



KINGFISHER COUNTY COMMISSIONERS

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Kingfisher County Courthouse
101 S. Main, Room #9
Kingfisher, OK 73750

February 9, 2023

In re: Remodel of Hennessey Fire Department

To all Bidders,

An addendum for this project regarding changes and clarification is attached.

These changes to the specifications are approved by the Commissioners of Kingfisher County and will go into effect immediately. Copies of this amended specification will be sent to all vendors on the vendor list identified in the notice to bid and will also be available in the Kingfisher County Clerk's office: 405-375-3887 and the Kingfisher County website, kingfisher.okcounties.org.

Board of County Commissioners
Kingfisher County Courthouse
Kingfisher, Oklahoma

CHAIRMAN: _____

Heath Dobrovolny

ATTEST:

COUNTY CLERK



PROJECT ADDENDUM NO. 01



TO THE BIDDING DOCUMENTS FOR:

HENNESSEY FIRE DEPARTMENT **Remodel/Addition**

February 8, 2023

PROJECT NO. 2111

TO ALL CONTRACTORS OF RECORD:

The following items, applicable to the Work designated, shall be considered to be an Addendum and, as such, shall be included into the Contract for Construction. Contractor shall acknowledge receipt of this addendum on bid form.

PART 1 - GENERAL ITEMS

1.01 SPECIFICATIONS

A.

1. **Section 10 14 00 – SPECIALTIES- SIGNAGE:**

Delete section items **2.02 Signage Applications**, Item D. **Building Identification Signs** and item E. **Plaque.**

Delete section **2.05 PLAQUES**

Delete section **2.06 DIMENSIONAL LETTERS**

2. **Section 13 34 19 –SPECIAL CONSTRUCTION-METAL BUILDING SYSTEM, PART 1 – GENERAL,**
section 1.12 WARRANTIES, Item B.

Change the following to read "only 5 years from date of Substantial Completion":

Special Weathertightness Warranty: On manufacturer's standard form, in which manufacturer agrees to repair or replace metal building system components that fail to remain weathertight, including leaks, [without monetary limitation] [up to cost limitation of seven dollars (\$7.00) per square foot of covered area] [up to cost limitation of fourteen dollars (\$14.00) per square foot of covered area] within [5] [~~10~~] [~~15~~] [~~20~~] years from date of Substantial Completion.

3. **Delete SECTION 08 71 00 DOOR HARDWARE. Replace with new SECTION 08 71 00 DOOR HARDWARE.** See attached.

4. **SECTION 00 21 13, INSTRUCTION TO BIDDERS, BID ENCLOSURES/REQUIREMENTS, 7.04 BID FORM REQUIREMENTS:**

Replace item B. To read as follows:

B. This project is tax exempt. County will issue tax exempt form to successful bidder.

5. **SECTION 00 21 13, INSTRUCTION TO BIDDERS, OFFER ACCEPTANCE/REJECTION. Add section 8.03 item A to read as follows:**

A. After acceptance of contract award and signed contracts with county, Contractor to apply for building permit with City of Hennessey. Permit application costs to be reimbursed by owner.

B. **Products Approvals:**

Subject to compliance with requirements the below listed materials, equipment or systems are accepted as substitutes to those specified. In submitting a substitution the contractor certifies the proposed substitution fully meets the performance characteristics of the specified product or material and design

2111 – HENNESSEY FIRE DEPARTMENT-REMODEL/ADDITION

ADDENDUM NO. 1-1

intent. The cost of any changes in the Work resulting from a substitution shall be borne by the Contractor making the substitution. Should a substitution not meet requirements, the specified item will be provided with no change in the contract amount or construction schedule.

1. Section 13 34 19 –PART 2-PRODUCTS. 2.01 MANUFACTURERS

A. Add the following approved manufacturer:

Chief Buildings, 2391 S. North Road, Grand Island, NE. www.chiefbuildings.com

PART 2 - ARCHITECTURAL ITEMS

2.01 DRAWINGS

- A. Refer A-601, Door Schedule. Change door number 202 to 203.
- B. Replace A-710 with Revised A-710. Refer to revised items below:
 - 1. **CWT-2** has changed from being a cove base to another 12 x 24 tile.
 - 2. **CWT-3** has been omitted.
 - 3. Room #107 is now to be **PT-3** Epoxy Paint
 - 4. Room #108 & #109 no longer have a base. The full tile is to go to the floor. All walls are to be finished with **PT-3**, **CWT-1** & revised **CWT-2**.
 - 5. **GRT-1** is the grout for the restrooms.
 - 6. **GRT-2** is the grout for all other tiled spaces.
- C. Replace A-742 with Revised A-742. Refer to revised items below:
 - 1. General note for millwork face profile added.
 - 2. Tile Pattern added at elevation 04/A-742.
- D. Replace A-750 with Revised A-750. Refer to revised items below:
 - 1. General note for millwork face profile added.
 - 2. Wall finish change to **PT-3** detail 02/A-750.
- E. Add new sheet A-760 Signage.
 - 1. Signage plan and schedule added.

3.01 SUBSTITUTIONS

- A. See attached list of approved fixtures.

PART 3 – PLUMBING, ELECTRICAL, MECHANICAL ITEMS

SEE ATTACHED INDEX



ENGINEERING & COMMISSIONING

February 9, 2023

ADDENDUM 01

Hennessey Fire Department
501 S. Main Street
Hennessey, Oklahoma

Moxify Engineering Project No. 501106

Drawings:

Plumbing:

1. Sheet P211 – FIRST FLOOR PLUMBING PLAN

- a. Refer to attached Revision Sheet
 - i. Illustrate 1-1/4" gas piping going to generator.
 - ii. Keynote 4 was edited for gas load to be 2200 instead of 1650 and to specify 10' from building opening separation should be met per code.
 - iii. 3/4" gas piping service to DWH-1 was added.
 - iv. Piping sizes were reviewed for accuracy and sizes reduced where applicable and indicated.
 - v. Keynote 18 was created to state "COORDINATE 1-1/4" GAS PIPING TO GENERATOR FROM 1-1/2" PIPE FROM METER BEFORE TAKING 1" GAS TO BUILDING UNDERGROUND."

Mechanical:

1. Sheet M101 – FIRST FLOOR MECHANICAL DEMOLITION PLAN

- a. Refer to attached Revision Sheet
 - i. Keynote updated from #4 to new #7 with clarifying information, "REMOVE AND PRESERVE FOR REUSE EXISTING AIR COOLED CONDENSER SYSTEM FOR ICEMAKER. REMOVE REFRIGERANT LINES, EQUIPMENT PAD, ETC."

