#### JOHNSON COUNTY EMA STORAGE BUILDING

#### **ADDENDUM NO. 2**

#### November 26, 2025

The information contained in this Addendum modifies supplements or replaces information contained in the Project Manual and on the Drawings and is hereby made a part of the Contract Documents.

Acknowledge receipt of this addendum on the Bid Form.

BIDS DUE: December 8th, 2025

### APPLICABLE TO THE PROJECT MANUAL

#### A. REVISED PROJECT MANUAL PAGES:

#### **DIVISIONS 1 THROUGH 32 SPECIFICATIONS:**

The replacement pages identified below include modifications made to the original Project Manual sections. Revised or added information is indicated by shaded type in the text. Areas where information has been deleted are identified by striking out the text. Insert replacement pages into the Project Manual ahead of the pages they replace.

**Document or Section** 

Quantity of Pages

### B. ADDED / DELETED DOCUMENTS AND SECTIONS

The Documents and Sections identified below shall be added / removed in the Project Manual.

| Document or Section | Document or Section Name           |  |  |
|---------------------|------------------------------------|--|--|
|                     |                                    |  |  |
| 21 13 00            | FIRE-SUPPRESSION SPRINKLER SYSTEMS |  |  |
| 28 31 00            | FIRE ALARM SYSTEM                  |  |  |

#### C. SUBSTITUTIONS/APPROVED MANUFACTURERS

The following products and manufacturers are approved for bidding. Approved products shall conform to all the requirements specified. Final acceptance is contingent upon receipt and approval of final shop drawings and product information.

13 34 00 Pre Engineered Post Frame Buildings EPS Buildings

#### **APPLICABLE TO THE DRAWINGS**

A. DRAWING REVISIONS: Incorporate the following revisions into the respective contract drawings.

Drawing No.

#### **JOHNSON COUNTY EMA STORAGE BUILDING**

#### **ADDENDUM NO. 2**

## November 26, 2025

#### S1.00 - FOUNDATION PLAN

- 1. Edit note as shown below.
  - a. 6" SLAB ON GRADE W/ 6x6-W2.4xW2.4 W.W.F. W/ 10 MIL VAPOR BARRIER OVER 6" COMPACTED GRANULAR FILL SAW CUT LAYOUT BY CONTRACTOR MAX. 12'-0" SQUARES, WITH JOINT SEALER. SEALED CONCRETE WITH SAND COAT SEE ARCH

#### S1.01 - FRAMING PLAN

- 1. Edit note as shown below.
  - a. 24" FLOOR TRUSS @ 19.2" O.C. DESIGNED BY OTHERS (100 PSF LIVE LOAD)

#### P0.00 - PLUMBING GENERAL INFORMATION

1. Replace sheet with attached.

\*\*\*\*\*\*

END OF DOCUMENT 00 90 10

# 21 13 00 – FIRE-SUPPRESSION SPRINKLER SYSTEMS (DELEGATED DESIGN)

Project: Johnson County EMA

Location: Iowa

#### PART 1 — GENERAL

#### SUMMARY

Provide complete automatic fire sprinkler systems for the pre-engineered metal building, including vehicle storage bay, storage mezzanine, and support areas. A licensed Fire Protection Engineer (FPE) or NICET Level III/IV sprinkler designer shall provide **full delegated design**, including hydraulic calculations, shop drawings, material submittals, and installation details in accordance with NFPA 13 and AHJ requirements.

#### REFERENCES

- All work shall comply with the applicable recommendations of:
- The National Board of Fire Underwriters
- The American Gas Association
- The National Fire Protection Association (NFPA)
- The Occupations Safety and Health Act (OSHA)
- Current IBC Building Code
- Current applicable city building codes
- Fire Protection: Conform to UFC and NFPA
- The Joint Commission
- Mechanical: Conform to current mechanical code.
- Plumbing: Conform to current plumbing code.
- Obtain permits and request inspections from authority having jurisdiction.

## **SUBMITTALS**

- Sealed shop drawings
- Hydraulics with 10% safety factor
- Water flow test (≤12 months)
- Product data
- As-builts, O&M, certificates

#### PART 2 — DESIGN & PERFORMANCE

#### SYSTEM TYPE

 Wet pipe in heated areas; dry/antifreeze where required; provide FDC, riser, drains, gauges.

#### HAZARD CLASSIFICATION

- Vehicle Storage Bay: OH2
- Mezzanine Storage: OH2 (unless AHJ approves OH1)
- Restrooms/support: Light Hazard

#### HYDRAULIC REQUIREMENTS

- OH2: 0.20 gpm/sf over 1,500 sf
- Light Hazard: 0.10 gpm/sf over 1,500 sf
- Include hose allowance and 10% safety margin

#### WATER SUPPLY

• Flow test required; fire pump/tank if insufficient.

