied and piped. See Section 232300.
- B. For each refrigerant circuit, provide:
  - 1. Liquid line sight glass and moisture indicator.
  - 2. Thermal expansion valve for maximum operating pressure.

# Attachment B

3. Insulated suction line.
  4. Suction and liquid line service valves and gauge ports.
  5. Charging valve.
  6. Discharge line check valve.
- C. For heat pump units, provide reversing valve, suction line accumulator, discharge muffler, flow control check valve, and solid-state defrost control utilizing thermistors.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. Install in accordance with manufacturer's installation instructions.
- B. Complete structural, mechanical, and electrical connections in accordance with manufacturer's installation instructions.
- C. Provide for connection to electrical service. See Section 260583.
- D. Install units on concrete base as indicated. See Section 033000.
- E. Provide connection to refrigeration piping system and evaporators. See Section 232300. Comply with ASHRAE Std 15.

### **3.02 SYSTEM STARTUP**

- A. Supply initial charge of refrigerant and oil for each refrigeration system. Replace losses of oil or refrigerant prior to end of correction period.
- B. Charge system with refrigerant and test entire system for leaks after completion of installation. Repair leaks, put system into operation, and test equipment performance.

**END OF SECTION**



MECHANICAL SPECIFICATIONS

GENERAL PROVISIONS FOR MECHANICAL WORK
1. MINOR ITEMS AND ACCESSORIES OR DEVICES REFERABLE AS NECESSARY TO THE COMPLETE AND PROPER OPERATION OF ANY SYSTEM SHALL BE PROVIDED FOR SUCH SYSTEMS...

PIPING:
1. PIPING APPLICATIONS
A. OVERFLOW AND DRAIN PIPING SHALL BE TYPE 1 DRAIN TEMPER COPPER TUBING WITH SOLDERED JOINTS.
B. HOT WATER HEATING PIPING 2" AND SMALLER SHALL BE TYPE 1 DRAIN COPPER TUBING WITH WROUGHT-COPPER FITTINGS AND SOLDERED OR BRAZED JOINTS...

BAS - TEMPERATURE CONTROLS:
1. EXISTING TENANT TEMPERATURE CONTROL SYSTEM IS BY PRECISION CONTROL SYSTEMS. THE TEMPERATURE CONTROL SYSTEM SHALL UTILIZE DDC CONTROLS. TO CONTRACTOR SHALL BE UNDER THE CONTROL OF THE HVAC CONTRACTOR. TO CONTRACTOR SHALL INCLUDE ALL WIRING NECESSARY FOR THE INSTALLATION OF HIS WORK.
2. COORDINATE ALL CONTROL WIRING AND POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR. CONTROL CONTRACTOR SHALL TERMINATE ALL POWER AND CONTROL WIRING TO CONTROL DEVICES...

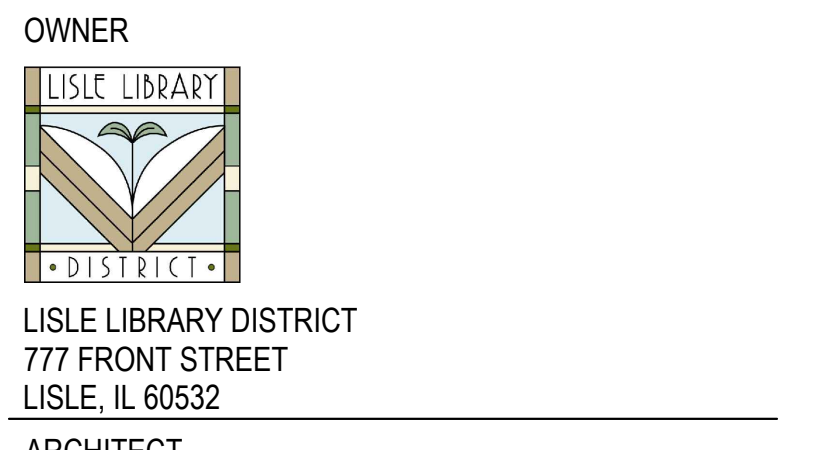
E

D

C

B

A



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SHEEHAN NAGLE HARTRAY ARCHITECTS



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GRAEF

ERIKSSON ENGINEERING ASSOCIATES
145 COMMERCE DRIVE, SUITE A
GRAYS LAKE, IL 60030
LIGHTING CONSULTANT
GGLD

GIVEN GROSSMAN
53 WEST JACKSON STREET, SUITE 1457
CHICAGO, IL 60604

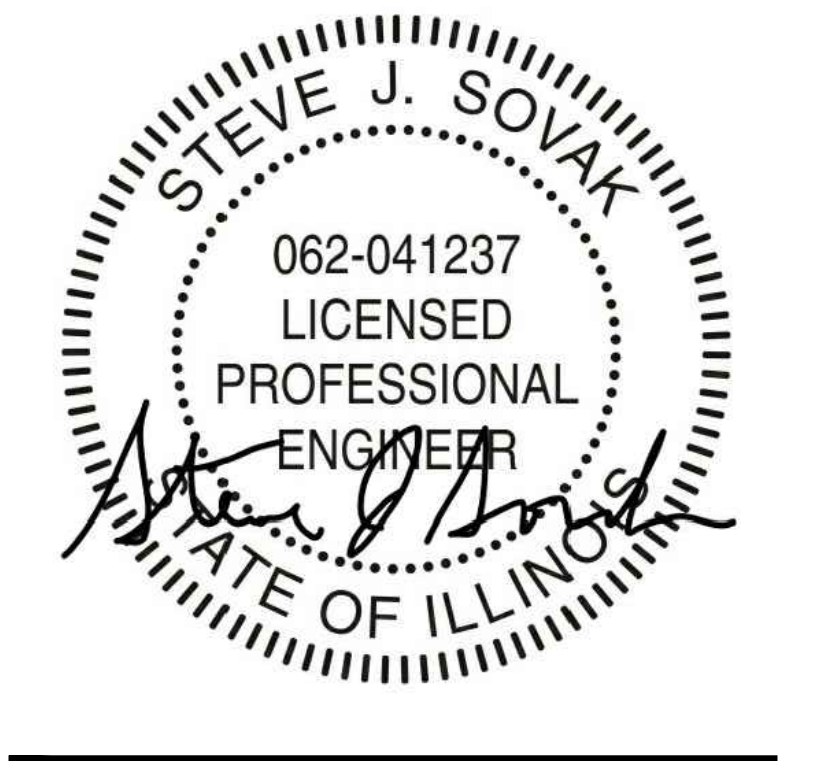


Table with 3 columns: No., Description, Date. Contains revision history for construction documents.

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BID AND PERMIT

MECHANICAL SPECIFICATIONS

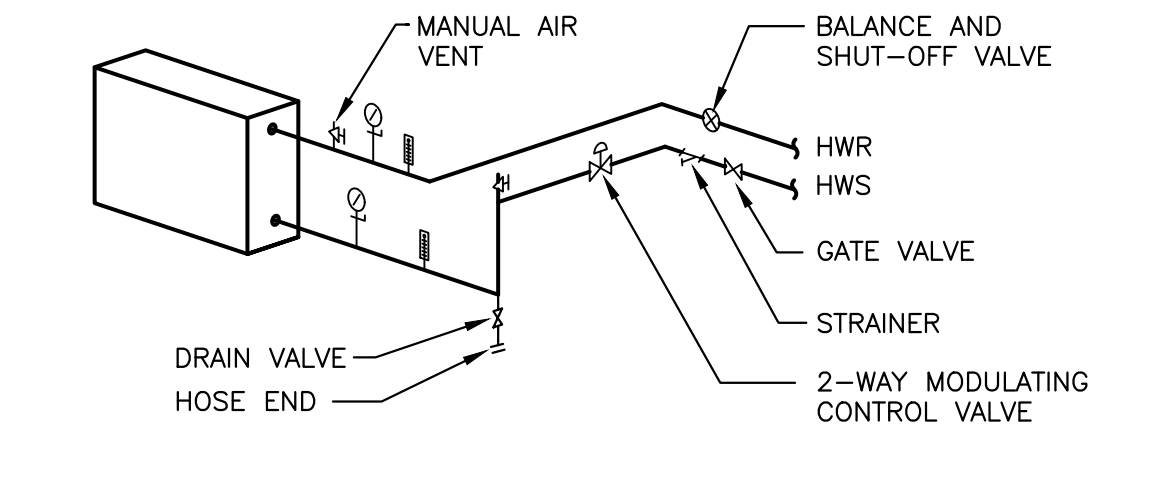
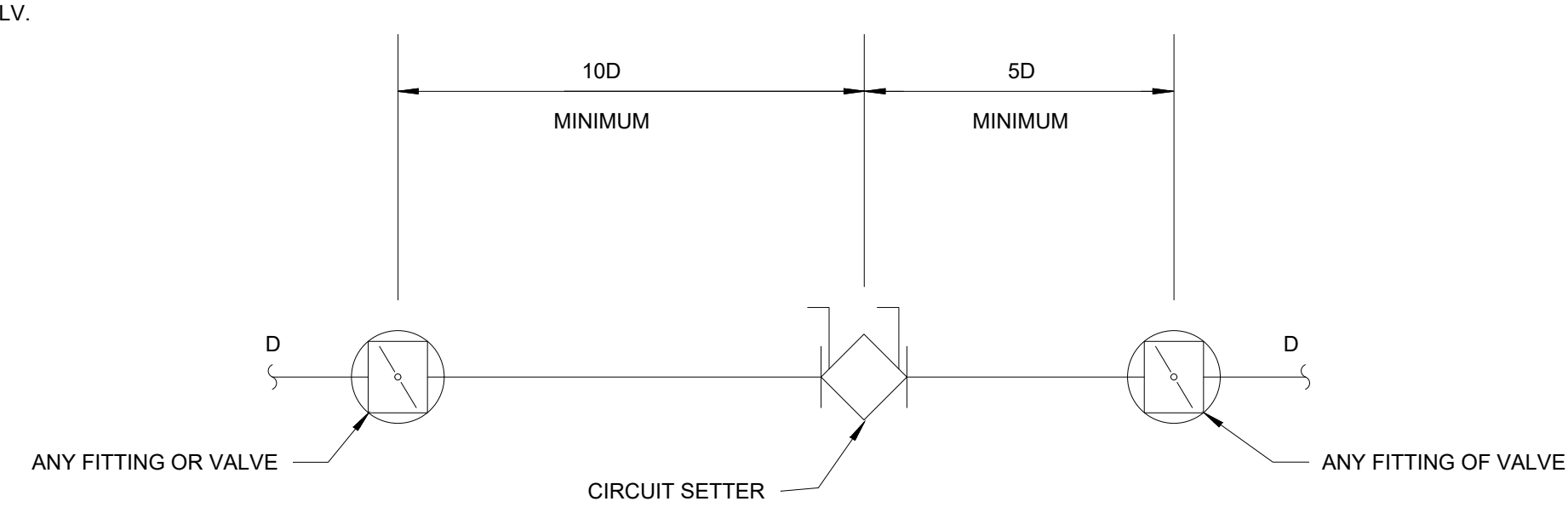
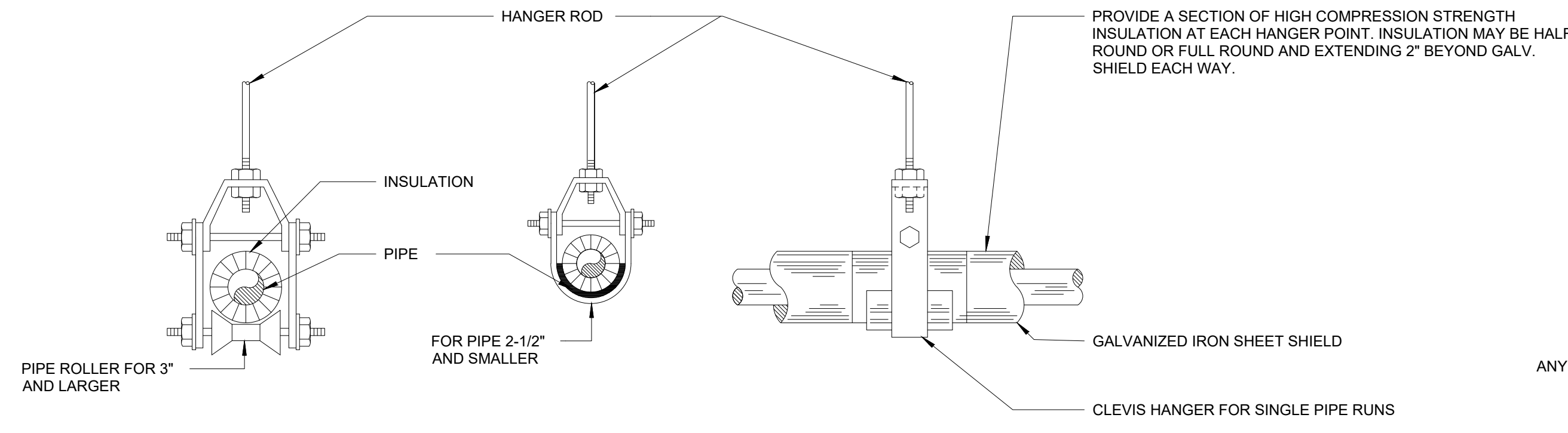
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AS-BUILTS
JENSEN'S PLUMBING & HEATING
670 E. CALHOUN ST.
WOODSTOCK, IL 60098