2. Sheet M602 – HVAC DETAILS

- a. Refer to attached Revision Sheet
 - i. Detail 1 corrected to state "Dryer to be OFCI" not "by GC"

Electrical:

1. Specification Section 28 4600 – Fire Detection and Alarm

- a. Updated specification section to indicate a new fire alarm system rather than an extension of an existing system.

END OF ADDENDUM

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes commercial door hardware for the following:
1. Swinging doors.
 2. Other doors to the extent indicated.
- B. Door hardware includes, but is not necessarily limited to, the following:
1. Mechanical door hardware.
 2. Cylinders specified for doors in other sections.
- C. Related Sections:
1. Division 08 Section "Hollow Metal Doors and Frames".
 2. Division 08 Section "Flush Wood Doors".
 3. Division 08 Section "Aluminum-Framed Entrances and Storefronts".
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 2. ICC/IBC - International Building Code.
 3. NFPA 70 - National Electrical Code.
 4. NFPA 80 - Fire Doors and Windows.
 5. NFPA 101 - Life Safety Code.
 6. NFPA 105 - Installation of Smoke Door Assemblies.
 7. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:
1. ANSI/BHMA Certified Product Standards - A156 Series.
 2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
 3. ANSI/UL 294 - Access Control System Units.
 4. UL 305 - Panic Hardware.
 5. ANSI/UL 437- Key Locks.

1.03 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
 3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.

- d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Warranty information for each product.
4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- D. Informational Submittals:
- 1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
- E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

1.04 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).
- C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
- E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
 - 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
- F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
 - 1. Function of building, purpose of each area and degree of security required.
 - 2. Plans for existing and future key system expansion.
 - 3. Requirements for key control storage and software.
 - 4. Installation of permanent keys, cylinder cores and software.
 - 5. Address and requirements for delivery of keys.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
 - 1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including



electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.

2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 3. Review sequence of operation narratives for each unique access controlled opening.
 4. Review and finalize construction schedule and verify availability of materials.
 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.06 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.07 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 1. Structural failures including excessive deflection, cracking, or breakage.
 2. Faulty operation of the hardware.
 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 4. Electrical component defects and failures within the systems operation.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- D. Special Warranty Periods:
 1. Ten years for mortise locks and latches.
 2. Five years for exit hardware.
 3. Twenty five years for manual overhead door closer bodies.

1.08 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.01 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
 - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.02 HANGING DEVICES

- A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.
 - 1. Quantity: Provide the following hinge quantity:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
 - 2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
 - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
 - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
 - 3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
 - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
 - c. Tornado Resistant Assemblies: At a minimum, provide heavy weight hinges with stainless steel screws used in accordance with and specified as part of a Severe Storm Shelter Opening meeting ICC 500 and FEMA 361.
 - 4. Hinge Options: Comply with the following:
 - a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.
 - 5. Manufacturers:
 - a. McKinney (MK).
- B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 certified continuous geared hinge. with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.
 - 1. Manufacturers:
 - a. Pemko (PE).

2.03 DOOR OPERATING TRIM

- A. Door Push Plates and Pulls: ANSI/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
 - 1. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
 - 2. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
 - 3. Manufacturers:
 - a. Rockwood (RO).

2.04 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key

- systems and have on record a published security keying system policy.
- B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
 - C. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:
 1. Threaded mortise cylinders with rings and cams to suit hardware application.
 2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
 4. Tubular deadlocks and other auxiliary locks.
 5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
 6. Keyway: Manufacturer's Standard.
 - D. Removable Cores: Provide removable cores as specified, core insert, removable by use of a special key, and for use with only the core manufacturer's cylinder and door hardware.
 - E. Patented Cylinders: ANSI/BHMA A156.5, Grade 1 Certified Products Directory (CPD) listed cylinders employing a utility patented and restricted keyway requiring the use of a patented key. Cylinders are to be protected from unauthorized manufacture and distribution by manufacturer's United States patents. Cylinders are to be factory keyed with owner having the ability for on-site original key cutting.
 1. Patented key systems shall not be established with products that have an expired patent. Expired systems shall only be specified and supplied to support existing systems.
 2. Manufacturers:
 - a. Corbin Russwin (RU) - Access 3 AP.
 - b. Sargent (SA) - Degree DG1.
 - F. Keying System: Each type of lock and cylinders to be factory keyed.
 1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
 3. New System: Key locks to a new key system as directed by the Owner.
 - G. Key Quantity: Provide the following minimum number of keys:
 1. Change Keys per Cylinder: Two (2)
 2. Master Keys (per Master Key Level/Group): Five (5).
 3. Construction Keys (where required): Ten (10).
 - H. Construction Keying: Provide construction master keyed cylinders.
 - I. Key Registration List (Bitting List):
 1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
 2. Provide transcript list in writing or electronic file as directed by the Owner.

2.05 KEY CONTROL

- A. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.
 1. Manufacturers:
 - a. Lund Equipment (LU).
 - b. MMF Industries (MM).
 - c. Telkee (TK).

2.06 MECHANICAL LOCKS AND LATCHING DEVICES

- A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.
 1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - ML2000 Series.

- b. Sargent Manufacturing (SA) - 8200 Series.
- B. Multi-Point Locksets, FEMA: ANSI/BHMA A156.37, Certified Products Directory (CPD) listed three-point locking system device engineered for in-swinging and out-swinging door applications on windstorm safe shelter rooms. Extra heavy duty steel component construction securing the door to the frame at top, bottom and center latch positions. All three latching points are automatically activated when the device is locked. Multi-Point Deadlocking System shall be used only with doors, frames and associated hardware that have been engineered, tested and approved for a complete opening assembly system.
 - 1. Severe Storm Shelter Components: Multi-point locking system devices engineered for in-swinging and out-swinging door applications on tornado or hurricane resistant safe shelter rooms. The multi-point latching integrated device is approved for usage as part of a complete ICC 500 (2014) and FEMA P-361 (2015) door, frame and hardware assembly.
 - 2. ANSI-BHMA listed to A156.37 Grade 1 for multi-point locks:
 - a. Lever torque to retract all bolts less than 28 in.lb.
 - b. Cycle tested to 1,000,000 cycles.
 - 3. NFPA 80 and NFPA 101 life safety requirements.
 - 4. UL10B or UL10C, 3-hour fire rated openings.
 - 5. Latchbolt Construction:
 - a. Center Bolt to be one piece, $\frac{3}{4}$ " throw anti-friction stainless steel latch and one piece, 1" throw, hardened stainless steel deadbolt; 2-3/4" standard backset.
 - b. Top and Bottom Bolts to be $\frac{3}{4}$ " x $\frac{3}{4}$ " stainless steel square latchbolt with $\frac{3}{4}$ " projection.
 - 6. Independent top and bottom bolt projection shall be field adjustable:
 - a. From the center mortise pocket.
 - b. Ability to make field adjustments while the door is in the hung position without the removal of the door.
 - c. Top and Bottom Bolts and the Center Mortise Case shall be factory installed into the door assembly.
 - 7. Bottom strike shall be offset and reversible to accommodate alignment issues due to rough opening tolerances.
 - 8. Devices must be able to accommodate sectional rose and lever trim to match the design style and architectural finishes of the balance of the lockset and latches as specified.
 - 9. Devices must be available with electronic access control options for higher or everyday use and traceability.
 - 10. Devices must be available with rod-dogging indicator options:
 - a. Operated by single-point latching for non-emergency or normal use of the space.
 - b. Ability to hold rods in a retracted state.
 - c. Day-to-day operations with mortise lock only.
 - d. Indicator to show status.
 - 11. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - FE6600 Series.
 - b. Sargent Manufacturing (SA) - FM7300 Series.