#### **MATERIALS**

• Steel pipe; CPVC only in Light Hazard; UL/FM sprinklers.

## PART 3 — EXECUTION

#### **INSTALLATION**

- Install per NFPA 13; coordinate with PEMB structure; provide seismic bracing.
- Route piping in orderly manner, plumb and parallel to building structure. Maintain gradient.
- Install piping to conserve building space and to not interfere with use of space and other work.
- Review location of heads and piping with architect and engineer prior to installation.

#### **TESTING**

• Hydrostatic test, flush, main drain, functional tests.

#### **TURNOVER**

• Provide O&M, as-builts, training, 1-year warranty.

#### SECTION 28 31 00 - FIRE ALARM SYSTEM

#### PART 1 - GENERAL

#### 1.01 SUMMARY

- A. Provide a complete, code-compliant fire alarm system including equipment, devices, wiring, programming, testing, and documentation.
- B. System shall comply with NFPA 72, ADA requirements, and all applicable local codes.

#### 1.02 SUBMITTALS

- A. Submit complete fire alarm shop drawings prepared by a NICET Level III (minimum) certified fire alarm technician trained and certified by the system manufacturer.
- B. Provide product data for all equipment and peripheral devices.
- C. Electrical and Fire Alarm Contractors shall submit wiring diagrams, riser diagrams, device data sheets, battery calculations, and panel load calculations for engineer/architect approval.
- D. Provide documentation for any added peripheral devices with pricing based on current GSA pricing.

## 1.03 QUALITY ASSURANCE

- A. Fire Alarm Contractor shall be factory-trained and certified by the manufacturer.
- B. System shall be equal to Notifier System 500 or equal by Pyrotronics, Edwards Systems Technologies, or Simplex.
- C. All conductors shall be installed in conduit as recommended by the manufacturer.

PART 2 - PRODUCTS

#### 2.01 FIRE ALARM CONTROL PANEL (FACP)

| A. Provide a microprocessor-based control panel sized for all zones and devices required for a complete system. |
|-----------------------------------------------------------------------------------------------------------------|
| B. Panel shall include:                                                                                         |
| 1. Initiating device circuits                                                                                   |
| 2. Power modules for horns and strobes                                                                          |
| 3. Control relay modules for HVAC shutdown                                                                      |
| 4. All accessories required for a complete system                                                               |
| C. Program the system such that activation of any alarm zone results in:                                        |
| 1. Shutdown of all HVAC units                                                                                   |
| 2. Activation of smoke purge sequence                                                                           |
| D. Minimum zoning:                                                                                              |
| - Zone 1: Manual pull stations                                                                                  |
| - Zone 2: HVAC duct smoke detectors                                                                             |
|                                                                                                                 |
| 2.02 PERIPHERAL DEVICES                                                                                         |
| Provide the following devices where required by code and as indicated on drawings:                              |
|                                                                                                                 |
| A. Manual Pull Stations:                                                                                        |
| Non-coded, dual-action type; mounted 3'-10" AFF. (e.g., NBG-10)                                                 |
|                                                                                                                 |
| B. Area Smoke Detectors:                                                                                        |
| Photoelectric type (e.g., 2451-B402B).                                                                          |
|                                                                                                                 |
| C. Duct-Mounted Smoke Detectors:                                                                                |
| Photoelectric type (e.g., 2451-DH400ACDC).                                                                      |

- Mechanical Contractor to provide sampling tubes.

| - Electrical Contractor to install and connect wiring.                                          |
|-------------------------------------------------------------------------------------------------|
| - Coordinate locations with Mechanical Contractor.                                              |
|                                                                                                 |
|                                                                                                 |
| D. Horn/Strobe Units:                                                                           |
| Minimum 75 cd; mount at 80" AFF or minimum 6" below ceiling (e.g., SS2475ADA).                  |
|                                                                                                 |
|                                                                                                 |
| E. Strobe-Only Units:                                                                           |
| Minimum 75 cd; mount at 80" AFF or minimum 6" below ceiling (e.g., IS1-24-VFR).                 |
|                                                                                                 |
| E. Eutorian Palli                                                                               |
| F. Exterior Bell:                                                                               |
| 6" weatherproof gong with backbox; mount 10'-0" above finished grade (e.g., KMS-624).           |
|                                                                                                 |
| G. Annunciator Panel:                                                                           |
|                                                                                                 |
| Same manufacturer as FACP. Mount with top not more than 72" AFF.                                |
|                                                                                                 |
| H. Magnetic Door Hold-Opens:                                                                    |
|                                                                                                 |
| Designed to release upon fire alarm activation.                                                 |
|                                                                                                 |
| 2.03 SYSTEM FEATURES                                                                            |
| A. Visual notification appliances shall be synchronized where two or more strobes are installed |
| within the same corridor or space. Flash rate shall be between 1 Hz and 3 Hz.                   |
|                                                                                                 |
| B. Addressable notification appliances are acceptable.                                          |
|                                                                                                 |
| PART 3 – EXECUTION                                                                              |
|                                                                                                 |
|                                                                                                 |