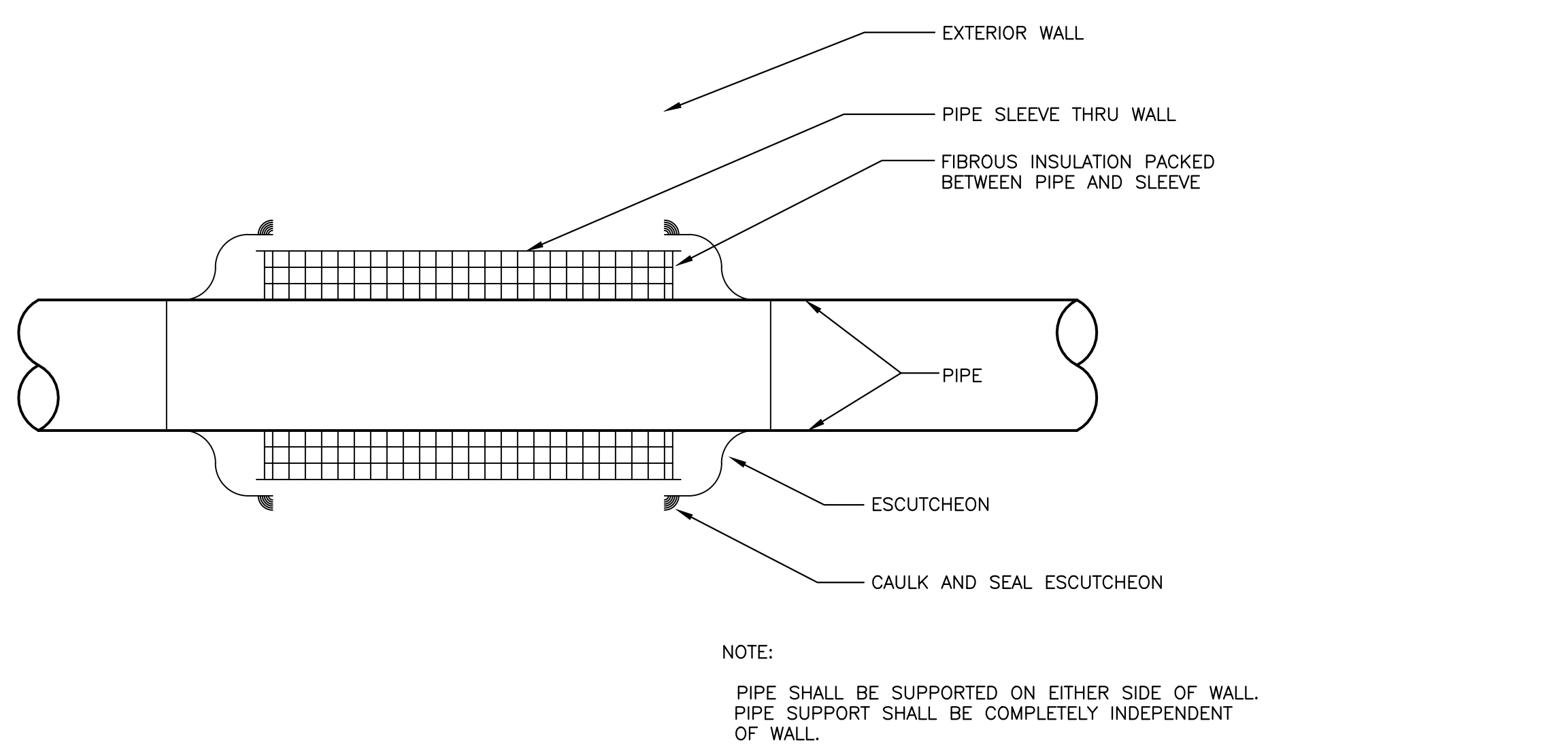
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**REHEAT COIL PIPING DIAGRAM WITH 2-WAY MODULATING CONTROL VALVE**  
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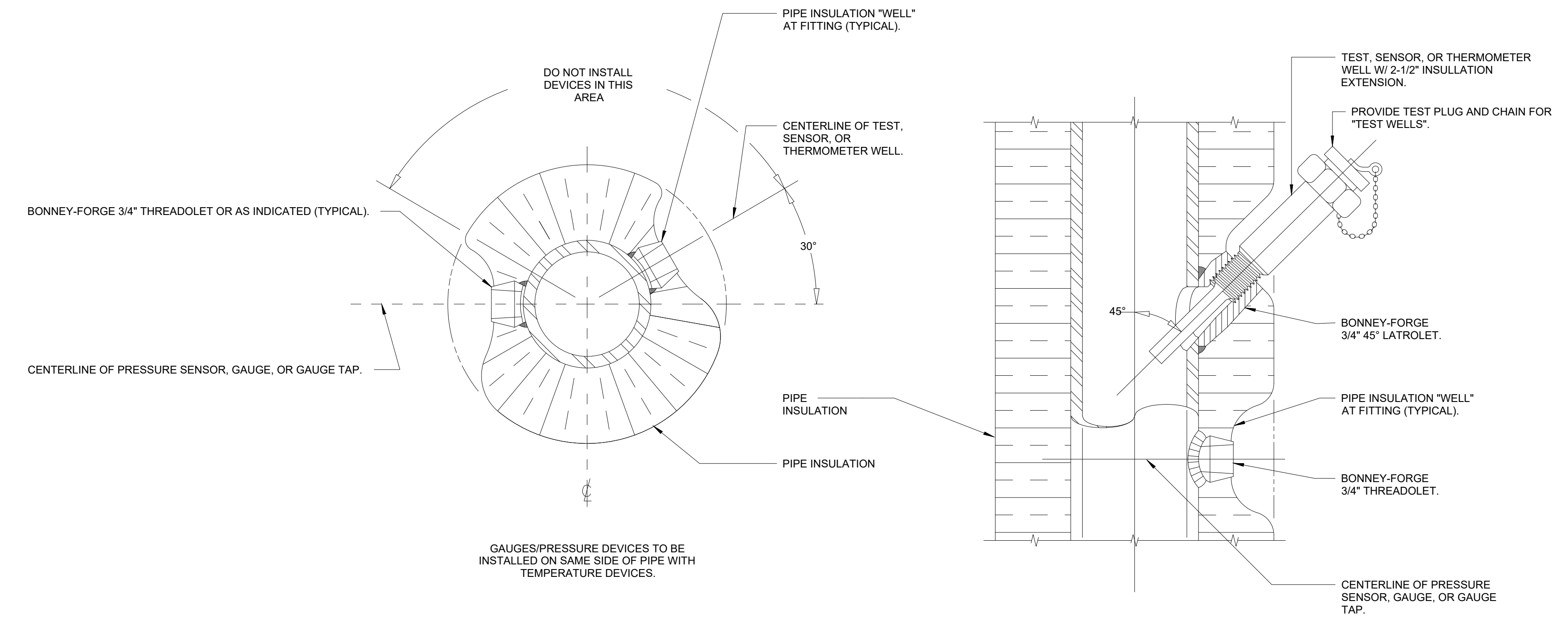
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**PIPE SUPPORT AND HANGERS**  
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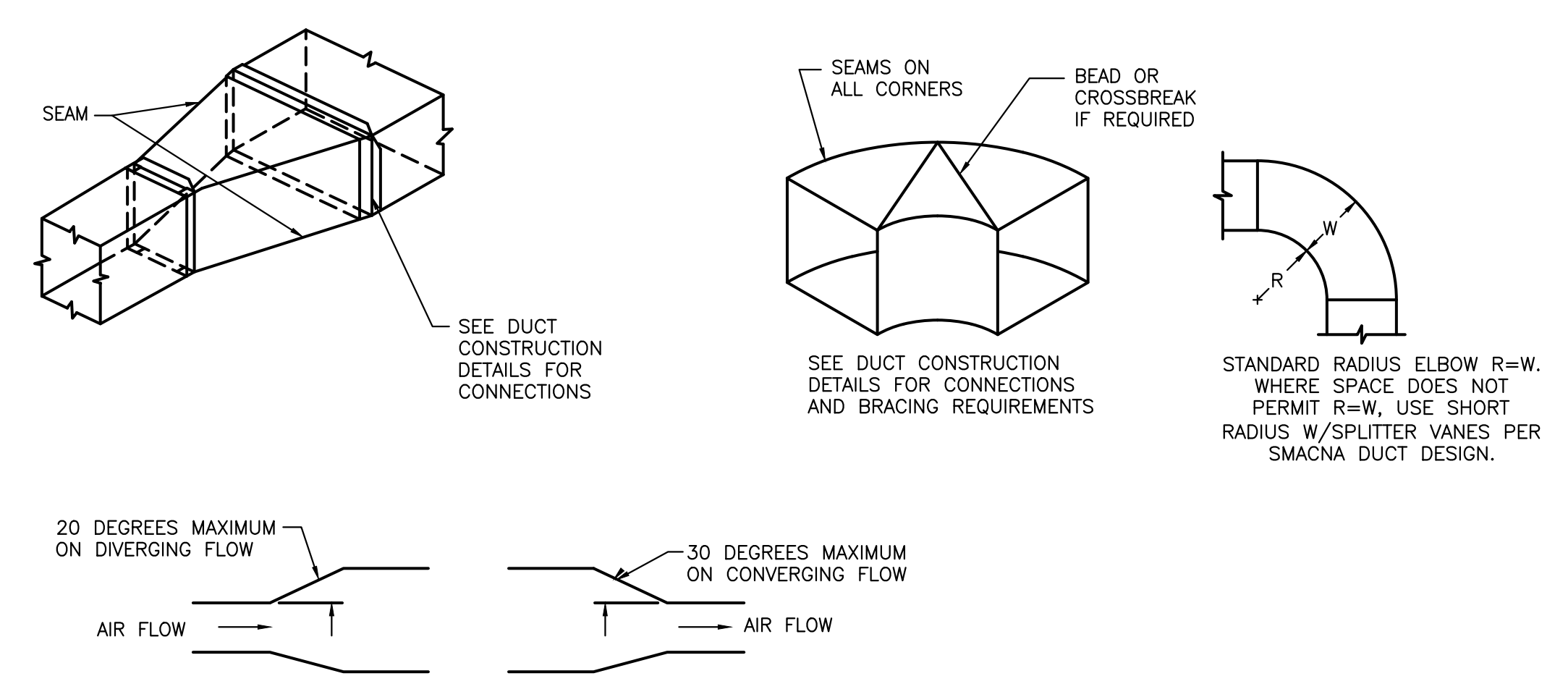
**PIPE THRU WALL DETAIL**  
N.T.S.