2.07 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
 - 1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by



- manufacturer.
- 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
- 3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
- 4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

- B. Standards: Comply with the following:
 - 1. Strikes for Mortise Locks and Latches: BHMA A156.13.
 - 2. Strikes for Bored Locks and Latches: BHMA A156.2.
 - 3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
 - 4. Dustproof Strikes: BHMA A156.16.

2.08 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
 - 1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
 - 2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
 - 3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
 - 4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
 - 5. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
 - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
 - 6. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
 - 7. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
 - 8. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
 - 9. Rail Sizing: Provide exit device rails factory sized for proper door width application.
 - 10. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.
 - 1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
 - b. Sargent Manufacturing (SA) - 80 Series.

2.09 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
 - 1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
 - 2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
 - 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers



depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.

4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
 6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.
 7. Tornado Resistance Compliance: Door closers to be U.L. listed for windstorm assemblies where applicable. Provide the appropriate tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.
- B. Door Closers, Surface Mounted (Large Body Cast Iron): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.
1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - DC8000 Series.
 - b. Norton Rixson (NO) - 9500 Series.
 - c. Sargent Manufacturing (SA) - 281 Series.
- C. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.
1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - DC8000 Series.
 - b. Norton Rixson (NO) - 7500 Series.
- D. Door Closers, Surface Mounted (Unitrol): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted closers with door stop mechanism to absorb dead stop shock on arm and top hinge. Hold-open arms to have a spring loaded mechanism in addition to shock absorber assembly. Arms to be provided with rigid steel main arm and secondary arm lengths proportional to the door width.
1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - Unitrol Series.
 - b. Norton Rixson (NO) - Unitrol Series.

2.10 ARCHITECTURAL TRIM

- A. Door Protective Trim
1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
 2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
 3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
 4. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:
 - a. Stainless Steel: 300 grade, 050-inch thick.
 5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.



6. Manufacturers:
 - a. Rockwood (RO).

2.11 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
 1. Manufacturers:
 - a. Rockwood (RO).

2.12 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
 1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.
- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Hurricane and Tornado Resistance Compliance: Architectural seals to be U.L. listed for windstorm assemblies where applicable. Provide the appropriate hurricane or tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.
- G. Manufacturers:
 1. Pemko (PE).

2.13 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.14 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine scheduled openings, with installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.02 PREPARATION

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08 71 00 - 9
DOOR HARDWARE

AIP

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.03 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
 - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 - 2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
 - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
 - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.04 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.
 - 1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

3.05 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.06 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.07 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.08 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.

B. Manufacturer's Abbreviations:

1. MK - McKinney
2. PE - Pemko
3. RO - Rockwood
4. RU - Corbin Russwin
5. NO - Norton
6. OT - Other

Hardware Sets

Set: 1.0

Doors: 104a, 104b

Description: Exterior Single, Storeroom Exit (AL/AL)

1	Continuous Hinge	CFM SLF-HD1		PE
1	Rim Exit, Nightlatch	ED5200 K157ET ACP	630	RU
1	Offset Pull	RM3310-12 Mtg-Type 12HD	US32D	RO
1	Surface Closer	UNI9500	BSP	NO
1	Spacer	9500-1/2SP	BSP	NO
1	Threshold	273x3AFG		PE
1	Gasketing	By Door/Frame Provider		OT
1	Rain Guard	346C		PE
1	Sweep	3151CN		PE

Set: 2.0

Doors: 101, 102a, 106a, 107a, 114a

Description: Exterior Single, Classroom Exit (HM/HM)

1	Continuous Hinge	CFM SLI-HD1		PE
1	Rim Exit, Classroom	ED5200 L955ET ACP	630	RU
1	Surface Closer	UNI9500	BSP	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Threshold	273x3AFG		PE
1	Gasketing	2891APK		PE
1	Rain Guard	346C		PE
1	Sweep	3151CN		PE

Set: 3.0

Doors: 115a

Description: Exterior Single, Classroom Lock (HM/HM)

1	Continuous Hinge	CFM SLI-HD1		PE
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1	Classroom Lock	ML2055 LSB ACP	626	RU
1	Surface Closer	UNI9500	BSP	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Threshold	273x3AFG		PE
1	Gasketing	2891APK		PE
1	Rain Guard	346C		PE
1	Sweep	3151CN		PE

Set: 4.0

Doors: 113, 114b, 114c, 201

Description: Interior Single, Passage Exit - Rated (HM/HM)

3	Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2"	US26D	MK
1	Rated Rim Exit, Passage	ED5200A L910ET	630C	RU
1	Surface Closer	9500ST	BSP	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Wall Stop, CV	RM860	US26D	RO
1	Gasketing	S88BL		PE

Set: 5.0

Doors: 112

Description: Interior Single, Multi-Point Lock (Hardened Shelter)

4	Hinge, Hvy Wt	SP3386 4-1/2" x 4-1/2"	US32D	MK
1	Multi-Point Lock	FE6665 LSA AUX188 ACP	630	RU
1	Surface Closer	7500ST	689	NO
1	Kick Plate	K1050 WS 10" high	US32D	RO
1	Wall Stop, CV	RM860	US26D	RO
1	Gasketing	S773BL		PE

Set: 6.0

Doors: 110, 111, 116

Description: Interior Single, Storeroom Lock (HM/HM)

3	Hinge, Full Mortise	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Storeroom Lock	ML2057 LSB ACP	626	RU
1	Surface Closer	9500ST	BSP	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Wall Stop, CV	RM860	US26D	RO
1	Gasketing	S88BL		PE

Set: 7.0

Doors: 105, 203

Description: Interior Single, Office Lock (WD/HM)