3.01 INSTALLATION

- A. Install system components in accordance with manufacturer instructions, NFPA 72, ADA, and applicable codes.
- B. All fire alarm wiring shall be installed in dedicated conduit.
- C. Provide a 1/2" empty conduit from the Fire Alarm Control Panel to the Owner's telephone terminal board for municipal box connection. Owner to provide wiring and connection to the "Local Energy Municipal Box Output."

#### 3.02 COORDINATION

- A. Coordinate with Mechanical Contractor for duct detector placement and sampling tube installation.
- B. Coordinate wiring and interconnection requirements for all elevator equipment with Elevator Contractor and in accordance with NFPA 72 and elevator manufacturer requirements.

#### 3.03 TESTING AND ACCEPTANCE

- A. Perform complete system testing per NFPA 72.
- B. Demonstrate all functions including HVAC shutdown, door release, and strobe synchronization.
- C. Correct deficiencies and provide documentation of successful testing.

## PLUMBING LEGEND <u>SYMBOL</u> <u>DESCRIPTION</u> ------SAN------SANITARY OR WASTE PIPING ABOVE GRADE (SAN) SANITARY OR WASTE PIPING BELOW GRADE (SAN) — — SAN— — ------GW------GREASE WASTE PIPING (GW) — — GW— — GREASE WASTE PIPING BELOW GRADE (GW) VENT PIPING ABOVE OR BELOW GRADE (V) \_\_\_\_\_cw\_\_\_ COLD WATER PIPING (CW) HOT WATER PIPING (HW) -----HW------HOT WATER RETURN PIPING (HWR) ------HWR ------TEMPERED WATER (TW) \_\_\_\_\_ TW \_\_\_\_\_ \_\_\_\_\_ TP \_\_\_\_\_ TRAP PRIMER LINE (TP) NATURAL GAS PIPING (G) —— GAS —— GAS VENT PIPING (GV) --- GV ---FLOW DIRECTIONAL ARROW SHUT-OFF VALVE <del>────</del>─── BALANCING VALVE (BV) SOLENOID VALVE (SV) BALL VALVE (BV) BUTTERFLY VALVE GAS PLUG VALVE (GPV) HORIZONTAL SWING CHECK UNION Y-STRAINER REDUCER OR INCREASER $\longrightarrow$ ECCENTRIC REDUCER \_\_\_\_ REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) PIPING DOWN RISE OR DROP PIPING PIPING UP -OR- PIPING UP & DOWN CAP ON END OF PIPE CLEANOUT (WALL OR CEILING) (CO) FLOOR CLEANOUT (FCO) EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO) TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE) — — — — PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF TOP BRANCH CONNECTION OUT OF BOTTOM BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION WYE BRANCH CONNECTION HOSE BIBB \_\_\_\_<u>\_</u>\_\_\_\_ GAS PRESSURE REGULATOR TEST COCK GAS METER WALL HYDRANT $\square$ REFER TO KEYED NOTE FLOOR SINK (FS) FLOOR DRAIN (FD) HUB DRAIN (HD)

NOTE: NOT ALL SYMBOLS MAY APPLY TO THIS PROJECT.

CONNECT NEW TO EXISTING

DELTA CHANGE SYMBOL

# PLUMBING SCOPE & SPECIFICATION

## THE WORK OF THIS SECTION SHALL INCLUDE, BUT NOT BE LIMITED TO:

- A. A DOMESTIC HOT AND COLD WATER DISTRIBUTION SYSTEM TO SERVE ALL FIXTURES,
- AND EQUIPMENT. B. SANITARY SOIL WASTE AND VENT SYSTEMS TO SERVE ALL FIXTURES AND EQUIPMENT.

DRAWINGS ARE DIAGRAMMATIC; CONFIRM DIMENSIONS AND LOCATIONS IN THE FIELD, ADVISE OF MAJOR DISCREPANCIES. GUARANTEE LABOR AND MATERIALS FOR ONE YEAR.

ADHERE TO ALL APPLICABLE LOCAL CODES AND REGULATIONS. CONTRACTOR SHALL OBTAIN REQUIRED PERMITS AND PAY ALL FEES.