**PIPING CIRCUIT SETTER**  
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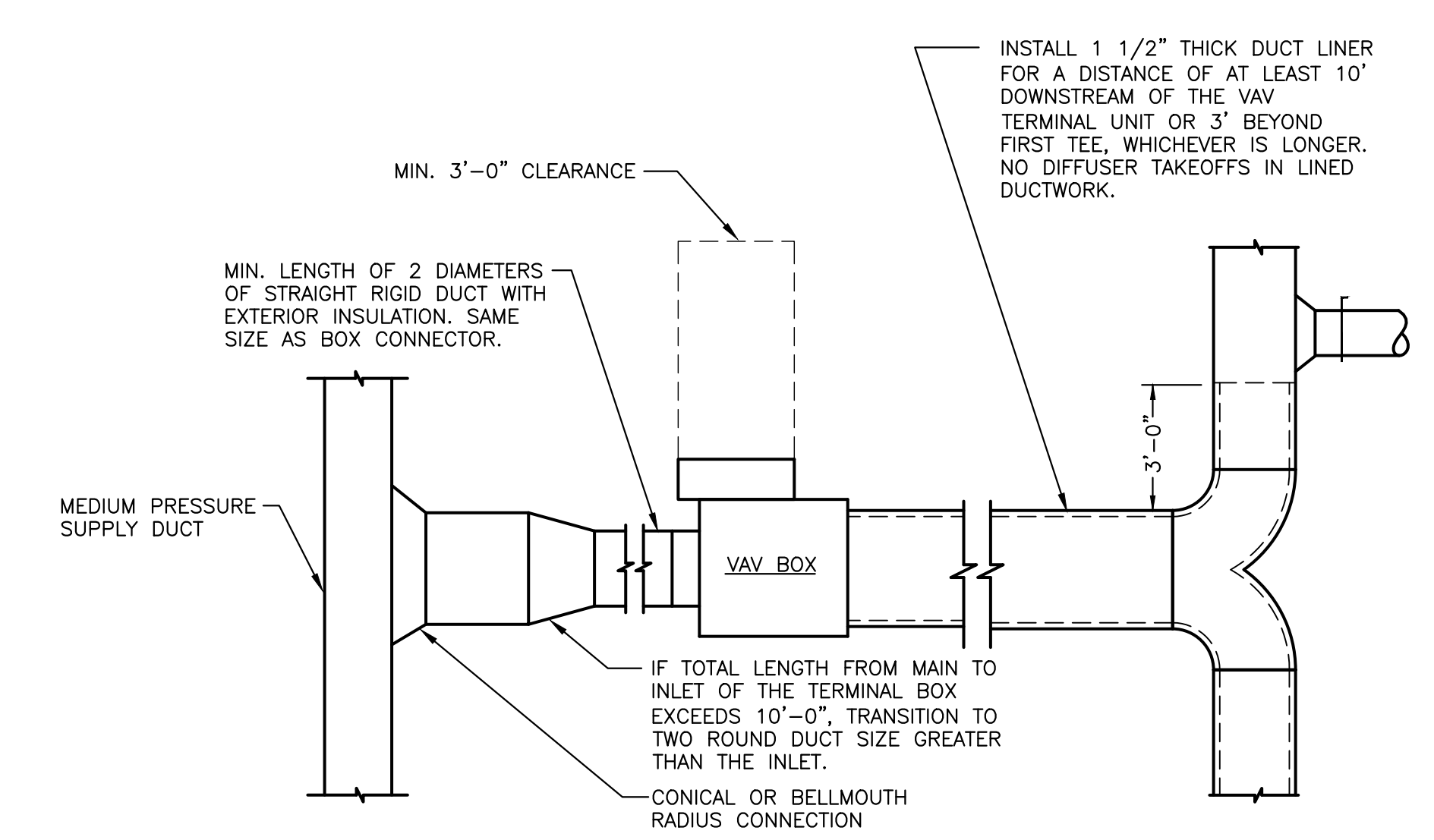


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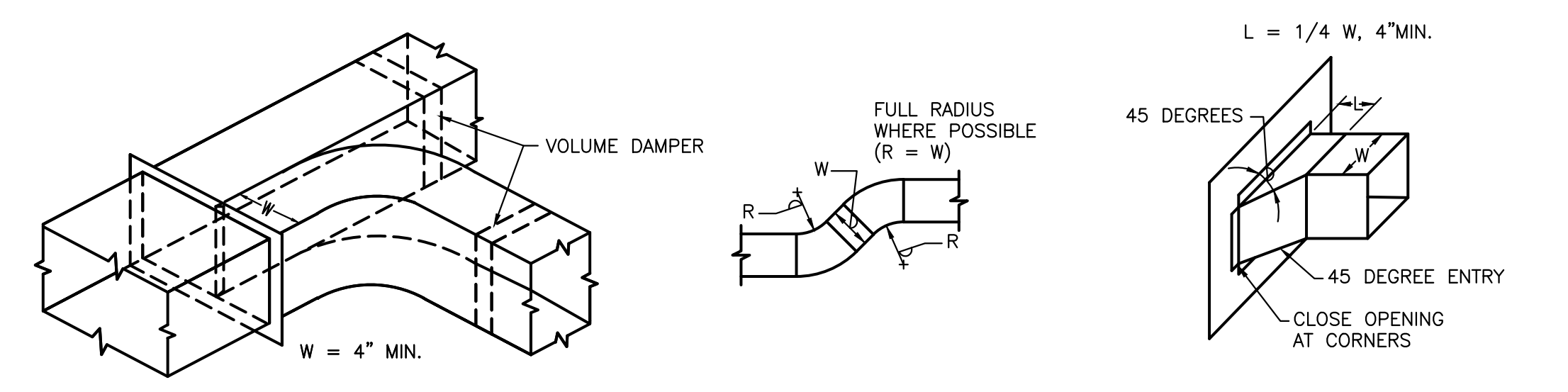