3	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Entrance Lock	ML2054 LSB ACP	626	RU
1	Wall Stop, CV	RM860	US26D	RO

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3 Silencer 608-RKW

RO

Set: 8.0

Doors: 103a, 103b

Description: Interior Single, Office Lock - Closer

3	Hinge, Full Mortise	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Entrance Lock	ML2054 LSB ACP	626	RU
1	Surface Closer	9500ST	BSP	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Wall Stop, CV	RM860	US26D	RO
1	Gasketing	S88BL		PE

Set: 9.0

Doors: 106b, 115b

Description: Interior Single, Passage Latch - Closer

3	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Passage Latch	ML2010 LSB	630	RU
1	Surface Closer	9500ST	BSP	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Wall Stop, CV	RM860	US26D	RO
1	Gasketing	S88BL		PE

Set: 10.0

Doors: 108, 109

Description: Interior Single, Passage Latch - Gasketing

3	Hinge, Full Mortise, Hvy Wt	T4A3386 4-1/2" x 4-1/2"	US32D	MK
1	Passage Latch	ML2010 LSB	630	RU
1	Surface Closer	9500ST	BSP	NO
1	Mop Plate	K1050 6" high CSK BEV	US32D	RO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Wall Stop, CV	RM860	US26D	RO
1	Gasketing	S773BL		PE
1	Door Bottom	434ARL		PE

Set: 11.0

Doors: 107b, 107c

Description: Interior Single, Passage Latch - Closer

3	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Passage Latch	ML2010 LSB	630	RU
1	Surface Closer	PS9500ST	BSP	NO
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO
1	Wall Stop, CV	RM860	US26D	RO
1	Gasketing S	88BL		PE



Set: 12.0

Doors: 102b, 102c, 107d

Description: Overhead Doors

1	Access 3 Core	CR8500	626	RU
1	Housing	CR1070 / CR3070	630	RU
1	Balance of Hardware	By Door/Frame Provider		OT

END OF SECTION



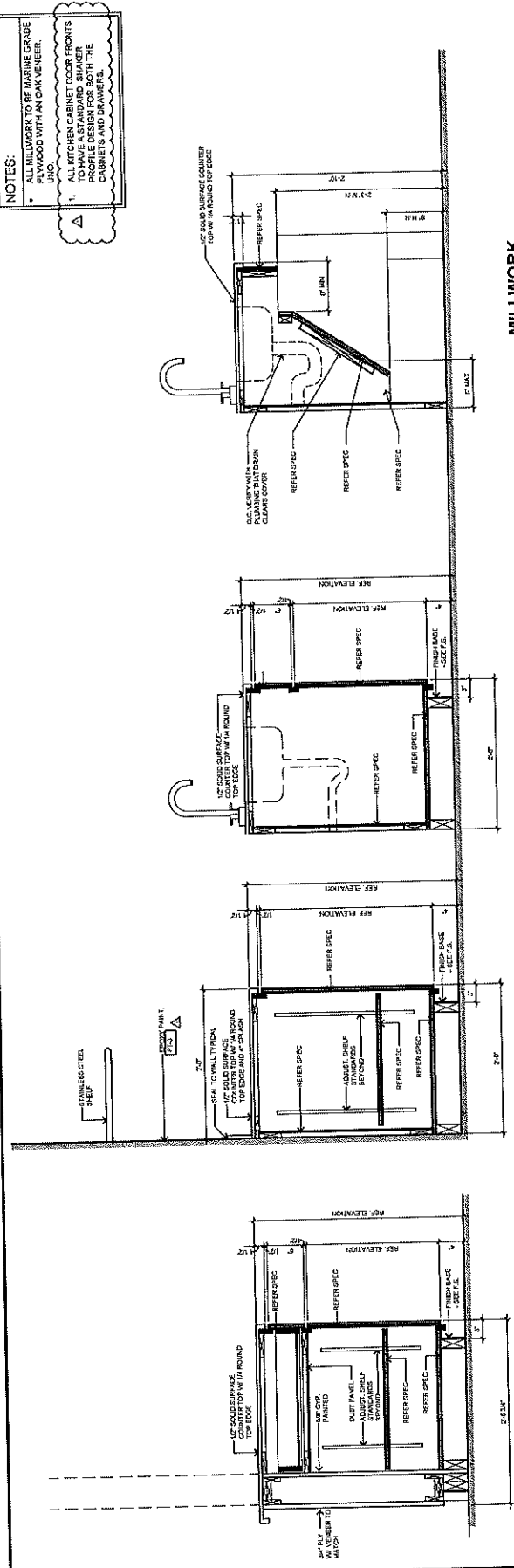
ARCHITECTS
INTERIOR DESIGNERS
1000 WEST 10TH AVENUE
NORMAN, OK 73071
TEL: 581-326-1401
FAX: 581-326-1401



HENNESSEY FIRE DEPARTMENT
REMODEL/ADDITION
HENNESSEY, OKLAHOMA
501 S. MAIN STREET

NO.	DATE	DESCRIPTION
1	08/08/2022	ISSUED FOR PERMITS
2		ADDENDUM 1
3		ADDENDUM 2
4		ADDENDUM 3
5		ADDENDUM 4
6		ADDENDUM 5
7		ADDENDUM 6
8		ADDENDUM 7
9		ADDENDUM 8

NOTES:
 ALL MILLWORK TO BE MARINE GRADE PLYWOOD WITH AN OAK VENEER.
 UNO.
 ALL KITCHEN CABINET DOOR FRONTS TO HAVE A STANDARD SHAKER PROFILE DESIGN WITH THE FOLLOWING DIMENSIONS:
 1. 1/2" RADIUS TOP EDGE
 2. 1/2" RADIUS BOTTOM EDGE
 3. 1/2" RADIUS CORNER

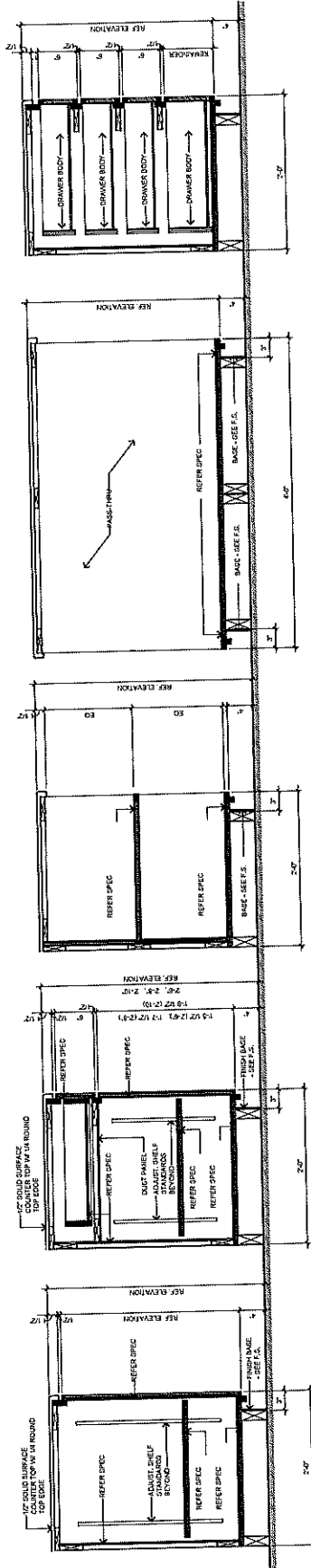


MILLWORK DETAIL 4
SCALE: 1 1/2"=1'-0"