VALVES SHALL BE MANUFACTURED BY NIBCO, HAMMOND, POWELL, STOCKHAM, WATTS OR EQUIVALENT APPROVED BY THE ENGINEER. BALL VALVES SHALL HAVE CAST BRONZE BODY, BLOWOUT PROOF STEMS, FULL SIZE PORT, 316 STAINLESS STEEL TRIM, TEFLON SEAT AND SEAL AND THRUST WASHERS. VALVES 2" AND SMALLER SHALL BE NIBCO T-585-70-66 OR APPROVED EQUIVALENT.

UNIONS IN COPPER OR BRASS LINES SHALL BE BRASS, THREADED PATTERN UNIONS.

EXCAVATE TRENCHES FOR UNDERGROUND PIPING TO THE REQUIRED DEPTH. CUT THE BOTTOM OF THE TRENCH OR EXCAVATION TO UNIFORM GRADE. EXCAVATE 6" BELOW GRADE, FILL WITH BEDDING MATERIAL (SAND) AND TAMP WELL LAY OUT ALIGNMENT OF PIPE TRENCHES TO AVOID OBSTRUCTIONS. PROVIDE ASSURANCE THAT PROPOSED ROUTE OF PIPE WILL NOT INTERFERE WITH BUILDING FOUNDATION BEFORE ANY CUTTING IS BEGUN. SHOULD INTERFERENCE BE FOUND, CONTACT THE ARCHITECT/ENGINEER BEFORE PROCEEDING.

BACKFILL SHALL NOT BE PLACED UNTIL THE WORK HAS BEEN INSPECTED, TESTED AND APPROVED. USE SUITABLE FRIABLE SOILS AS BACKFILL MATERIAL. DO NOT USE PEAT, SILT, MUCK, DEBRIS OR OTHER ORGANIC MATERIALS. DEPOSIT BACKFILL IN UNIFORM LAYERS. PLACE BACKFILL MATERIAL IN UNIFORM LAYERS, 8" MAXIMUM LOOSE MEASURE. COMPACT TO NOT LESS THAN 95% OF MAXIMUM SOIL DENSITY AS DETERMINED BY ASTM D698 STANDARD PROCTOR.

## PLUMBING PIPING HANGER SPACING

MAXIMUM SPACING SHALL BE 10 FOOT.

## CLEANING, TESTING AND ADJUSTING

THIS CONTRACTOR SHALL FURNISH ALL LABOR, TOOLS, INSTRUCTIONS, AND SUPERVISION REQUIRED FOR THE PERFORMANCE OF ALL TESTS, CLEANING, AND MAKING NECESSARY ADJUSTMENTS TO OPERATION OF ALL FIXTURES AND EQUIPMENT.

ALL COLD & HOT WATER PIPING, FITTINGS AND VALVES SHALL BE INSULATED WITH NOMINAL 1-1/2" WALL THICKNESS FIBERGLASS PIPE INSULATION, OR AN APPROVED EQUAL HAVING FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DENSITY OF 50 OR LESS WHEN TESTED BY ASTM E-84 METHOD.

PIPE INSULATION SHALL BE INSTALLED ACCORDING TO THE PROCEDURES OUTLINED BY THE MANUFACTURE.

FITTING COVER INSULATION SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDED PROCEDURES. SWEAT FITTINGS SHALL BE INSULATED WITH MITER CUT PIECES OF FIBERGLASS PIPE INSULATION THE SAME SIZE AS ON ADJACENT PIPING. THREADED FITTINGS SHALL BE INSULATED WITH SLEEVED FITTING COVERS FABRICATED FROM MITER CUT PIECES OF FIBERGLASS PIPE INSULATION ACCORDING TO THE MANUFACTURER'S SLEEVING SIZE RECOMMENDATIONS AND SHALL BE OVERLAPPED 2" AND SEALED TO THE ADJACENT PIPE INSULATION. ALL VALVES SHALL BE INSULATED WITH CUT PIECES OF FIBERGLASS PIPE INSULATIONS. ALL JOINTS AND MITER CUT PIECES ARE TO BE SEALED PER MANUFACTURER'S RECOMMENDATIONS.

SUPPORTING HANGERS SHALL BE DESIGNED TO RESIST COMPRESSION; SUPPORTING DEVICES SUCH AS SHORT WOOD DOWELS OR WOOD BLOCKS SHALL BE USED IN COMBINATION WITH GALVANIZED SHEET METAL HANGER SHIELDS. THE WOOD SUPPORTING DEVICES SHALL BE THE SAME THICKNESS AS THE INSULATION AND SEALED TO THE INSULATION WITH FACTORY APPROVED CONTACT ADHESIVE.

