

MAY 08 2023

SHERRY MURRAY
COUNTY CLERK

SA&I 1-4040 (2000)

Canadian _____ County, Oklahoma
COUNTY PURCHASING OFFICE
Canadian _____ County Court House
El Reno _____, Oklahoma
Phone: (405) 295-6125

280360


INVITATION TO BID

PLEASE REVIEW TERMS AND CONDITIONS ON REVERSE
SIDE RELATING TO SUBMISSION OF THIS BID.
Notarized Affidavit completions and signature required on reverse side.

DATE ISSUED
May 08, 2023
Page 1 of 2

BID NUMBER #2023-#14 Plumbing Retrofit Project / Children's Justice Center	BID CLOSING DATE AND HOUR June 5, 2023 9:00am	REQUIRED DELIVERY DATE SEE SPECIFICATIONS ____ Days after award of Purchase Order
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TERMS Start accepting bids on May 30, 2023 at 9:00am Net, FOB this bid will open 06-05-2023 during Commissioner's Meeting that begins at 9:00am	DATE OF DELIVERY: SEE SPECIFICATIONS
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ITEM	QUANTITY	UNIT OF ISSUE	DESCRIPTION	UNIT PRICE	TOTAL
	1 or more		<p>Canadian County Children's Justice Center is seeking bids for Plumbing Retrofit Project.</p> <p>See Specifications attached.</p> <p>The Board of Canadian County Commissioners reserves the right to reject any and all bids or to award all or any portion of the items bid. All data will be considered in the awarding of the bid including the delivery time.</p> <p><u>The terms & conditions of this document must be completed and returned or the bid will be rejected.</u></p> <p>Contact person: Joshua Rutherford 7905 E. Highway 66 El Reno, OK 73036 Email: maintenance@ccjck.org Phone: (405) 262-0202 Hours: Monday - Friday 8:00am to 5:00pm</p> <p style="text-align: center;">APPROVED</p> <p>Date: <u>5.3.23</u></p> <p style="text-align: center;"> _____ Officer of Department Head</p>		<p>\$ _____</p> <p>Total</p>

TERMS AND CONDITIONS

1. Sealed bids will be opened in the Commissioner's Conference Room, Canadian County Courthouse, 201 N. Choctaw Avenue, El Reno, Oklahoma, at the time and date shown on the invitation to bid form.
2. Late bids will not be considered. Bids must be received in sealed envelopes (one to an envelope) with bid number and closing date written on the outside of the envelope.
3. Unit prices will be guaranteed correct by the bidder.
4. Firm prices will be F.O.B. destination.
5. Purchases by Canadian County, Oklahoma, are not subject to state or federal taxes.
6. This bid is submitted as a legal offer and any bid when accepted by the County constitutes a firm contract.
7. Oklahoma laws require each bidder submitting a bid to a county for goods or services to furnish a notarized sworn statement of non-collusion. A form is supplied below.
8. Bids will be firm until 07/05/2023
(DATE)

AFFIDAVIT: I, the undersigned, of lawful age, being first duly sworn on oath say that he (she) is the agent authorized by the bidder to submit the above bid. Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any state official or employee as to quantity; quality or price in the prospective contract or any other terms of said prospective contract; or in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract; that the bidder/contractor has not paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma (or other entity) any money or other thing of value, either directly or indirectly in the procuring of the award of a contract pursuant to this bid.

Subscribed and sworn before this _____ day
of _____, 20 _____

(SEAL)

Firm: _____

My commission expires _____

Signed by: _____ Title: _____
(Manual Signature of Undersigned)

NOTARY PUBLIC (CLERK OR JUDGE)

Address: _____ Phone: _____

City: _____ State: _____

Zip: _____

Please mail sealed bids to:
Canadian County Clerk's Office
Attn: Purchasing
PO Box 458
El Reno, OK 73036

Street Address:
201 N Choctaw Avenue
El Reno, OK 73036

NOTE: Other terms and conditions can be added at the discretion of the county officers.



Date Issued: May 08, 2023
Bid Number: **2023-#14**
Closing Date: June 05, 2023 at 9:00 am
PO Box 458, 201 N. Choctaw Ave., El Reno, OK 73036
Opening Date: June 05, 2023 during the Commissioner's Meeting that begins at 9:00 am
Commissioner's Meeting Room, 201 N. Choctaw Ave., El Reno, OK 73036

~ SPECIFICATIONS ~

Plumbing Retrofit Project / Children's Justice Center

Children's Justice Center is seeking bids for Plumbing Retrofit Project.