MILLWORK DETAIL 3
SCALE: 1 1/2"=1'-0"

MILLWORK DETAIL 2
SCALE: 1 1/2"=1'-0"

MILLWORK DETAIL 1
SCALE: 1 1/2"=1'-0"



MILLWORK DETAIL 9
SCALE: 1 1/2"=1'-0"

MILLWORK DETAIL 8
SCALE: 1 1/2"=1'-0"

MILLWORK DETAIL 7
SCALE: 1 1/2"=1'-0"

MILLWORK DETAIL 6
SCALE: 1 1/2"=1'-0"

MILLWORK DETAIL 5
SCALE: 1 1/2"=1'-0"

SIGN SCHEDULE

MARK	ROOM NO.	LOCATION ON PLAN	ROOM NAME	ROOM NO.	ROOM NAME	ROOM NO.	OTHER	NOTES
1	102	NEW APPARATUS BAY	NEW APPARATUS BAY	102	NEW APPARATUS BAY	102		
2	103	NEW APPARATUS BAY	NEW APPARATUS BAY	103	NEW APPARATUS BAY	103		
3	104	NEW APPARATUS BAY	NEW APPARATUS BAY	104	NEW APPARATUS BAY	104		
4	105	NEW APPARATUS BAY	NEW APPARATUS BAY	105	NEW APPARATUS BAY	105		
5	106	MEETING ROOM	MEETING ROOM	106	MEETING ROOM	106		
6	107	MEETING ROOM	MEETING ROOM	107	MEETING ROOM	107		
7	108	MEETING ROOM	MEETING ROOM	108	MEETING ROOM	108		
8	109	MEETING ROOM	MEETING ROOM	109	MEETING ROOM	109		
9	110	MEETING ROOM	MEETING ROOM	110	MEETING ROOM	110		
10	111	MEETING ROOM	MEETING ROOM	111	MEETING ROOM	111		
11	112	MEETING ROOM	MEETING ROOM	112	MEETING ROOM	112		
12	113	MEETING ROOM	MEETING ROOM	113	MEETING ROOM	113		
13	114	MEETING ROOM	MEETING ROOM	114	MEETING ROOM	114		
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170	271	MEETING ROOM						



Type	MFG	Part
EM	MULE LIGHTING	TSR-HO-W
WE	HE WILLIAMS, INC.	VWPH-L60/740-TFT-BLK-CGL-EM/ 10WC-DIM-UNV
X	MULE LIGHTING	MD-B-U-R-BA



Type	Manufacturer	Model Number	Pg.
A	COLUMBIA	LCAT24-35HLG-EDU	1
B	COLUMBIA	LCAT22-35HLG-EDU	8
C	PRESCOLITE	LFR-6SQD-M-30L35K8-WD-DM1 / LFR-6SQD-T-SS / LFR-6SQD-H-IC	15
D	PRESCOLITE	LFR-6RD-M-30L35K8-WD-DM1 / LFR-6RD-T-SH-WTAML / LFR-6RD-H-IC	25
EM	COMPASS	CU2HLHO	34
H	COLUMBIA	PELA-840-L18-B-ED-U-ST	36
S	COLUMBIA	CSL4-LSCS / CSHC	48
V	LUMENCIA	LINSQ28-W-2-D820L-U733L-UBAT-35K-UNV-EM8	50
W	EXO OUTDOOR LIGHTING	LNC2-48L-35-4K7-4W-120-BLT-EH	53
	COMPASS	CCEBRE	58



Type	MFG	Part
A	ELITE LIGHTING	24-OEVHP-LED-3000L/4000L/5000L-DIM10-MVOLT-35K/40K/50K-85
B	ELITE LIGHTING	22-OEVHP-LED-2000L/3000L/4000L-DIM10-MVOLT-35K/40K/50K-85
C	SIGNIFY	6SA C6L30935WZ10U C6SDLWCL
D	SIGNIFY	6SA C6L30935WZ10U C6DSLWCL
EM	ELITE LIGHTING	ELM-LED-804-W
H	SIGNIFY	FBZ18L840-UNV-W - HNH5-VHOOK
S/SM	NULITE LIGHTING INC	PXP3-12-L35-U-D-11-RD-WH-4'
S/PEN	NULITE LIGHTING INC	PXP3-12-L35-U-D-11-RD-WH-SR-W-048-4'
V	ELITE LIGHTING	OLS-WDI-LED-2-S-2-800D-800U-1C-DIM10-MVOLT-30K-85-WH
W	SIGNIFY	101L-16L-700-NW-G2-4-EBPC-120-BK
X	ELITE LIGHTING	ELX-605-R-B-AL-1

DIVISION 28 - DIVISION 28 - ELECTRONIC SAFETY AND SECURITY
FIRE DETECTION AND ALARM

SECTION 28 4600

SECTION 28 4600
FIRE DETECTION AND ALARM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fire alarm system design and installation, including all components, wiring, and conduit.
- B. Transmitters for communication with supervising station.
- C. Replacement and removal of existing fire alarm system components, wiring, and conduit indicated.