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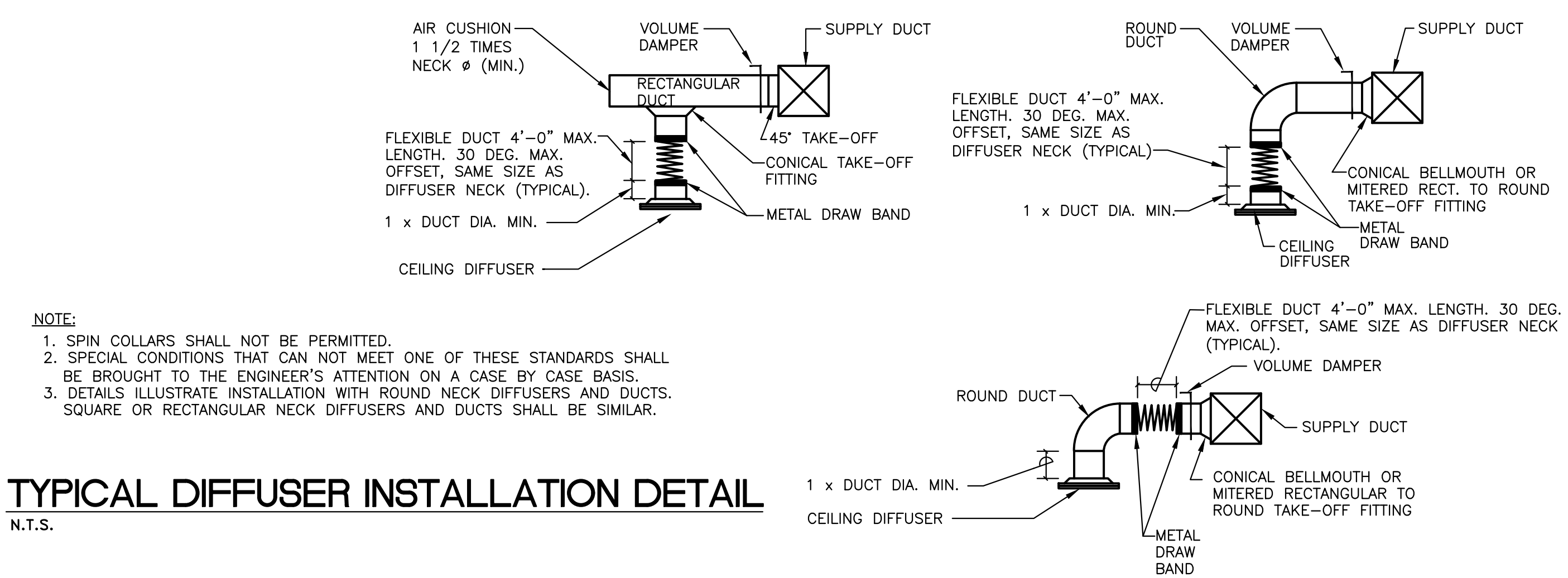


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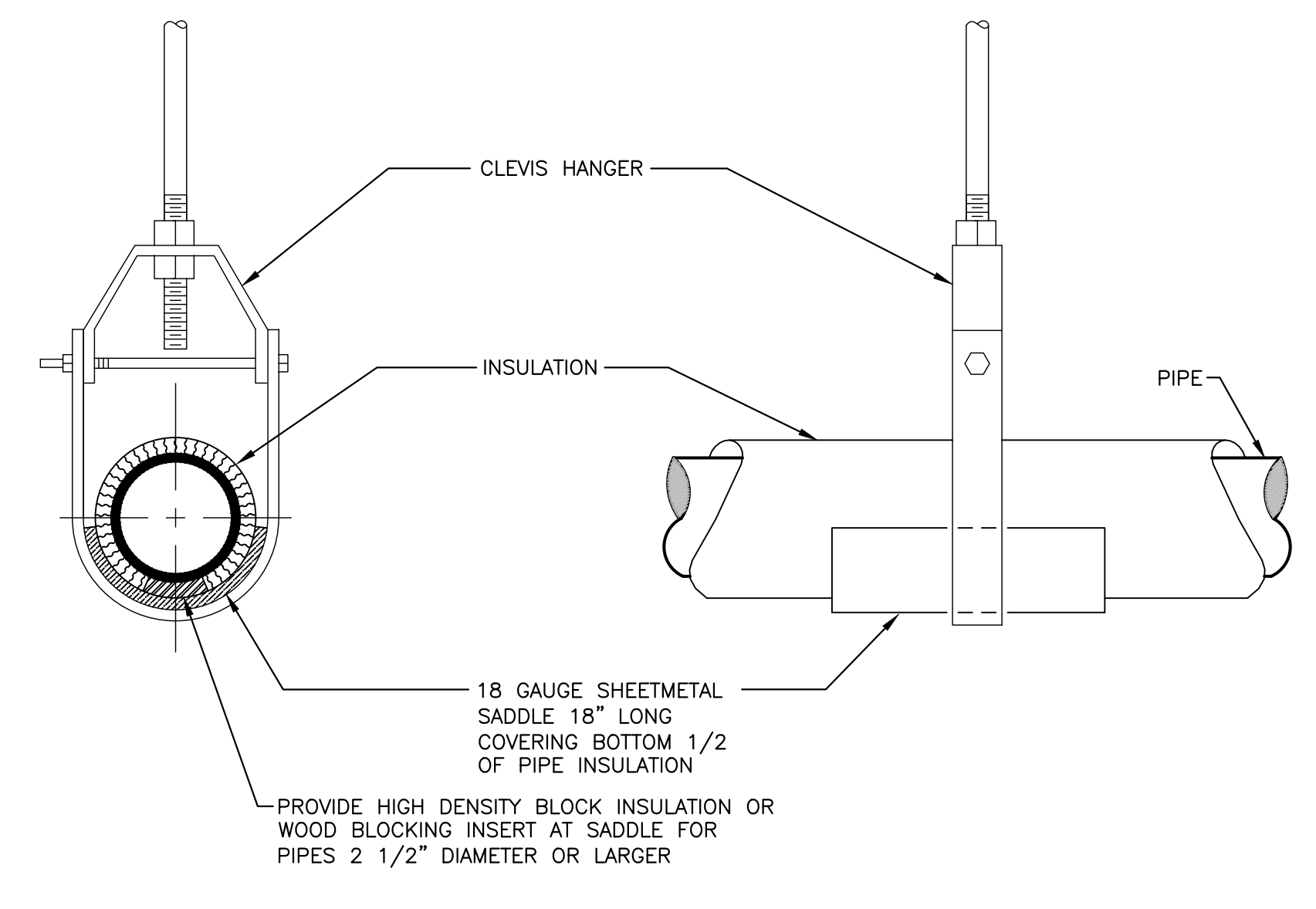
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A



**TYPICAL DIFFUSER INSTALLATION DETAIL**  
N.T.S.



**CLEVIS HANGER PIPE SUPPORT DETAIL**  
N.T.S.

**OWNER**  
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MEP / TECHNOLOGY ENGINEER

**STRUCTURAL ENGINEER**  
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815 SOUTH WABASH AVENUE  
CHICAGO, IL 60605

**CIVIL ENGINEER AND LANDSCAPE CONSULTANT**  
**GRAEF**  
332 SOUTH MICHIGAN AVENUE, SUITE 1400  
CHICAGO, IL 60604

**ERIKSSON ENGINEERING ASSOCIATES, LTD.**  
145 COMMERCE DRIVE, SUITE A  
GRAYSLAKE, IL 60030

**LIGHTING CONSULTANT**  
**GGLD**  
GIVEN GROSSMAN  
Lighting design  
53 WEST JACKSON STREET, SUITE 1457  
CHICAGO, IL 60604

No.	Description	Date
CD-3	WCPR-100-3 ISSUED FOR CONSTRUCTION	03.02.2022
2	ISSUED FOR BID AND PERMIT	11.19.2021
1	ISSUED FOR DESIGN DEVELOPMENT	09.08.2021
1	ISSUED FOR SCHEMATIC DESIGN	06.30.2021

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777 FRONT STREET  
LISLE, IL 60532

**BID AND PERMIT**  
**MECHANICAL DETAILS**

**M004**  
AS-BUILTS  
JENSEN'S PLUMBING & HEATING  
670 E. CALHOUN ST.  
WOODSTOCK, IL 60098

SCALE: AS NOTED  
© 2019 SHEEHAN NAGLE HARTRAY ARCHITECTS, LTD.