Specifications attached.

Electronic copies of plans available upon request:
Contact: Angel Colley
Email: acolley@ccjcok.org
Phone: (405) 264-5513
Hours: Monday – Friday 8:00am to 5:00pm
Address: 7905 E. Highway 66, El Reno, OK 73036

For All Other Information Contact:
Contact: Joshua Rutherford
Email: maintenance@ccjcok.org
Phone: (405) 264-5552
Hours: Monday – Friday 8:00am to 5:00pm
Address: 7905 E. Highway 66, El Reno, OK 73036

Bids will be received beginning at 9:00am on Tuesday, May 30, 2023 until 9:00am on Monday, June 05, 2023.

Bids shall be accompanied by:

- Singed and Notarized Invitation to Bid
- A certified check, cashier's check or bid bond equal to five percent (5%) of the bid, which shall be deposited with the awarding public agency as a guaranty; or
An irrevocable letter of credit terms the Construction and Properties Division of the Office of Management and Enterprise Services prescribes, issued by a financial institution insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation for the benefit of the state, on behalf of the awarding public agency, in an amount equal to five percent (5%) of the bid. The awarding public agency shall deposit the irrevocable letter of credit with Division.
- Business Relationships Affidavit
- Non-Collusion Bidding Certification

(Please review Title 61 O.S. § 101-138 for full disclosure)

NOTE

Terms for Payment:

A purchase order will be issued to the awarded vendor. Once the original itemized invoice is received by the receiving officer it will be processed for payment.

If you have any questions or need additional information, please contact:

Lena Marquez, Purchasing Agent, 405.295.6125
lm Marquez@okcana.cogov.net

201 N. Choctaw Avenue, El Reno, OK 73036
405.295.6125 ~ Fax 405.422.2437
www.canadiancounty.org

Canadian County Children's Justice Center Plumbing System Retrofit Project

EI Reno, Oklahoma

DRAWING INDEX

- PLUMBING
- P-1 PLUMBING WATER PLAN
- P-2 PLUMBING SANITARY PLAN
- P-3 PLUMBING SPECIFICATIONS

BUILDING CODE INFORMATION

A. APPLICABLE CODES AND STANDARDS
2018 International Building Code (IBC)
2018 International Plumbing Code (IPC)
2008 International Fire Code (IFC)
2008 International Existing Building Code (IEBC)
Current National Electric Code (NEC)
Energy Conservation Code Section 105 (2008 Oklahoma State Building Code)
ASPE 117.1 American National Standards Institute and United Builders And Fabricators



Gwin Engineering
Consultants, LLC
342502 F 300 Road, Chandler OK 74834
Phone (405) 850-0705
Email: ggwin@gwin-engineering.com
Oklahoma CA # 7643, Expires 6/30/2024