1.02 REFERENCE STANDARDS

- A. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines current edition.
- B. ADA Standards - 2010 ADA Standards for Accessible Design 2010.
- C. IEEE C62.41.2 - IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits 2002 (Corrigendum 2012).
- D. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- E. NFPA 72 - National Fire Alarm and Signaling Code Most Recent Edition Cited by Referring Code or Reference Standard.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Evidence of designer qualifications.
- C. Design Documents: Submit all information required for plan review and permitting by authorities having jurisdiction, including but not limited to floor plans, riser diagrams, and description of operation:
 - 1. Copy (if any) of list of data required by authority having jurisdiction.
 - 2. NFPA 72 "Record of Completion", filled out to the extent known at the time.
 - 3. Clear and concise description of operation, with input/output matrix similar to that shown in NFPA 72 Appendix A-7-5-2.2(9), and complete listing of software required.
 - 4. System zone boundaries and interfaces to fire safety systems.
 - 5. Location of all components, circuits, and raceways; mark components with identifiers used in control unit programming.
 - 6. Circuit layouts; number, size, and type of raceways and conductors; conduit fill calculations; spare capacity calculations; notification appliance circuit voltage drop calculations.
 - 7. List of all devices on each signaling line circuit, with spare capacity indicated.
 - 8. Manufacturer's detailed data sheet for each component, including wiring diagrams, installation instructions, and circuit length limitations.
 - 9. Description of power supplies; if secondary power is by battery include calculations demonstrating adequate battery power.
 - 10. Certification by either the manufacturer of the control unit or by the manufacturer of each other component that the components are compatible with the control unit.
 - 11. Certification by the manufacturer of the control unit that the system design complies with Contract Documents.
 - 12. Certification by Contractor that the system design complies with Contract Documents.
 - 13. Do not show existing components to be removed.
- D. Evidence of installer qualifications.
- E. Inspection and Test Reports:

DIVISION 28 - DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

FIRE DETECTION AND ALARM

SECTION 28 4600

1. Submit inspection and test plan prior to closeout demonstration.
 2. Submit documentation of satisfactory inspections and tests.
 3. Submit NFPA 72 "Inspection and Test Form," filled out.
- F. Operating and Maintenance Data: See Section 01 7800 for additional requirements; revise and resubmit until acceptable; have one set available during closeout demonstration:
1. Complete set of specified design documents, as approved by authority having jurisdiction.
 2. Additional printed set of project record documents and closeout documents, bound or filed in same manuals.
 3. Contact information for firm that will be providing contract maintenance and trouble call-back service.
 4. List of recommended spare parts, tools, and instruments for testing.
 5. Replacement parts list with current prices, and source of supply.
 6. Detailed troubleshooting guide and large scale input/output matrix.
 7. Preventive maintenance, inspection, and testing schedule complying with NFPA 72; provide printed copy and computer format acceptable to Owner.
 8. Detailed but easy to read explanation of procedures to be taken by non-technical administrative personnel in the event of system trouble, when routine testing is being conducted, for fire drills, and when entering into contracts for remodeling.
- G. Project Record Documents: See Section 01 7800 for additional requirements; have one set available during closeout demonstration:
1. Complete set of floor plans showing actual installed locations of components, conduit, and zones.
 2. "As installed" wiring and schematic diagrams, with final terminal identifications.
 3. "As programmed" operating sequences, including control events by device, updated input/output chart, and voice messages by event.
- H. Closeout Documents:
1. Certification by manufacturer that the system has been installed in compliance with manufacturer's installation requirements, is complete, and is in satisfactory operating condition.
 2. NFPA 72 "Record of Completion", filled out completely and signed by installer and authorized representative of authority having jurisdiction.

1.04 QUALITY ASSURANCE

- A. Designer Qualifications: NICET Level III or IV (3 or 4) certified fire alarm technician or registered fire protection engineer, employed by fire alarm control panel manufacturer, Contractor, or installer, with experience designing fire alarm systems in the jurisdictional area of the authorities having jurisdiction.
- B. Installer Qualifications: Firm with minimum 3 years documented experience installing fire alarm systems of the specified type and providing contract maintenance service as a regular part of their business.
1. Authorized representative of control unit manufacturer; submit manufacturer's certification that installer is authorized; include name and title of manufacturer's representative making certification.
 2. Installer Personnel: At least 2 years of experience installing fire alarm systems.
 3. Supervisor: NICET level III or IV (3 or 4) certified fire alarm technician; furnish name and address.

PART 2 PRODUCTS

2.01 FIRE ALARM SYSTEM

- A. Fire Alarm System: Provide a new automatic fire detection and alarm system:
1. Provide all components necessary, regardless of whether shown in Contract Documents or not.
 2. Protected Premises: Entire building shown on drawings.

DIVISION 28 - DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

FIRE DETECTION AND ALARM

SECTION 28 4600

3. Comply with the following; where requirements conflict, order of precedence of requirements is as listed:
 - a. ADA Standards.
 - b. The requirements of the local authority having jurisdiction.
 - c. Applicable local codes.
 - d. Contract Documents (drawings and specifications).
 - e. NFPA 72; where the word "should" is used consider that provision mandatory; where conflicts between requirements require deviation from NFPA 72, identify deviations clearly on design documents.
 4. Evacuation Alarm: Multiple smoke zones; allow for evacuation notification of any individual zone or combination of zones, in addition to general evacuation of entire premises.
 5. Voice Notification: Provide emergency voice/alarm communications with multichannel capability; digital.
 6. General Evacuation Zones: Each smoke zone is considered a general evacuation zone unless otherwise indicated, with alarm notification in all zones on the same floor, on the floor above, and the floor below.
 7. Program notification zones and voice messages as directed by Owner.
 8. Fire Alarm Control Unit: New, located at fire command center.
- B. Supervising Stations and Fire Department Connections:
1. Public Fire Department Notification: By on-premises supervising station.
 2. On-Premises Supervising Station: New proprietary station operated by Owner.
 3. Means of Transmission to On-Premises Supervising Station: Directly connected noncoded system.
- C. Circuits:
1. Initiating Device Circuits (IDC): Class B, Style A.
 2. Signaling Line Circuits (SLC) Within Single Building: Class B, Style O.5.
 3. Notification Appliance Circuits (NAC): Class B, Style W.
- D. Power Sources:
1. Primary: Dedicated branch circuits of the facility power distribution system.
 2. Secondary: Storage batteries.
 3. Capacity: Sufficient to operate entire system for period specified by NFPA 72.
 4. Each Computer System: Provide uninterruptible power supply (UPS).

2.02 EXISTING COMPONENTS

- A. Clearly label components that are "Not In Service."
- B. Remove unused existing components and materials from site and dispose of properly.

2.03 FIRE SAFETY SYSTEMS INTERFACES

- A. Supervision: Provide supervisory signals in accordance with NFPA 72 for the following:
 1. Sprinkler water control valves.
- B. Alarm: Provide alarm initiation in accordance with NFPA 72 for the following:
 1. Sprinkler water flow.
- C. HVAC:
 1. Duct Smoke Detectors: Close dampers indicated; shut down air handlers indicated.

2.04 COMPONENTS

- A. General:
 1. Provide flush mounted units where installed in finish areas; in unfinished areas, surface mounted unit are acceptable.