INSTALL THERMAL INSULATION ON CLEAN, DRY SURFACES AFTER ALL TESTING AND INSPECTION IS COMPLETED. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS AND WITH MANUFACTURER'S INSTRUCTIONS.

# PIPE MATERIAL LIST

# DOMESTIC WATER PIPING

ABOVE SLAB INSIDE THE BUILDING SHALL BE SEAMLESS ASTM B 88 TYPE L COPPER WATER TUBE WITH WROUGHT COPPER FITTINGS, ANSI B16.22. SOLDER MATERIAL SHALL BE 99.8% LEAD LEAD FREE AND COMPLIANT WITH THE "SAFE WATER DRINKING ACT". THE USE OF DRILLED-T CONNECTIONS IS NOT PERMITTED. PEX TUBING CONFORMING TO ALL STANDARD APPLICABLE CODE REQUIREMENTS FOR COMMERCIAL APPLICATIONS IS APPROVED AS ALTERNATE TO COPPER.

BELOW SLAB SHALL BE ASTM B 88 TYPE K COPPER WATER TUBE WITH WROUGHT COPPER FITTINGS, ANSI B16.22. ALL JOINTS SHALL BE BRAZED.

# CONDENSATE AND INDIRECT DRAIN PIPING SHALL BE

TYPE M COPPER TUBING UP TO 1" ID, TYPE DWV TUBING AND COPPER FITTINGS FOR 1-1/4" AND LARGER SIZES, AND 95-5 SOLDER JOINTS. PEX TUBING CONFORMING TO ALL STANDARD APPLICABLE CODE REQUIREMENTS FOR COMMERCIAL APPLICATIONS IS APPROVED AS ALTERNATE.

# SANITARY SOIL WASTE AND VENT PIPING SHALL BE

ABOVE SLAB INSIDE BUILDING SHALL BE SCHEDULE 40 DWV POLYVINYL CHLORIDE PIPE AND FITTINGS CONFORMING TO ASTM D-1784-82 WITH SOLVENT WELDED JOINTS. IN AIR SUPPLY OR RETURN PLENUMS. AND/OR WHERE FIRE RATED WALLS. PARTITIONS. OR FLOORS ARE PENETRATED. CONTRACTOR SHALL PROVIDE NO-HUB CAST IRON SYSTEM CONFORMING TO CISPI STANDARD NO. 301-75. NEOPRENE GASKETS SHALL CONFORM TO ASTM STANDARD C564-75.

BELOW SLAB SHALL BE SCHEDULE 40 DWV POLYVINYL CHLORIDE PIPE AND FITTINGS CONFORMING TO ASTM D-1784-82 WITH SOLVENT WELDED JOINTS.

| TA                                   | ANKLES:                                  | S GAS                         | WATER                  | HEATE                       | ER                                                          |                                   |
|--------------------------------------|------------------------------------------|-------------------------------|------------------------|-----------------------------|-------------------------------------------------------------|-----------------------------------|
| TOTAL<br>BTUH INPUT<br>(NATURAL GAS) | MAXIMUM GPM<br>DELIVERED<br>AT 45°F RISE | MINIMUM<br>FLOW RATE<br>(GPM) | ELECTRICAL<br>REQUIRED | TEMPERATURE<br>SETTING (°F) | AIR INTAKE,<br>EX. GAS VENT,<br>HW, GAS, HWR,<br>COND., CW. | MANUFACTURER<br>COMMENT           |
| 100 000                              |                                          |                               |                        |                             | 2"<br>2"                                                    | NAVIEN #NPE-240A<br>OUTDOOR, WALL |

120°

120V/1ø/60HZ

(350W)

3/4", 3/4"

3/4", 3/4"

MOUNTED, POWER

VENTED TANKLESS

GAS WATER HEATER

(3.5-10.5 I.W.C.)

. CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL FOLLOW ALL APPLICABLE CODE REQUIREMENTS.

0.5

PROVIDE HOT WATER EXPANSION TANK DOWNSTREAM OF CHECK VALVE ON COLD WATER SUPPLY. (THERM-X-TROL ST-5).