CCC
Oklahoma CA # 7643, Expires 6/30/2024

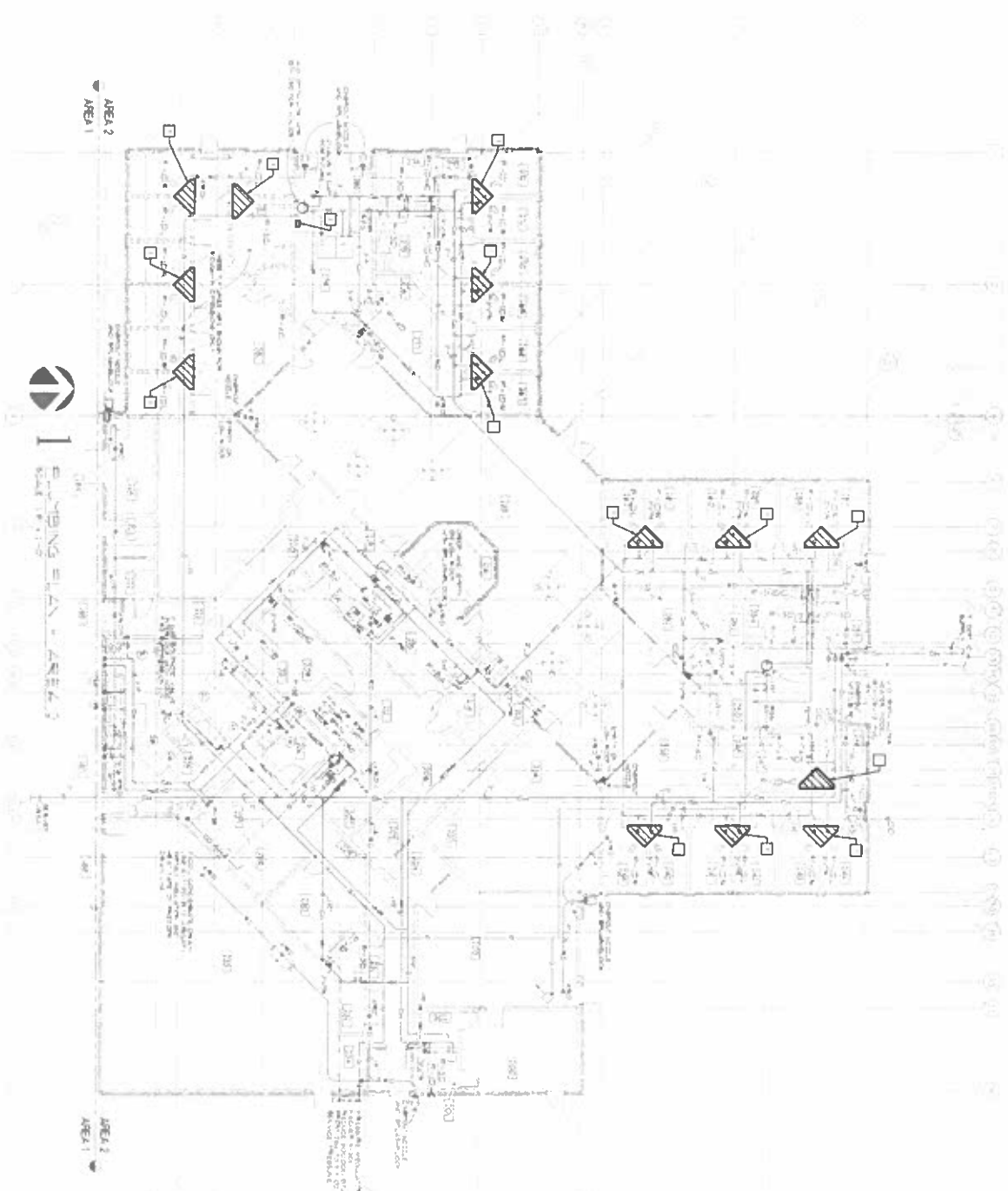
DATE	
REVISION	
CHECKED BY	
DRAWN BY	
SCALE	
PROJECT NO.	
SHEET NO.	

CANADIAN COUNTY CHILDREN'S JUSTICE CENTER
PLUMBING SYSTEM RETROFIT
1/2" = 1' - 0"

PROJECT NO.: 2023-001
SHEET NO.: 1 OF 1
DATE: 04/18/2023
DRAWN BY: J. SMITH
CHECKED BY: J. SMITH

COVER SHEET

COVER



- PROJECT GENERAL NOTES**
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE OREGON PLUMBING CODE AND THE OREGON MECHANICAL CODE.
 2. ALL MATERIALS SHALL BE APPROVED BY THE LOCAL HEALTH DEPARTMENT AND THE LOCAL FIRE DEPARTMENT.
 3. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
 4. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED BUDGET.
 5. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED QUALITY STANDARDS.

- PLUMBING GENERAL NOTES**
1. ALL PLUMBING SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE OREGON PLUMBING CODE AND THE OREGON MECHANICAL CODE.
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 5. ALL PLUMBING SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE OREGON PLUMBING CODE AND THE OREGON MECHANICAL CODE.

- DRAWING NOTES**
1. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
 2. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED BUDGET.
 3. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED QUALITY STANDARDS.
 4. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
 5. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED BUDGET.