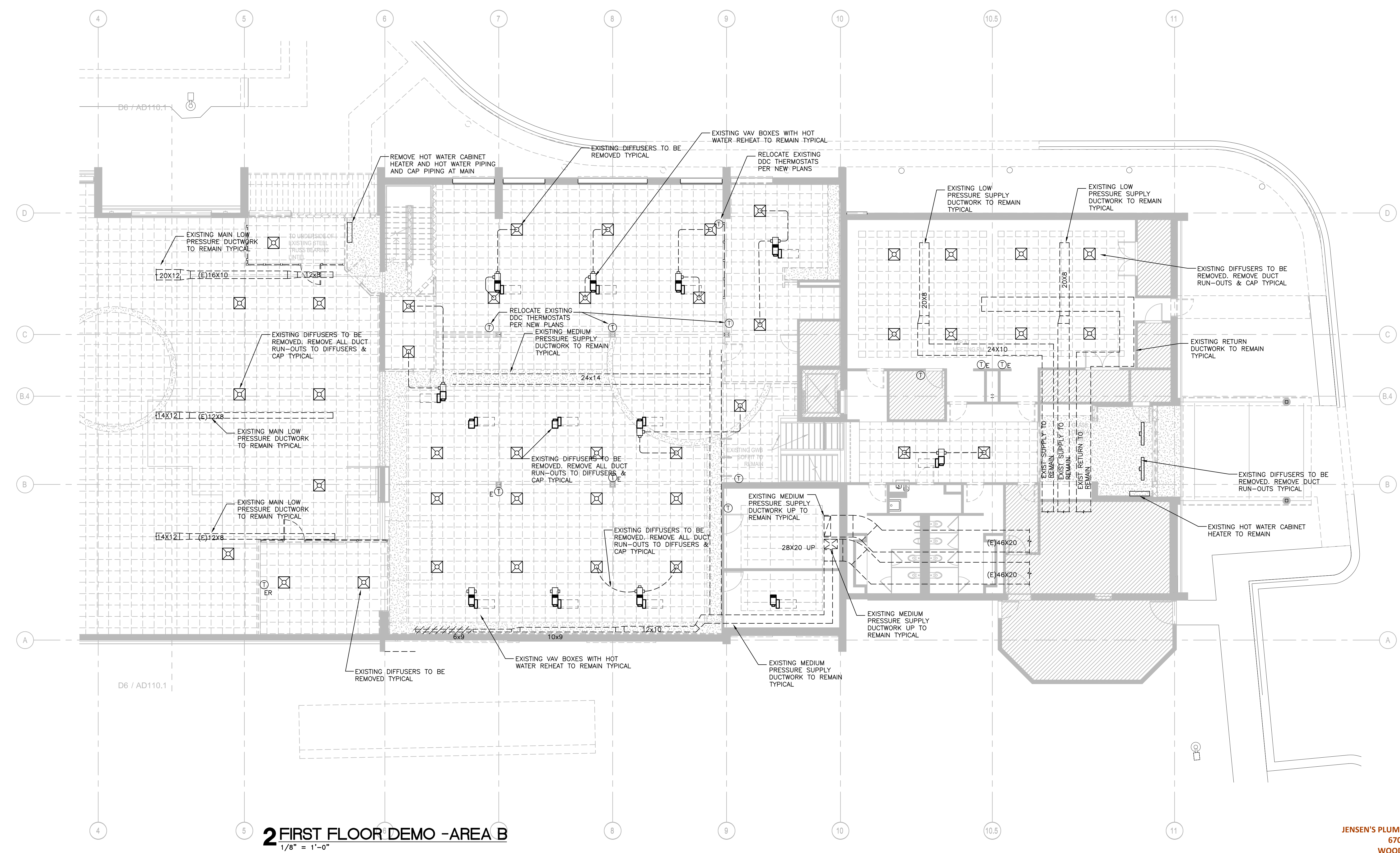
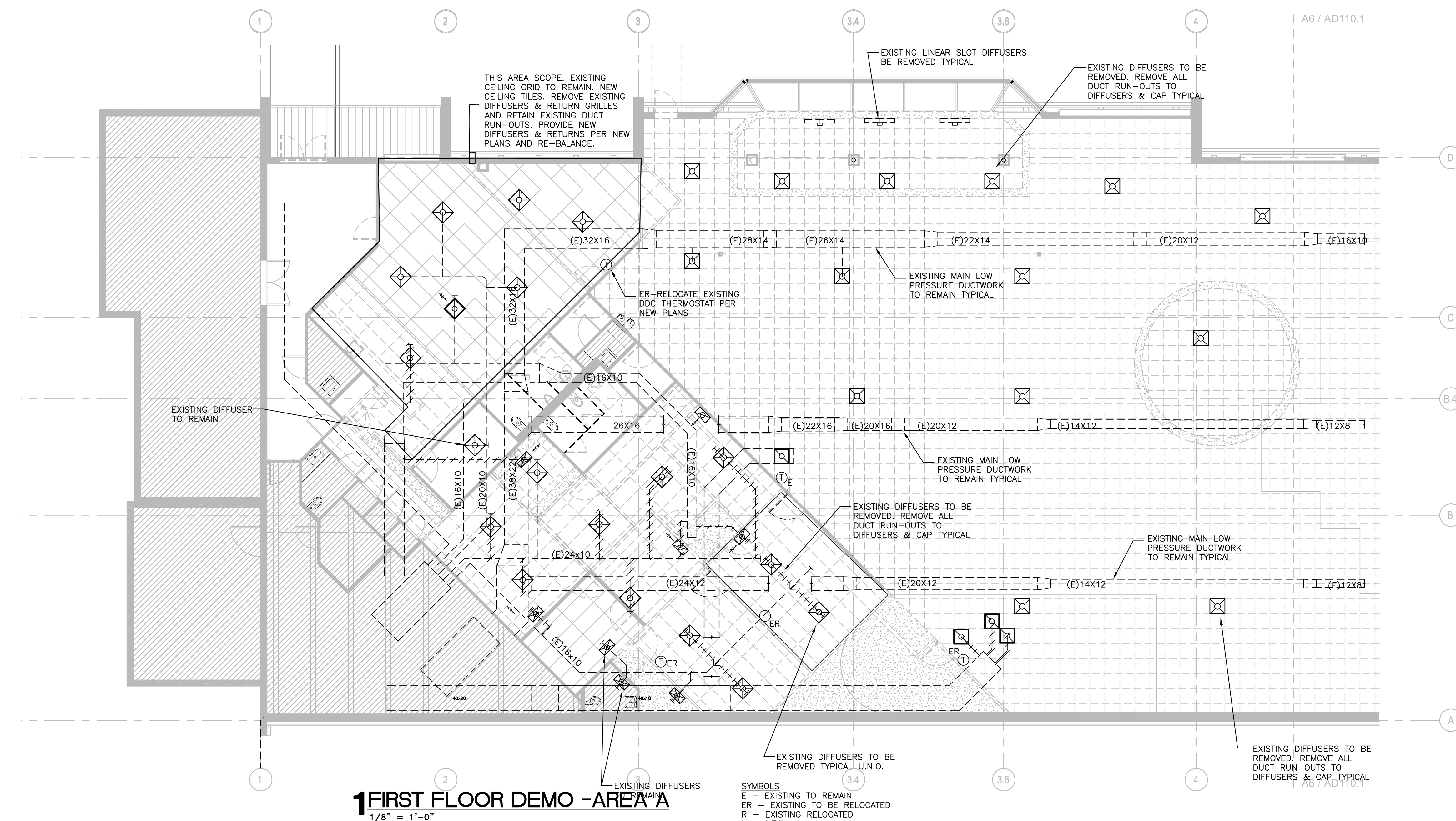
E

D

C

B

A



OWNER  
 LISLE LIBRARY DISTRICT  
 777 FRONT STREET  
 LISLE, IL 60532

ARCHITECT  
 SHEEHAN NAGLE HARTRAY ARCHITECTS  
 30 WEST MONROE, SUITE 900  
 CHICAGO, IL 60603  
 MEP / TECHNOLOGY ENGINEER

SALAS O'BRIEN  
 815 SOUTH WABASH AVENUE  
 CHICAGO, IL 60605  
 STRUCTURAL ENGINEER

GRAEF  
 332 SOUTH MICHIGAN AVENUE, SUITE 1400  
 CHICAGO, IL 60604  
 CIVIL ENGINEER AND LANDSCAPE CONSULTANT

ERIKSSON ENGINEERING ASSOCIATES, LTD.  
 145 COMMERCE DRIVE, SUITE A  
 GRAYSLAKE, IL 60030  
 LIGHTING CONSULTANT

GGLD  
 GWEN GROSSMAN  
 53 WEST JACKSON STREET, SUITE 1457  
 CHICAGO, IL 60604



No.	Description	Date
1	ISSUED FOR SCHEMATIC DESIGN	06.30.2021
2	ISSUED FOR DESIGN DEVELOPMENT	09.08.2021
3	ISSUED FOR BID AND PERMIT	11.19.2021
4	ISSUED FOR CONSTRUCTION	03.02.2022