. WATER HEATERS ARE PROVIDED WITH INTEGRAL HOT WATER RECIRCULATION PUMPS. PUMPS SHALL CIRCULATE HOT WATER INTERNALLY DURING OCCUPIED HOURS.

| ITEM<br>NO. | INLET<br>HOT WATER<br>TEMP (*F) | OUTLET<br>MIXED WATER<br>TEMP (*F) | MINIMUM<br>FLOW<br>(GPM) | DESIGN<br>FLOW<br>(GPM) | PRESSURE DROP  © DESIGN FLOW  (PSI) | VALVE<br>FINISH | MANUFACTURER /<br>MODEL NO. |
|-------------|---------------------------------|------------------------------------|--------------------------|-------------------------|-------------------------------------|-----------------|-----------------------------|
| TMV-1       | 140°                            | 110°                               | 0.5                      | 0.5-2.5                 | 5.0                                 | ROUGH<br>BRONZE | WATTS<br>USG-B-M1           |

. MAKE WATER CONNECTIONS TO THERMOSTATIC MIXING VALVE(S) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. PROVIDE PIPE INCREASERS AND/OR VALVES AS REQUIRED.

# SHOCK ARRESTORS

| P.D.I. SYMBOL | FIXTURE UNITS | CHAMBER LENGTH | SWEAT CONNECTION |
|---------------|---------------|----------------|------------------|
| A             | 1–11          | 9-5/8"         | 1/2"             |
| В             | 12-32         | 11-3/4"        | 3/4"             |
| C             | 33-60         | 14-11/18"      | 1"               |
| D             | 61–113        | 12-3/8"        | 1"               |
| E             | 114–154       | 15-3/8"        | 1"               |
| F             | 155-330       | 17-3/8"        | 1"               |

# PLUMBING GENERAL NOTES

- SAWCUT AND REMOVE EXISTING FLOOR SLAB/PAVING AS REQUIRED TO PROVIDE NEW FIXTURES, GREASE TRAP, SAMPLE WELL, CLEANOUTS, AND UNDER-SLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR/PAVING O MATCH EXISTING, ALL SUCH WORK IS TO BE DONE IN ACCORDANCE WITH THE LANDLORD'S REQUIREMENTS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE LANDLORD'S MOST RECENT RULES AND REGULATIONS FOR TENANT FINISH-OUT. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH SUCH RULES AND REGULATIONS.
- REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING FINISHED FLOOR FI FVATION.
- FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING DOMESTIC WATER, AND SANITARY WASTE & VENT PIPING PRIOR TO BEGINNING CONSTRUCTION TO ENSURE THAT PROPER CONNECTIONS TO AND EXTENSIONS OF SUCH UTILITIES CAN BE MADE.
- PRIOR TO BEGINNING CONSTRUCTION, COORDINATE PLUMBING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL CODE AUTHORITY AND PROVIDE AS DIRECTED.
- CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
- CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
- MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES.
- COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
  - DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
- CONTRACTOR TO COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
- ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
- UPON COMPLETION OF WORK, THOROUGHLY ROD OUT AND FLUSH ALL SANITARY WASTE PIPING TO ENSURE IT IS FREE FROM BLOCKAGES.

# PLUMBING FIXTURE SPECIFICATION

| TYPE: DESCRIPTION: SEAT: | WC-1 (T.A.S. COMPLIANT FOR ADULTS) WATER CLOSET, FLOOR MOUNTED — CHINA, 1.6 GALLON PER FLUSH FLUSHOMETER ELONGATED CLOSET BOWL WITH CLOSE—COUPLED TANK AND BOLT COVERS. TANK TO BE CONFIGURED WITH TRIP LEVER LOCATED ON LEFT SIDE OR ON RIGHT SIDE IN ORDER TO MEET T.A.S. REQUIREMENT THAT FLUSH CONTROLS BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREA. KOHLER K—P96057—T5D—NA  ELONGATED OPEN FRONT WHITE PLASTIC SEAT WITH SELF— | ROUGH-IN:    | FD-1 FLOOR DRAIN, BOTTOM OUTLET CAST IRON BODY, ADJUSTABLE 6" DIAMETER NICKEL BRONZE STRAINER WITH VANDAL PROOF SCREWS. PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS. MI-FAB F1100-1-6. PROVIDE WITH 1/2" TRAP PRIMER CONNECTION. 3" WASTE, 2" VENT, 1/2" TRAP PRIMER FROM LAVATORY TRAP PRIMER COORDINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS / FLOOR CONSTRUCTION. |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SLAI.                    | SUSTAINING CHECK HINGES.                                                                                                                                                                                                                                                                                                                                                                                                               | $\sim\sim$   |                                                                                                                                                                                                                                                                                                                                                                                                            |
| SUPPLIES:                | 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE                                                                                                                                                                                                                                                                                                                  | DESCRIPTION: | TD-1<br>ZURN Z882                                                                                                                                                                                                                                                                                                                                                                                          |