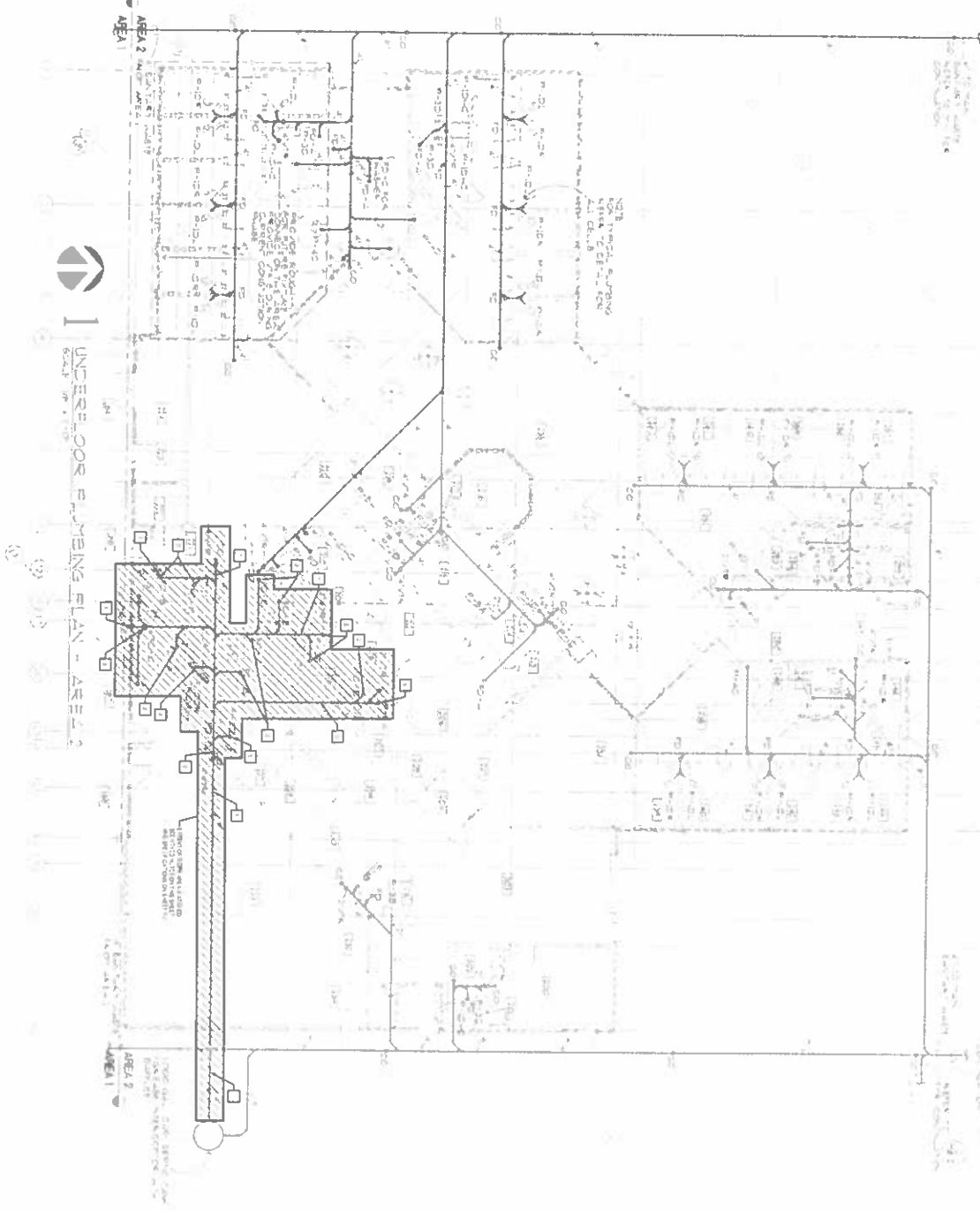
- SCHEDULING NOTES**
1. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
 2. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED BUDGET.
 3. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED QUALITY STANDARDS.
 4. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
 5. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED BUDGET.