**LISLE LIBRARY DISTRICT**  
 777 FRONT STREET  
 LISLE, IL 60532

BID AND PERMIT

MECHANICAL FIRST FLOOR PLAN - DEMO

**MD110.01**

AS-BUILTS  
 JENSEN'S PLUMBING & HEATING  
 670 E. CALHOUN ST.  
 WOODSTOCK, IL 60098

SCALE: AS NOTED

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6

5

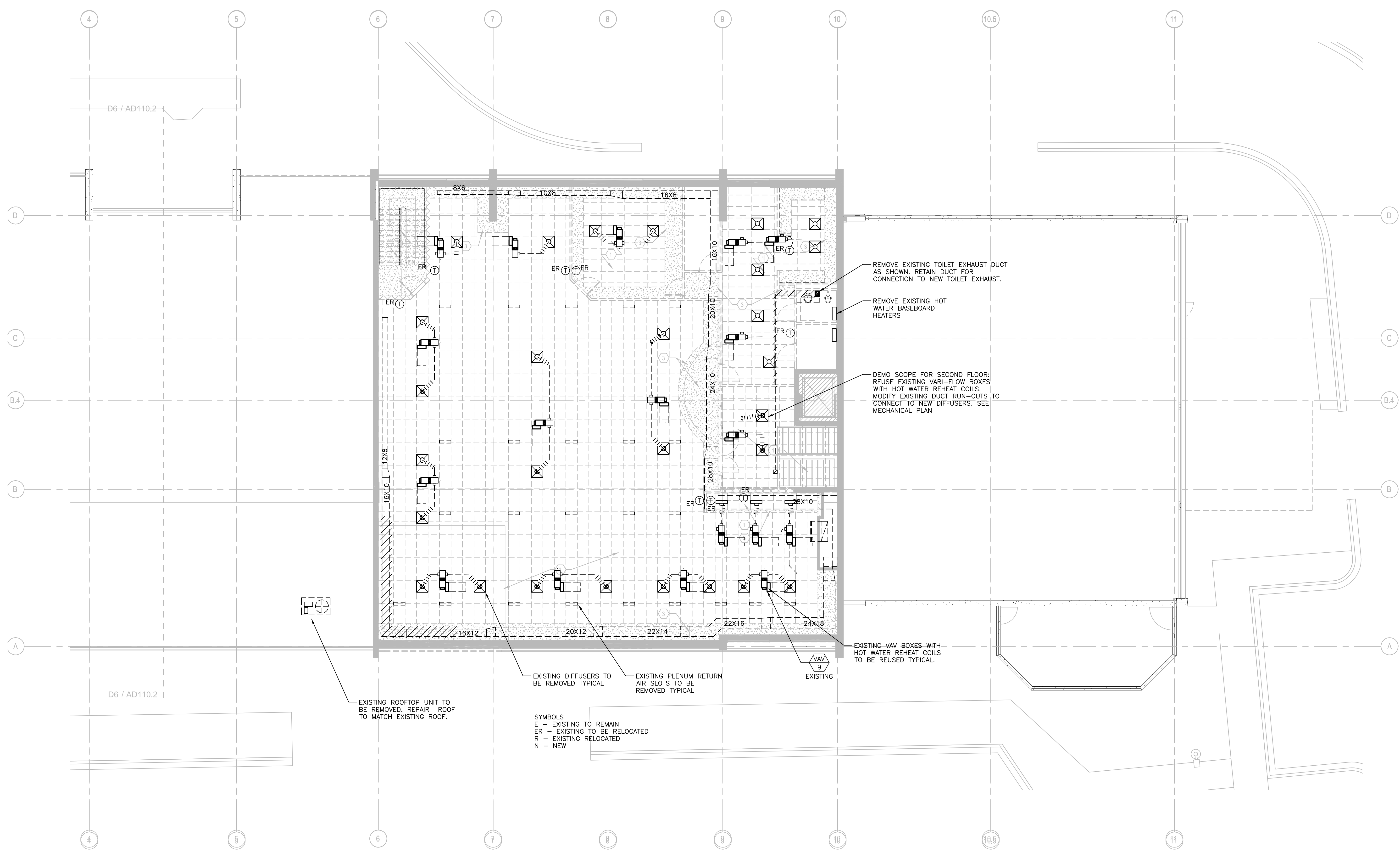
4

3

2

1

E  
D  
C  
B  
A



**2 SECOND FLOOR DEMO - AREA B**  
1/8" = 1'-0"

**SYMBOLS**  
E - EXISTING TO REMAIN  
ER - EXISTING TO BE RELOCATED  
R - EXISTING RELOCATED  
N - NEW

**OWNER**  
LISLE LIBRARY DISTRICT  
777 FRONT STREET  
LISLE, IL 60532

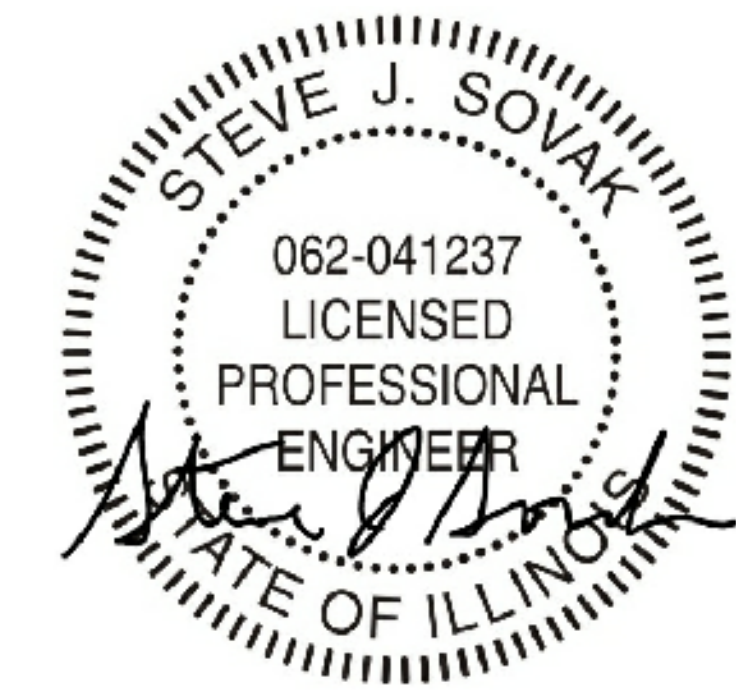
**ARCHITECT**  
**SHEEHAN NAGLE HARTRAY ARCHITECTS**  
SHEEHAN NAGLE HARTRAY ARCHITECTS  
30 WEST MONROE, SUITE 900  
CHICAGO, IL 60663  
MEP / TECHNOLOGY ENGINEER

**STRUCTURAL ENGINEER**  
**SALAS O'BRIEN**  
SALAS O'BRIEN  
815 SOUTH WABASH AVENUE  
CHICAGO, IL 60605

**CIVIL ENGINEER AND LANDSCAPE CONSULTANT**  
**GRAEF**  
GRAEF  
332 SOUTH MICHIGAN AVENUE, SUITE 1400  
CHICAGO, IL 60604

**LIGHTING CONSULTANT**  
**ERIKSSON ENGINEERING ASSOCIATES, LTD.**  
ERIKSSON ENGINEERING ASSOCIATES  
145 COMMERCE DRIVE, SUITE A  
GRAYSLAKE, IL 60030

**LIGHTING CONSULTANT**  
**GGLD**  
GWEN GROSSMAN  
GWEN GROSSMAN LIGHTING DESIGN  
53 WEST JACKSON STREET, SUITE 1457  
CHICAGO, IL 60604



No.	Description	Date
1	ISSUED FOR SCHEMATIC DESIGN	06.30.2021
2	ISSUED FOR DESIGN DEVELOPMENT	09.08.2021
3	ISSUED FOR BID AND PERMIT	11.19.2021
4	ISSUED FOR CONSTRUCTION	03.02.2022