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FIRE DETECTION AND ALARM

SECTION 28 4600

2. Provide legible, permanent labels for each control device, using identification used in operation and maintenance data.
- B. Fire Alarm Control Units: Analog, addressable type; listed, classified, and labeled as suitable for the purpose intended.
- C. Addressable Modules:
 1. Provide addressable modules suitable for connection to fire alarm control unit signaling line circuits.
 2. Unless otherwise indicated, use addressable modules only in clean, dry, indoor, nonhazardous locations.
- D. Initiating Devices:
 1. Addressable Systems:
 - a. Addressable Devices: Individually identifiable by addressable fire alarm control unit.
 - b. Provide suitable addressable interface modules as indicated or as required for connection to conventional (non-addressable) devices and other components that provide a dry closure output.
- E. Circuit Conductors: Copper or optical fiber; provide 200 feet extra; color code and label.
- F. Surge Protection: In accordance with IEEE C62.41.2 category B combination waveform and NFPA 70; except for optical fiber conductors.
- G. Locks and Keys: Deliver keys to Owner.
- H. Instruction Charts: Printed instruction chart for operators, showing steps to be taken when a signal is received (normal, alarm, supervisory, and trouble); easily readable from normal operator's station.
 1. Frame: Stainless steel or aluminum with polycarbonate or glass cover.
 2. Provide one for each control unit where operations are to be performed.
 3. Obtain approval of Owner prior to mounting; mount in location acceptable to Owner.
 4. Provide extra copy with operation and maintenance data submittal.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install in accordance with applicable codes, NFPA 72, NFPA 70, and Contract Documents.
- B. Conceal all wiring, conduit, boxes, and supports where installed in finished areas.
- C. Obtain Owner's approval of locations of devices, before installation.
- D. Install instruction cards and labels.

3.02 INSPECTION AND TESTING FOR COMPLETION

- A. Notify Owner 7 days prior to beginning completion inspections and tests.
- B. Notify authorities having jurisdiction and comply with their requirements for scheduling inspections and tests and for observation by their personnel.
- C. Provide the services of the installer's supervisor or person with equivalent qualifications to supervise inspection and testing, correction, and adjustments.
- D. Prepare for testing by ensuring that all work is complete and correct; perform preliminary tests as required.
- E. Provide all tools, software, and supplies required to accomplish inspection and testing.
- F. Perform inspection and testing in accordance with NFPA 72 and requirements of local authorities; document each inspection and test.

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FIRE DETECTION AND ALARM

SECTION 28 4600

- G. Correct defective work, adjust for proper operation, and retest until entire system complies with Contract Documents.

3.03 CLOSEOUT

- A. Closeout Demonstration: Demonstrate proper operation of all functions to Owner.
 - 1. Be prepared to conduct any of the required tests.
 - 2. Have at least one copy of operation and maintenance data, preliminary copy of project record drawings, input/output matrix, and operator instruction chart(s) available during demonstration.
 - 3. Have authorized technical representative of control unit manufacturer present during demonstration.
 - 4. Demonstration may be combined with inspection and testing required by authority having jurisdiction; notify authority having jurisdiction in time to schedule demonstration.
 - 5. Repeat demonstration until successful.

END OF SECTION



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TEL: 405.326.1000
FAX: 405.326.1001



HENNESSEY, OKLAHOMA

501 S. MAIN STREET

HENNESSEY FIRE DEPARTMENT REMODEL/ADDITION

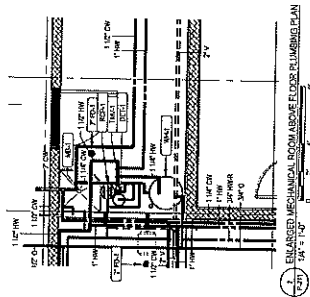
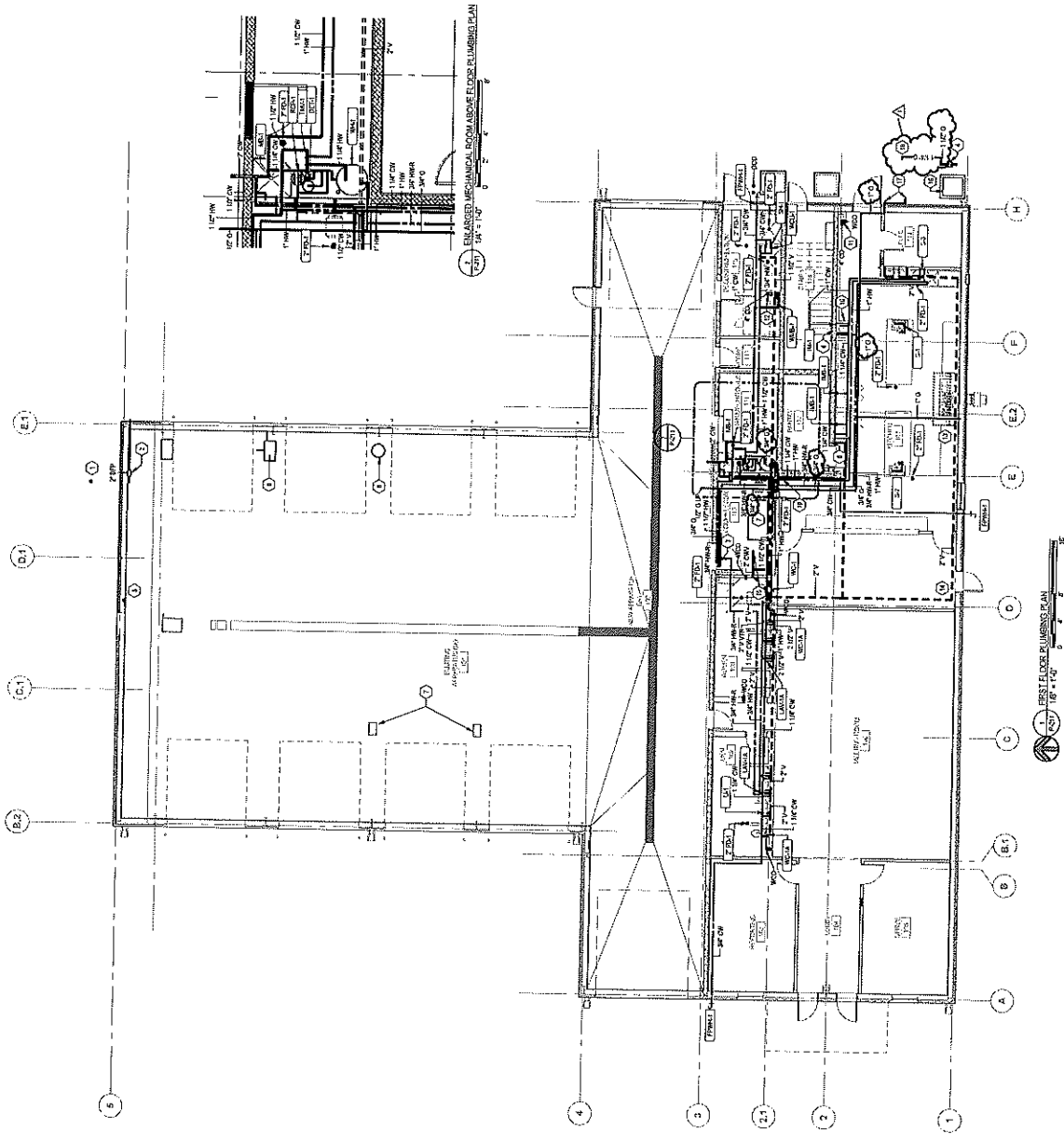
REV.	DATE	DESCRIPTION