Gwin Engineering Consultants, LLC
 342582 E 893 Road Chandler, OH 74634
 Phone (405) 850-0205
 Email ogwin@gwin-engineering.com
 Oklahoma CA # 7649 F. License 6302/2024



**CANADIAN COUNTY CHILDREN'S JUSTICE CENTER
 PLUMBING SYSTEM RETROFIT**

PLUMBING WATER PLAN
 DATE: 04/18/2023
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 P-1



NOTE:
 NON-TYPICAL SCHEDULING
 LISTING IS USED FOR CON
 SULTING



1 UNDER FLOOR PIPING PLAN - AREA 1

DRAWING NOTES

1. REVIEW ALL NOTES AND SPECIFICATIONS FOR THIS PROJECT.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE PLUMBING CODES AND STANDARDS.
3. ALL MATERIALS AND EQUIPMENT SHALL BE APPROVED BY THE ENGINEER.
4. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
5. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.
6. ALL WORK SHALL BE SUBJECT TO THE REQUIREMENTS OF THE LOCAL PERMITS.
7. ALL WORK SHALL BE SUBJECT TO THE REQUIREMENTS OF THE LOCAL INSURANCE.
8. ALL WORK SHALL BE SUBJECT TO THE REQUIREMENTS OF THE LOCAL FIRE DEPARTMENT.
9. ALL WORK SHALL BE SUBJECT TO THE REQUIREMENTS OF THE LOCAL HEALTH DEPARTMENT.
10. ALL WORK SHALL BE SUBJECT TO THE REQUIREMENTS OF THE LOCAL ENVIRONMENTAL AGENCY.

SCHEDULING NOTES

1. SCHEDULING LIST IS FOR INFORMATION ONLY.
2. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING MATERIALS.
3. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING EQUIPMENT.
4. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING LABOR.
5. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING SERVICES.
6. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING SUPPLIES.
7. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING TOOLS.
8. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING TRAVEL.
9. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING MEALS.
10. SCHEDULING LIST IS NOT TO BE USED FOR ORDERING ACCOMMODATIONS.

**CANADIAN COUNTY CHILDREN'S JUSTICE CENTER
 PLUMBING SYSTEM RETROFIT**




**Gwin Engineering
 Consultants, LLC**
 342592 E. 985 Road Chandler OK 74834
 Phone: (405) 850-0205
 Email: ogwin@gwin-engineering.com
 Oklahoma CA # 7548 E press 6/20/2024

PLUMBING
 SANITARY PLAN
 DATE: 04/18/2024
 DRAWN BY: GWIN
 CHECKED BY: GWIN
 P-2
 1 of 4

PLUMBING ELECTRONIC CONTROLS

- A. Electronic Controls: Electronic networked water management system.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Acom Engineering; Morris Group International; Master-Trol PLUS (MTP) or comparable product by one of the following:
 - a. Sloan Valve Company.
 - b. Willoughby Industries.
 2. Water Management System:
 - a. Manufacturer to:
 - 1) Provide wiring diagrams that are used to create Floor Plan View(s) and Tree View (Directory Tree Style Format for system computer navigation), and assist Installer with controller locations and valve connections.
 - 2) Install water management system software on Owner's PC-based computer. Configure and test software prior to installation to provide control and monitoring of each valve connected to RS-485 networked control system.
 - b. Installer to:
 - 1) Furnish manufacturer with list of fixture designations and quantities connected to the Water Management System.
 - 2) Furnish manufacturer with scaled floor plans showing fixture locations and designations.
 - c. Software to:
 - 1) Provide capability to communicate with multiple Water Management System computers that are connected to the same LAN. This connection will allow the system computer to monitor and control valves connected to other system computers on the LAN.
 - 2) Display facility in directory-tree-style interface view of defined sections of the facility, which may be navigated through series of subdirectories down to individual room and control valve level.
 - 3) Provide labeled fixture and room/area identification of locations and valve types connected to facility water management system.
 - 4) Display current settings and status of each valve connected to the system.
 - 5) Provide ability to program and control individual or groups of valves.
 - 6) Provide ability to program runtimes up to one hour using minute, second, and 0.1 second increments on each valve.
 - 7) Provide ability to program lockouts up to 24 hours using hour and minute increments on each valve.
 - 8) Provide ability to enable, disable, and remote-activate each individual valve from system computer.