**LISLE LIBRARY DISTRICT**  
777 FRONT STREET  
LISLE, IL 60532

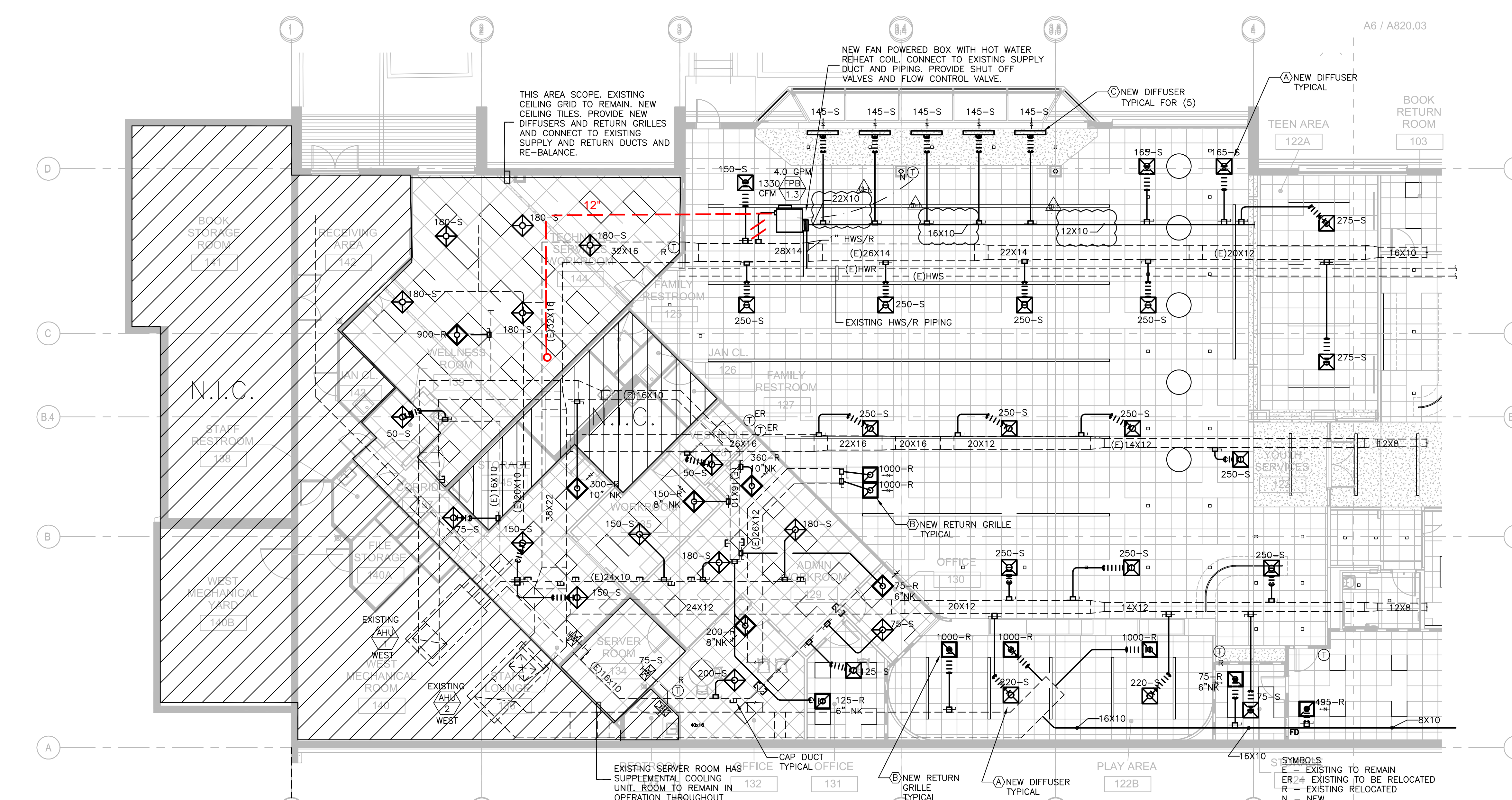
BID AND PERMIT

MECHANICAL SECOND FLOOR PLAN - DEMO

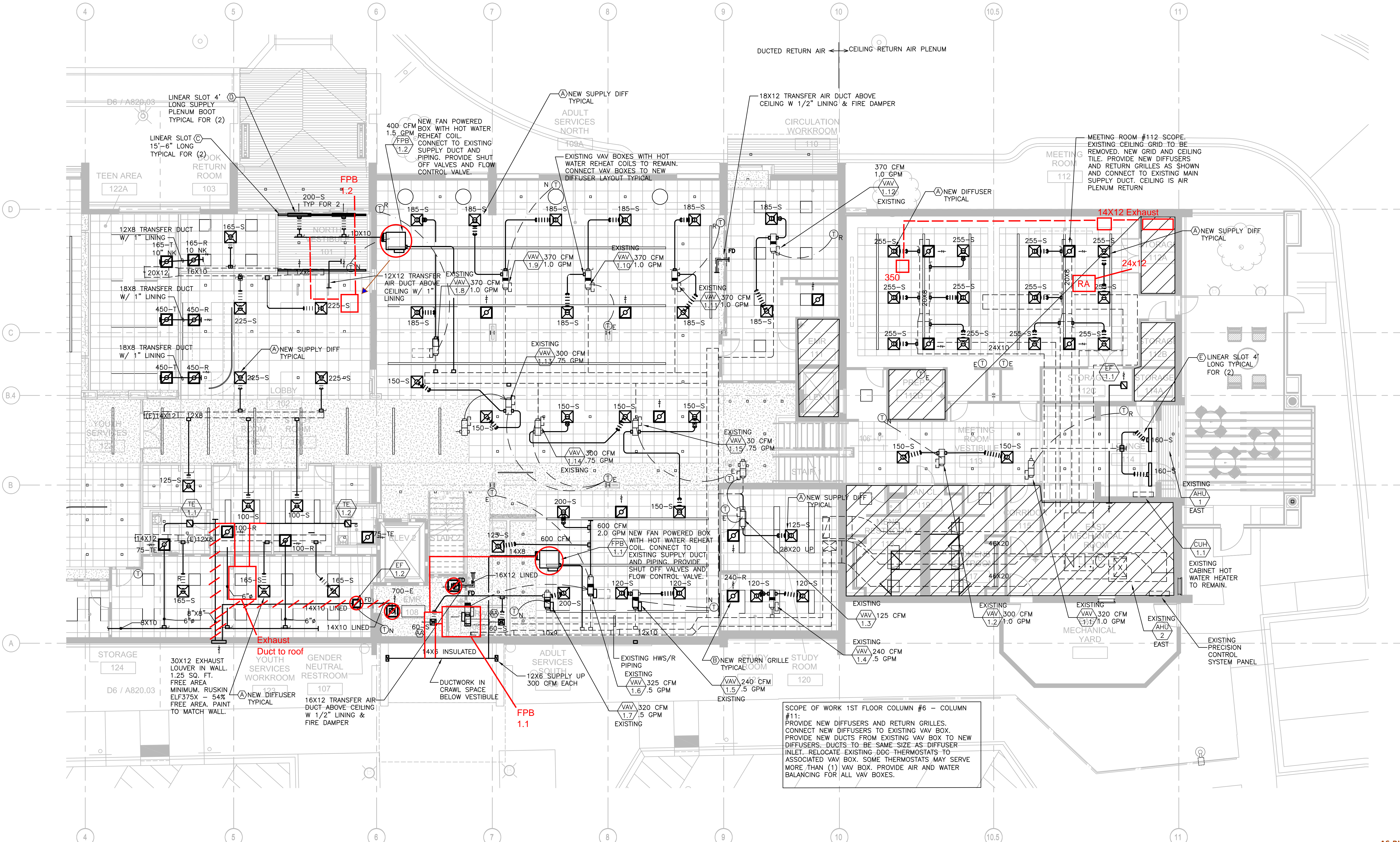
**MD110.02**

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AS-BUILTS  
JENSEN'S PLUMBING & HEATING  
670 E. CALHOUN ST.  
WOODSTOCK, IL 60098



**1 FIRST FLOOR - AREA A**  
1/8" = 1'-0"



**2 FIRST FLOOR - AREA B**  
1/8" = 1'-0"

OWNER  
LISLE LIBRARY  
777 FRONT STREET  
LISLE, IL 60532

ARCHITECT  
SHEEHAN NAGLE HARTRAY ARCHITECTS  
30 WEST MONROE, SUITE 900  
CHICAGO, IL 60603  
MEP / TECHNOLOGY ENGINEER

**SALASOBRIEN**  
expect a difference

SALAS O'BRIEN  
815 SOUTH WABASH AVENUE  
CHICAGO, IL 60605  
STRUCTURAL ENGINEER

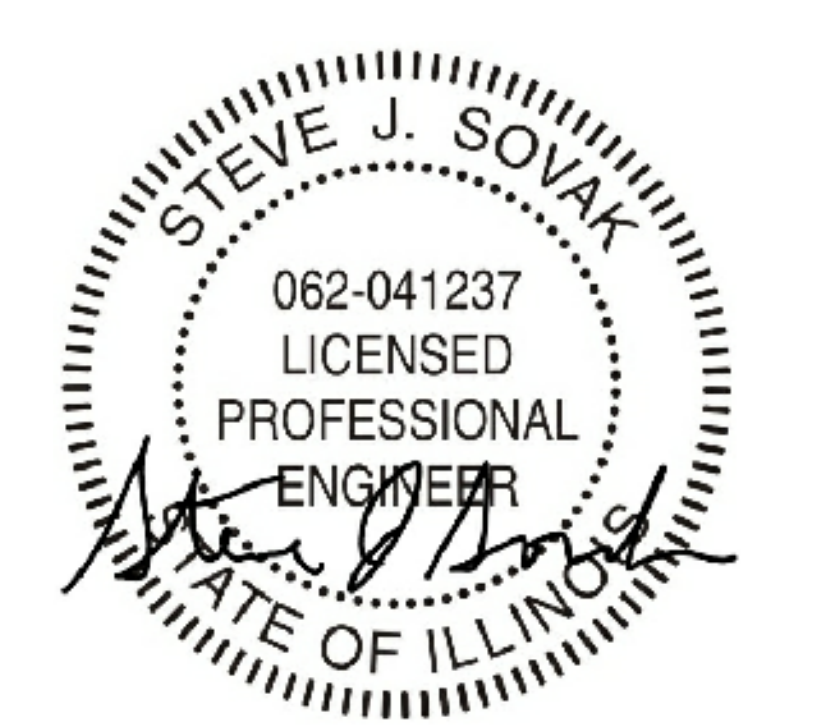
**GRAEF**

GRAEF  
332 SOUTH MICHIGAN AVENUE, SUITE 1400  
CHICAGO, IL 60604  
CIVIL ENGINEER AND LANDSCAPE CONSULTANT

**ERIKSSON**  
ENGINEERING  
ASSOCIATES, LTD.

ERIKSSON ENGINEERING ASSOCIATES  
145 COMMERCE DRIVE, SUITE A  
GRAYSLAKE, IL 60030  
LIGHTING CONSULTANT

**GGLD**  
GAVEN GROSSMAN  
53 WEST JACKSON STREET, SUITE 1457  
CHICAGO, IL 60604



No.	Description	Date
1	ISSUED FOR SCHEMATIC DESIGN	06.30.2021
2	ISSUED FOR DESIGN DEVELOPMENT	09.08.2021
3	ISSUED FOR BID AND PERMIT	11.18.2021
4	ISSUED FOR CONSTRUCTION	03.02.2022
5	ISSUED FOR CONSTRUCTION	01.07.2022
6	ISSUED FOR CONSTRUCTION	01.07.2022
7	ISSUED FOR CONSTRUCTION	01.07.2022
8	ISSUED FOR CONSTRUCTION	01.07.2022
9	ISSUED FOR CONSTRUCTION	01.07.2022
10	ISSUED FOR CONSTRUCTION	01.07.2022
11	ISSUED FOR CONSTRUCTION	01.07.2022
12	ISSUED FOR CONSTRUCTION	01.07.2022

**LISLE LIBRARY DISTRICT**  
777 FRONT STREET  
LISLE, IL 60532

BID AND PERMIT  
MECHANICAL FIRST FLOOR PLAN

**M110.01**  
AS-BUILTS  
JENSEN'S PLUMBING & HEATING  
670 E. CALHOUN ST.  
WOODSTOCK, IL 60098  
SCALE: AS NOTED  
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# Attachment D

8/13/2024

## RIDER TO LLD CONTRACT WITH CONTRACTOR

For Inclusion in Standard Form of Agreement  
Between Owner and Contractor (“Agreement”)

For information purposes:

- A. This Rider applies to all services to be provided by Contractor pursuant to the Agreement.
- B. All representations made by the Owner in the Contract Documents that complete the Agreement are made to the best of Owner’s knowledge and belief.
- C. The contractor shall furnish a Performance Bond in an amount equal to one hundred percent (100%) of the Contract Sum as security for the faithful performance of this Contract and also a Labor and Material Payment Bond in an amount not less than one hundred percent (100%) of the Contract Sum as security for the payment of all persons performing labor and furnishing materials in connection with this Contract. The Performance Bond and the Labor and Material Payment Bond shall be submitted on AIA Form A312 or on other forms acceptable to the Architect/Engineer.
- D. Performance Bonds to be provided (AIA Form) shall contain the following language:

“Any suit under this bond must be instituted before the expiration of the statute of limitation applicable to any claims against the Contractor named herein.”
- E. Any claims shall be commenced within the limitations stated in 735 ILCS 5/13-214. \* The parties intend that modifications in the Agreement or Contract Documents of the limitations provided by 735 ILCS 5/13-214, if any, shall be given no effect.
- F. Contractor shall purchase insurance to cover claims and expenses, including costs of defense, asserted against Owner and Architect/Engineer and Owner’s Representative, their agents, employees and consultants for bodily injury, sickness, disease or death caused by any negligent act or omission of the Contractor, Sub-Contractors, anyone directly or indirectly employed by them or anyone for whose acts any of them may be liable. The coverage afforded the Owner and Architect/Engineer and Owner’s Representative shall be primary insurance for the Owner and Architect/Engineer and Owner’s Representative with respect to claims arising out of operations performed by or on behalf of the Contractor. If the Owner and Architect/Engineer and Owner’s Representative have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of liability of the Contractor under this insurance policy shall not be reduced by

---

\* (a) Actions based upon tort, contract or otherwise against any person for an act or omission of such person in the design, planning, supervision, observation or management of construction, or construction of an improvement to real property shall be commenced within 4 years from the time the person bringing an action, or his or her privity, knew or should reasonably have known of such act or omission. Notwithstanding any other provision of law, contract actions against a surety on a payment or performance bond shall be commenced, if at all, within the same time limitation applicable to the bond principal.

(b) No action based upon tort, contract or otherwise may be brought against any person for an act or omission of such person in the design, planning, supervision, observation or management of construction, or construction of an improvement to real property after 10 years have elapsed from the time of such act or omission . . .

# Attachment D

the existence of such other insurance.