## UR-1 (T.A.S. COMPLIANT FOR ADULTS) DESCRIPTION: URINAL, FLOOR MOUNT, WHITE VITREOUS CHINA, 0.5 GALLON PER FLUSH SIPHON JET ACTION, EXTERNAL TRAPWAY. KOHLER K-25039-T-0 BRANHAM FULL STALL WASHOUT URINAL WITH TOP SPUD IN FLUSH VALVE: SLOAN ROYAL G2 8186-0.5 GPF FLUSH VALVE. CARRIFR: REFER TO URINAL MANUFACTURER'S REQUIREMENTS. ROUGH-IN:

SUPPLIES:

2" WASTE, 2" VENT, 3/4" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS. L-1 (T.A.S. COMPLIANT FOR ADULTS) LAVATORY, UNDER COUNTER MOUNT, WHITE VITREOUS CHINA, 19-1/4" X 16-1/4" WITH FRONT OVERFLOW, FAUCET HOLES ON 4" CENTERS. KOHLER CAXTON K-2210-0. TOUCHLESS FAUCET WITH KINESIS SENSOR TECHNOLOGY, AC-POWERED IN POLISHED CHROME RESISTANT 0.5 CPM AFRATOR KOHLER K-103K36-SANA-CP KLIMIN STRAINER: CHROME PLATED BRASS GRID STRAINER WITH 1-1/4" 17 GAUGE TAILPIECE WITH LOCK NUT. P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE.

4" WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL

RISER. MCGUIRE 2166LK.

DRAWINGS FOR HEIGHT REQUIREMENTS.

FLEXIBLE RISERS. ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS. DESCRIPTION: WALL HYDRANT, CONCEALED BOX TYPE, NON-FREEZE, 3/4" MALE HOSE THREAD OUTLET. SELF-DRAINING WITH ANTI-SIPHON VACUUM BREAKER. CHROME PLATED BRONZE CONSTRUCTION

1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVES

WITH ESCUTCHEONS AND 3/8" COMPRESSION CHROME PLATED

WITH CAST STAINLESS STEEL HYDRANT BOX. LOCKING HINGED COVER. LOOSE TEE OPERATING KEY. MIFAB MHY-20-3. ROUGH-IN: 3/4" COLD WATER. INSTALL WITH OUTLET AT 24" A.F.F. OR AS DIRECTED BY ARCHITECT/OWNER.

WALL HYDRANT, NON-FREEZE, TWO-3/4" MALE - (HW & CW), DESCRIPTION: HOSE THREAD OUTLET, SELF-DRAINING WITH ANTI-SIPHON VACUUM BREAKER. CHROME PLATED BRONZE CONSTRUCTION WITH CAST STAINLESS STEEL HYDRANT BOX. LOOSE TEE OPERATING KEY. MIFAB MHY-40 ROUGH-IN: 3/4" COLD WATER. INSTALL WITH OUTLET AT 24" A.F.F. OR AS

DIRECTED BY ARCHITECT/OWNER. 

> DESCRIPTION: SHOWER STALL, BASE, AND ENCLOSURE SPECIFIED BY ARCHITECTURAL DIVISION AND INSTALLED DIVISION AND INSTALLED BY PLUMBING CONTRACTOR. COORDINATE INSTALLATION AND ORIENTATION WITH ARCHITECTURAL DRAWINGS.

FAUCET: SHOWER FAUCET SELECTED BY OWNER, PROVIDED AND INSTALLED BY CONTRACTOR.

ROUGH-IN: 3" WASTE, 2" VENT, 3/4" HOT AND COLD WATER. SHOWER FLOOR DRAIN: MIFAB FD212TC-49 OR APPROVED EQUAL SHOWER BASE: EVERFAB S6339RWA-L/R

|   | TYPE:<br>DESCRIPTION: | FD-1<br>FLOOR DRAIN, BOTTOM OUTLET CAST IRON BODY, ADJUSTABLE 6"<br>DIAMETER NICKEL BRONZE STRAINER WITH VANDAL PROOF                                      |
|---|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | TRAD PRIMER.          | SCREWS. PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS. MI-FAB F1100-1-6. PROVIDE WITH 1/2" TRAP PRIMER CONNECTION.                            |
|   | ROUGH-IN:             | 3" WASTE, 2" VENT, 1/2" TRAP PRIMER FROM LAVATORY TRAP PRIMER COORDINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS / FLOOR CONSTRUCTION. |
|   | $\sim\sim$            | ·                                                                                                                                                          |
| н | DESCRIPTION:          | TD-1<br>ZURN Z882                                                                                                                                          |