- 9) Provide ability to enable, disable, program runtimes and lockouts, and set valve modes to groups of valves, from system computer.
 - 10) Provide ability to program and control manufacturer-provided Infrared Sensors.
 - 11) Provide ability to set "24-hour limits," "Days of the Week," and "Windows of Operation" to limit daily activations and valve availability per time of day and day of the week on individual or groups of valves, from the system computer.
 - 12) Provide ability to set "Auto Cycle" feature to automatically activate individual or groups of valves at specified time of day, from the system computer.
 - 13) Provide ability to display controller network information, including Versa-Link, controller address, and valve station number for each valve connected to the system computer.
 - 14) Provide ability to set visual and audio alarms for specified statuses to alert personnel.
 - 15) Provide Alert Panel that highlights presence of valves with critical status, including disabled valves, valves in "Valve Override" condition, and valves that have lost network communications.
 - 16) Provide ability to create configurable user-level passwords for individuals or groups that can limit access to features and locations on the system computer.
 - 17) Provide password tracking to log all changes on the system computer by password.
- d. Provide PC-based water management system computer running Windows 10 or newer operating system.
- 1) Provide RS-485 network communications between system computer and microprocessor controllers, to monitor valve status, activations, log data, and remote operations and programming.
 - 2) PC to serve as operator interface serving up to eight multi-drop communication cables (Versa-Links) of networked microprocessor controllers.
 - 3) PC system computer to display all fixtures and indicate their operation and state.
 - 4) Provide PC to meet or exceed the following minimum requirements:
 - a) Monitor: 17 inch (432 mm) or larger with resolution of 1024 by 768 pixels minimum.
 - b) Touchscreen Monitor.
 - c) RAM: 8 GB, minimum.
 - d) Solid State Hard Drive: 500 GB, minimum.
 - e) Keyboard.
 - f) Mouse.
 - 5) Provide Asynchronous Serial Adapter capable of communication with up to eight Versa-Links for network communication with up to 256 microprocessor controllers, each controlling up to 12 valves, totaling 3072 valves.
 - 6) Versa-Link Length: 4000 ft. (1219 m), maximum.
 - 7) Install water management system software on system computer.
-
- 

- 8) Configure and test prior to installation to provide control and monitoring of each valve connected to the RS-485 networked control system.
 - 9) Provide BMS interface adapter and software.
- e. Microprocessor Controllers:
- 1) Provide controllers for installation in plumbing chase or other areas isolated from typical inmate access.
 - 2) Install controllers in accordance with manufacturer's installation instructions. Deviations from the manufacturer's installation instructions to be approved in writing by the manufacturer.
 - 3) Provide controllers able to control operation of manufacturer-supplied 24 Vac electronic solenoid valve, with ability to be programmed and controlled onsite using water management system computer.
 - 4) Provide controllers with modular design that allow for a four-port, eight-port, or 12-port configuration by combining main module and up to two sub-modules. Any combination of main and sub-modules to be recognized as one controller by computer system.
 - 5) Controllers to use single I/O cable to connect valve assembly to its corresponding controller.
 - 6) Provide controllers with IP54-certified rated enclosures to protect against water and dust intrusion.
 - 7) Controllers to retain all programmed settings after event in which power is removed or lost. When power is restored, fixtures to operate in same manner as prior to power loss.
 - 8) Controllers to operate on 24 Vac. Provide 120/24 Vac, UL Class 2 transformer with each controller supplied.
 - 9) Provide controllers with internal power switch.
 - 10) Provide controllers with replaceable internal fuse to protect electronics.
 - 11) Each controller to include power and status LEDs to indicate presence of incoming power and valve status.
 - 12) Each controller to have integrated real-time clock for scheduling and allocation reset features.
 - 13) Controllers to be programmed by manufacturer or Installer to Owner's requirements for each valve connected to water management system.
 - a) Owner will furnish programming requirements to manufacturer.
 - 14) Manual valve activation to initiate from vandal-resistant stainless steel piezo electric push buttons.
 - a) Push buttons to require less than 5 lbf (22.2 N) to activate.
 - b) Push buttons to include "non-hold open" function to prevent continuous activation or cycling when push button is continuously pressed.
 - c) Infrared Sensors to have an adjustable range up to 23.6 inches (600 mm).
- f. Handheld Programmer: Provide for direct programming at controller.
- g. Provide electronic lavatory valves that continue to provide cold drinking water when power to the system is lost. Conversion to non-electric operation to be automatic. Electronic operation to automatically resume when power is restored.
-

- h. Site Visit: Furnish services of manufacturer-trained technician to inspect the installation, install the system computer, verify communication to each controller connected to the system, program Owner-required settings, and train staff how to use the system.

PLUMBING SPECIFICATIONS

PART 1 - GENERAL

A. INTENT

The intent of this section is to cover Basic Mechanical Requirements specifically applicable to plumbing.