1. Such insurance shall be written to include the following coverages and for not less than the following minimum limits, or greater if required by law:

- i. General Liability:

1. Commercial General Liability
    2. Occurrence Basis
    3. Limits:
      - a. General Aggregate - \$2,000,000
      - b. Products – Comp / Ops Aggregate - \$1,000,000
      - c. Personal & Advertising Injury - \$1,000,000
      - d. Each Occurrence - \$1,000,000
      - e. Fire Damage (any one fire) - \$50,000
      - f. Medical Expense (any one person) - \$5,000

- ii. Automobile Liability

1. Any Auto Owned by Contractor
    2. Hired Autos
    3. Non-Owned Autos
    4. Limits:
      - a. Combined Single Limit - \$1,000,000

- iii. Umbrella / Excess Liability

1. Limits:
      - a. Each Occurrence - \$10,000,000
      - b. Aggregate - \$10,000,000

- iv. Workers' Compensation and Employers' Liability

1. Employers' Liability Limits:
      - a. Each Accident - \$500,000
      - b. Disease-Policy Limit - \$500,000
      - c. Disease-Each Employee - \$500,000

- G. Work will not begin, nor will any payment be authorized absent submission by the Contractor to the Owner and/or Owner's Representative of proof that all required insurance coverages and bonds are in effect. A Certificate of Insurance is not adequate proof. The Contractor may provide a Certificate of Insurance but shall also provide the actual endorsement from the Contractor's insurance company.
- H. "As built" drawings from the Contractor are a condition of receipt of the Contractor's final payment.
- I. The responsibilities/liabilities of the Owner and the Contractor and their consultants, agents and employees and any concomitant damages and/or consequential damages shall be determined in such amount and to such extent as provided by Illinois law, insurance coverage, caps or limitations notwithstanding. By way of this provision, the parties intend that any limitations in the Agreement of the amounts or types of damages available to the parties shall be given no effect.
- J. The Contractor shall reimburse the Owner for all reasonable fees charged to the Owner by the Architect/Engineer and Owner's Representative, if any, which the Owner incurs as a result of the Contractor's failure to fulfill the Contractor's obligations including, without limitation, timely completion of the project.
- K. Contractor shall pay all reasonable attorneys' fees, experts' fees, and costs incurred by the Owner in enforcing the terms and provisions of this Agreement and in defending any proceeding to which the Owner is made a party as result of the acts or omissions of the Contractor.
- L. Contractor shall defend, indemnify, and hold harmless Owner, Architect/Engineer and Owner's Rep from and against all claims, losses, damages, and expenses to the extent such claims, losses, damages or expenses are caused by Contractor's conduct, acts, errors or omissions.

# Attachment D

- M. In an effort to resolve any conflicts that arise under this Agreement, prior to commencing litigation all disputes between the Owner and the Contractor arising out of or relating to this Agreement shall be submitted to non-binding mediation. After such non-binding mediation and, unless the parties agree to submit to binding arbitration, any claims, disputes, liabilities of the parties or other matters between the Owner and the Contractors shall be resolved in the Circuit Court of Dupage County, Illinois in accordance with Illinois law.
- N. Contractor shall obtain lien waivers for all labor and materials for the project.
- O. Contractor acknowledges sole responsibility for determining the nature and extent of any and all work required to complete the Project.
- P. It is intended that neither the Owner nor the Architect/Engineer nor the Owner's Representative has responsibility for constructions means, methods, techniques, sequences, or procedures, and/or safety precautions and programs.
- Q. Contractor shall at all times observe and comply with all laws, ordinances, regulations and codes of any applicable governmental entity including, without limitation, prevailing wage laws.
- R. Contractor acknowledges full and sole authority for all safety programs and precautions in connection with the work.
- S. Contractor acknowledges that he has examined the property and has familiarized himself with all local conditions affecting the property.
- T. The Contractor's standard of care shall be the standard of care consistent with those usual and customary standards of professional care, skill, and diligence which are, at the time of performance of services under this Agreement, commonly followed by Contractors performing the same or similar services in the locale in which the Project is located. Consistent with this standard of care, Contractor is cognizant of its duties:
  - a) vis-à-vis assessing compliance with the Drawings and Specs; and
  - b) to confirm in writing, when appropriate, interpretations by government officials of building codes and applicable regulations.
- U. Contractor, at Contractor's expense, will obtain and maintain all necessary permits and licenses.
- V. Contractor shall provide Owner with all documents requested by Owner thereby enabling Owner to respond timely to any request to Owner for documents pursuant to the Freedom of Information Act.
- W. The Owner is subject to the Freedom of Information Act, 5 ILCS 140/1, et seq. ("FOIA"). All information submitted by Contractor to Owner is subject to disclosure to third parties in accordance with FOIA. If Contractor intends for Owner to withhold the bidder's trade secrets, commercial information, or financial information from disclosure to a third party in response to a FOIA request, Contractor must include with its bid written notification specifically identifying such information, along with a statement that disclosure of such information will cause competitive harm to the bidder, as provided by FOIA Section 7(1)(g), 5 ILCS 140/7(1)(g). Any information submitted which is not so marked by Contractor at the time of bid submittal will be presumed to be open to public inspection. Contractor may be required to substantiate the basis for its claims. Owner reserves the right, in its sole discretion and subject only to applicable law, to withhold or release Contractor's information in response to a FOIA request.



# Attachment D

## X. Owner's Representative Required Provisions:

- i. Contractors responsible for construction shall purchase insurance to cover claims and expenses, including costs of defense, asserted against Owner's Representative, its agents, employees and consultants for bodily injury, sickness, disease or death caused by any negligent act or omission of the Contractor, any sub-contractor, anyone directly or indirectly employed by them or anyone for whose acts any of them may be liable. Such insurance shall state that: "The coverage afforded the additional insured shall be primary insurance for the additional insured with respect to claims arising out of operations performed by or on behalf of the Contractor. If the additional insured have other insurance, which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the company's liability under this insurance policy shall not be reduced by the existence of such other insurance."
- ii. To the fullest extent permitted by law, the Contractor shall waive any right of contribution and shall indemnify and hold harmless the Owner, CCS International, Inc. (the Owner's Representative) and their agents and employees and consultants from and against all claims, damages, losses and expenses, including but not limited to attorney's fees and economic or consequential damages, arising out of or resulting from or in connection with the performance of the Work, provided that any such claim, damage, loss or expense is caused in whole or in part by any negligent act or omission of any Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity that would otherwise exist as to any party or person described in this Agreement.
- iii. In any and all claims against the Owner or Owner's Representative or any of their agents or employees and consultants by any employee of the Contractor or Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph agreement shall not be limited in any way by any limitation on the amount or type damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefits acts.
- iv. "Claims, damages, losses and expenses" as these words are used in this Agreement shall be construed to include, but not limited to (1): injury or damage consequent upon the failure of or use or misuse by Contractor, its Subcontractors, agents, servants, or employees, of any hoist, rigging, blocking, scaffolding, or any and all other kinds of items of equipment, whether or not the same be owned, furnished or loaned by Owner; (2): all attorneys' fees and costs incurred in bringing an action to enforce the provisions of this indemnity or any other indemnity contained in the General Conditions, as modified by the Supplementary General Conditions; and (3): time expended by the party being indemnified and their employees, at their usual rate plus costs of travel, long distance telephone and reproduction of documents.
- v. The indemnity provisions of this Agreement shall not require the Contractor to indemnify the Owner, Owner's Representative, their consultants, agents or employees to the extent of their own negligence. The Owner's Representative is intended to be a third party beneficiary of all provisions of the Agreement.

# Attachment D

## Y. Architect/Engineer Required Provisions:

- i. To the fullest extent permitted by law, the Contractor shall waive any right of contribution and, with respect to the Indemnified Parties, any limitation of liability under Worker Compensation laws, and shall indemnify and hold harmless the Owner, the Architect/Engineer and their agents and employees and consultants (the Indemnified Parties”) from and against all claims, damages, losses and expenses (“Claims”), including but not limited to attorney’s fees and economic or consequential damages, arising out of, resulting from or in connection with the performance of the Work, provided that any such Claim, is caused in whole or in part by any negligent act or omission of any Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by an Indemnified Party. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist to any party or person described in this Agreement.
- ii. In any and all Claims against any Indemnified Party by any employee of the Contractor or any Subcontractor, anyone directly or indirectly employed by any of them for whose acts any of them may be liable, the indemnification obligation under this Paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under worker compensation acts, disability benefit acts or other employee benefits acts.
- iii. The term ‘Claim’ as used in this Paragraph shall be construed to include, but not limited to (1) injury or damage consequent upon the failure of or use of misuse by Contractor, its Subcontractors, agents, servants or employees, of any kind of items of equipment, whether or not the same be owned, furnished or loaned by Owner or Contractor; (2) all attorney’s fees and costs incurred in bringing an action to enforce the provisions of this indemnity or any other indemnity contained in the Contract Documents; and (3) time expended by the Indemnified Party and its employees, at their usual rates plus costs of travel, long distance telephone and reproduction of documents.
- iv. Only to the extent necessary to prevent this provision from being void under 740 ILCS 35/1, et seq., entitled “Indemnification of person from person’s own negligence, this indemnity agreement shall not require the Contractor to indemnify any Indemnified Party against that party’s own negligence.”

# Attachment D

Z. THIS RIDER IS THE LAST ARTICLE TO THE AGREEMENT AND IS EXECUTED ON THE DATES STATED BELOW. IN THE EVENT OF ANY CONFLICT BETWEEN THE PROVISIONS OF THIS RIDER AND ANY OTHER PROVISIONS OF THE AGREEMENT, THIS RIDER CONTROLS. THIS PARAGRAPH IS STATED IN ALL CAPITAL LETTERS AND IS INITIALED AS CONFIRMATION OF THE PARTIES' UNDERSTANDING OF THE PRECEDENCE THIS RIDER TAKES OVER ANY OTHER PROVISIONS OF THE AGREEMENT.

\_\_\_\_\_  
Contractor (Initial)

\_\_\_\_\_  
Owner (Initial)

Date Initialed: \_\_\_\_\_

Date Initialed: \_\_\_\_\_

CONTRACTOR TBD  
COMPANY

BOARD OF LIBRARY TRUSTEES  
LISLE PUBLIC LIBRARY DISTRICT

By: \_\_\_\_\_

By: \_\_\_\_\_

President

President

Date Signed: \_\_\_\_\_, 2021

Date Signed: \_\_\_\_\_, 2021