CHANNELS SHALL BE 96" [2438MM] LONG, 12" [305MM] WIDE REVEAL AND HAVE A 9-1/4" [235MM] THROAT. MODULAR CHANNEL SECTIONS SHALL BE MADE OF 0% WATER ABSORBENT HIGH DENSITY POLYETHYLENE (HDPE). SHALL HAVE A POSITIVE MECHANICAL CONNECTION BETWEEN CHANNEL SECTIONS THAT WILL NOT SEPARATE DURING THE INSTALLATION AND SHALL MECHANICALLY LOCK INTO THE CONCRETE SURROUND EVERY 12" [305MM]. CHANNELS SHALL WEIGH LESS THAN 5.05 LBS. [2.29KG] PER LINEAR FOOT, HAVE A SMOOTH, 3" [76MM] RADIUSED SELF CLEANING BOTTOM WITH A MANNING'S COEFFICIENT OF 0.009 AND 1.04% OR NEUTRAL 0% BUILT IN SLOPE. CHANNELS SHALL HAVE REBAR CLIPS STANDARD TO SECURE TRENCH IN ITS FINAL LOCATION. SHALL BE PROVIDED WITH STANDARD DGC GRATES THAT LOCK DOWN TO FRAME. ZURN 12" [305MM]WIDE REVEAL DUCTILE IRON SLOTTED GRATE CONFORMING TO ASTM SPECIFICATION A536-84, GRADE 80-55-06. DUCTILE IRON GRATE IS RATED CLASS C PER THE DIN EN1433 TOP LOAD CLASSIFICATIONS. SUPPLIED IN 24" [608MM] NOMINAL LENGTHS WITH 13/16" [21MM] WIDE SLOTS, AND 1-1/2" [38MM] BEARING DEPTH. GRATE HAS AN OPEN AREA OF 80.8 SQ. IN PER FT. [171,027 SQ. MM PER METER]. THE 1/4" [6MM] THICK HEAVY-DUTY CARBON STEEL FRAME ASSEMBLY CONFORMS TO ASTM SPECIFICATION A36 WITH 10 - 4" [102MM] LONG CONCRETE ANCHORS PER 96" [2438MM]. GRATE LOCKDOWN BARS ARE TO BE INTEGRAL TO THE FRAME. THE FRAME IS SUPPLIED WITH A POWDER COATED FINISH. ALL WELDS MUST BE PERFORMED BY A CERTIFIED WELDER PER ASTM STANDARD AWS D1.1. FRAMES SHALL BE PRODUCED IN THE U.S.A DESCRIPTION: PROVIDE MATCHING HEAVY DUTY GRATE COVER PER OWNER'S PREFERENCE.

DESCRIPTION: WALL CLEANOUT. CAST IRON CLEANOUT FERRULE WITH BRONZE RAISED HEAD PLUG AND ROUND STAINLESS STEEL COVER PLATE WITH CENTER SECURING SCREW. MIFAB C1440-RD6. PROVIDE MIFAB C1460 CAST IRON CLEANOUT TEE IN LIEU OF FERRULE AS REQUIRED FOR WALL CONSTRUCTION.

DESCRIPTION: FLOOR CLEANOUT, CAST IRON BODY WITH SECONDARY O-RING TEST SEAL AND ADJUSTABLE COMBINED ACCESS COVER/PLUG TOP ASSEMBLY WITH PRIMARY GASKET SEAL, AND ROUND SCORIATED NICKEL BRONZE COVER. MIFAB C1100-R-1. FOR CARPETED FLOORS PROVIDE MIFAB C1100-RC-1.

> ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND COLD WATER TO FAUCETS AS INDICATED ON PLANS AND FIXTURE SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. REFER TO FIXTURE SCHEDULE

PROVIDE MCGUIRE "PROWRAP" INSULATION KITS ON ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE. ALL SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

FOR MINIMUM SIZES OF PLUMBING FIXTURE ROUGH-INS.

JIGIE .... 1. ALL FIXTURES FOR CONNECTION BASIS OF DESIGN ONLY. CONTRACTOR SHALL COORDINATE FINAL SELECTIONS OF ALL PLUMBING FIXTURES WITH ARCHITECT/OWNERS REP PRIOR TO PURCHASE AND INSTALLATION.

GENERAL

NOTES:

# architecture

**ENCITE** architecture + design LLC 105 S Ave H, Washington, IA 52353 319.331.7424

+ design



KF ENGINEERING

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# CONSTRUCTION **DOCUMENTS** 09-19-2025

| No. | Description | Date       |
|-----|-------------|------------|
| 1   | ADDENDUM #1 | 11/25/2025 |
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JOHNSON **CONUTY EMA STORAGE** 

PLUMBING **GENERAL** INFORMATION

| KFE Project number    | 25041      |
|-----------------------|------------|
| Encite Project number | 24-060     |
| Date                  | 09-19-2025 |
| Drawn by              | MBP        |
| Checked by            | KSF        |
|                       | 0.0        |

1/8" = 1'-0"