PROJECT NO.	02/09/2023
DATE	2111
NO. OF SHEETS	2111
TOTAL SHEETS	2111

NO. 1111
FIRST FLOOR
PLUMBING PLAN
P-2111

- KEYNOTES**
1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND RECORD THEM ON THE DRAWINGS.
 2. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL PLUMBING CODE (IPC) AND THE 2021 INTERNATIONAL MECHANICAL CODE (IMC).
 3. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 NATIONAL ELECTRICAL CODE (NEC).
 4. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL FIRE CODE (IFC).
 5. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE (IBC).
 6. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC).
 7. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL SWEET'S WATER SUPPLY AND WASTE DISPOSAL CODE (ISWSWDC).
 8. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL MECHANICAL AND PLUMBING EXAMINER'S HANDBOOK (IMPEH).
 9. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL MECHANICAL AND PLUMBING EXAMINER'S HANDBOOK (IMPEH).
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 30. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL MECHANICAL AND PLUMBING EXAMINER'S HANDBOOK (IMPEH).

MOXIFY
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ARCHITECTS
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DESIGNERS

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TULSA, OK 74107
TEL: 485.363.0000
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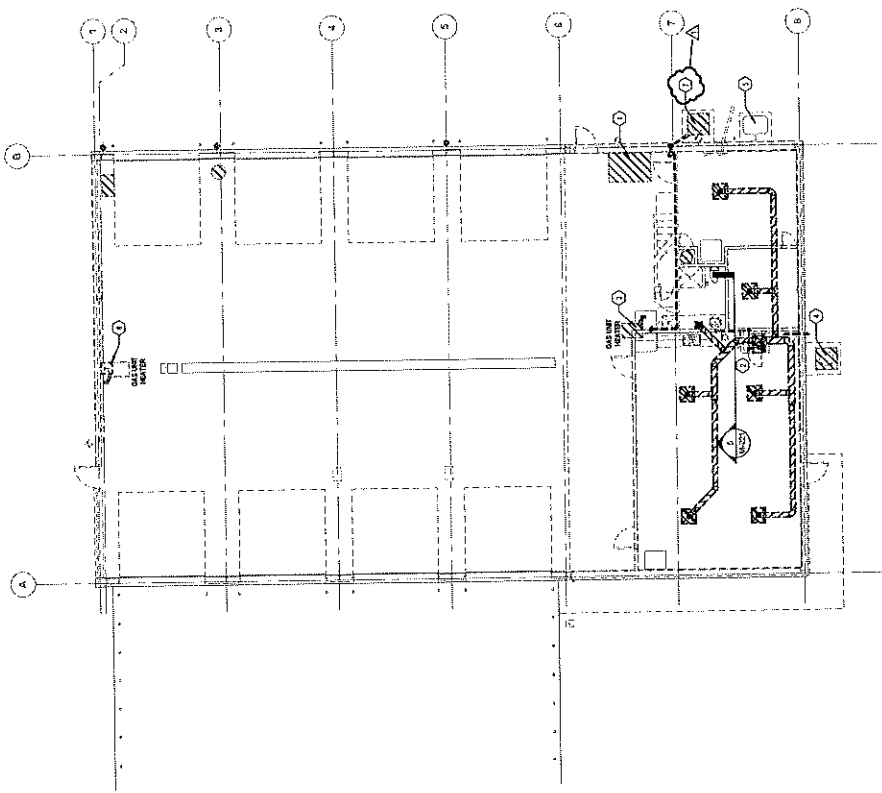
HENNESSEY FIRE DEPARTMENT
REMODEL/ADDITION
501 S. MAIN STREET
HENNESSEY, OKLAHOMA

REV.	DATE	DESCRIPTION

DATE: 02/09/2023
PROJECT NO.: 2111

FLOOR: FIRST FLOOR
MECHANICAL
DEPOSITION PLAN
M-101

- KEYNOTES**
1. REMOVE EXISTING PER COMPRESSOR AND CONNECTIONS TO BE RELOCATED.
 2. REMOVE EXISTING PIPING AND JOINTWORK SYSTEMS COMPLETE.
 3. REMOVE AND RELOCATE EXISTING EQUIPMENT TO BE RELOCATED TO BE RELOCATED.
 4. ALL RELOCATED PIPING TO BE INSTALLED IN ACCORDANCE WITH OSHA REGULATIONS.
 5. ALL RELOCATED PIPING TO BE INSTALLED IN ACCORDANCE WITH OSHA REGULATIONS.
 6. ALL RELOCATED PIPING TO BE INSTALLED IN ACCORDANCE WITH OSHA REGULATIONS.
 7. ALL RELOCATED PIPING TO BE INSTALLED IN ACCORDANCE WITH OSHA REGULATIONS.
 8. ALL RELOCATED PIPING TO BE INSTALLED IN ACCORDANCE WITH OSHA REGULATIONS.
 9. ALL RELOCATED PIPING TO BE INSTALLED IN ACCORDANCE WITH OSHA REGULATIONS.
 10. ALL RELOCATED PIPING TO BE INSTALLED IN ACCORDANCE WITH OSHA REGULATIONS.



FIRST FLOOR HVAC REMEDIATION PLAN
1/8" = 1'-0"

Moxify
4834 N.W. HENNESSEY
SUITE 156
OKLAHOMA CITY, OK 73116
PHONE: (405) 254-0038
WWW.MOXIFY.COM
PROJECT: 501106
CA: 7512 EXP: 06/09/23

REV.	DATE	DESCRIPTION

DATE	02/09/2023
PROJECT NO.	2111
OWNER	HENNESSEY
DESIGNER	AIP
DATE	02/09/2023
PROJECT NO.	2111
OWNER	HENNESSEY
DESIGNER	AIP

4324 NW EXPRESSWAY
SUITE 100
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