B. GENERAL REQUIREMENTS

Visit the building site prior to bidding, examine all existing conditions, and verify all dimensions. No extras will be awarded after the contract is signed if conflicts or obstructions between new work and existing construction are not reported.

Work installed by this Contractor which interferes with or affects the existing structures shall be changed as directed and all costs incident to such changes shall be paid by this Contractor.

Any existing condition uncovered during the construction process which, by generally accepted construction practices, should be remedied, should be brought to the attention of the architect immediately and in writing.

Specific locations, mounting heights and overall dimensions of devices and fixtures are to be obtained from the architectural details when available and from site data.

All work of this contract shall be done neatly and proficiently and only by workers skilled in their particular craft.

Except where modified by specific notation to the contrary, it shall be understood that the indication and/or description of any item in the drawings, specifications, or both carries with it the instruction to furnish and install the item, regardless of whether or not this instruction is explicitly stated as part of the indication or description.


All work shall be done during normal working hours.

C. SCOPE OF WORK

Provide all materials, labor, equipment and services necessary for the installation of all systems as indicated on the drawings.

D. CONTRACT DRAWINGS

The contract drawings for the work are diagrammatic, intended to convey the scope of work and indicate the general arrangement and approximate location of equipment and piping, the contractor shall be responsible for checking and verifying all conditions and dimensions. Do not scale drawings.



Drawing Definitions: Where the term "provide" is used, this shall mean furnish and install, complete and ready for the intended use. "Furnish" means supply and deliver to the Project site, ready for unloading, unpacking, assembly, and installation. "Install" describes the operations at the Project site including the actual assembly, erection, anchoring, and all similar operations.

Provide any offsets, fittings, etc., necessary for the complete installation of all work of this contract. Provide any accessories required for the complete installation and operation of all systems.

Include all costs to make any alterations and offsets of materials, pipe, conduits, etc., and of equipment as necessary to avoid installation conflicts with existing work.

The drawings and specifications are complementary and any work and material required by the drawings and not mentioned in the specifications or vice versa, shall be executed as if same were both specified and shown.

Any questions or conflict between drawings and specifications, shall be referred to the Engineer.

The Engineer reserves the right to require any and or all Contractors to make minor changes in arrangements at no additional cost to the Owner.

E. CODES, STANDARDS AND TESTS

All systems and components shall be installed in accordance with all state, county and local codes and regulations.

All tests shall be performed in accordance with state, county, local, Owner's and engineer's requirements.

F. PERMITS

The Contractor is responsible for applying for all required permits and paying for all permit, inspection, licensing, and service fees to authorities having jurisdiction over the work. The Contractor is responsible for arranging for all inspection visits.

G. COORDINATION

Perform work under this contract in close harmony with other contractors so completed work shall present a neat and workmanlike installation. The mechanical contractor shall consult the plans of all other trades in all instances before installing his work so that their installations will not interfere with other disciplines. In the event of a conflict, this contractor shall report to the Owner's Representative at once and do no further work until a satisfactory arrangement is decided upon. Any work done, or equipment placed in position by this contractor, creating a conflict in violation hereof, shall be readjusted to the satisfaction of the Owner's Representative at the expense of the contractor. The decision of the Owner's Representative shall be final in regard to changes due to conflicting conditions.

H. SUBMITTALS

Submit to engineer/architect six (6) copies of certified shop drawings, descriptive data, diagrams and specifications on all specified materials and equipment for review in ample time before manufacturers are authorized to make shipment. The information submitted shall be prepared and arranged in a format which will permit easy identification and comparison by the engineer/architect of specified equipment. It shall be the responsibility of the Contractor to furnish any additional copies (showing architect/engineer stamp and comments) as necessary for suppliers and/or building officials.

The make, type and finish of all materials, equipment and apparatus shall be approved by the engineer/ architect in writing before the Contractor installs it. Any substitution for any specified equipment or material shall first be approved by the engineer/architect in writing.

Submit typewritten schedule showing all electrical characteristics and requirements for all electrically operated equipment. The schedule shall be used by the electrical Contractor from which he will prepare his work.

Shop drawings shall include, but are not limited to the following: make, model number, dimensions, electrical characteristics (rating). Shop drawings shall bear name of project and location.

Any changes to items specified must be submitted as a substitution with complete documentation of price differential and equipment details.

I. RECORD DRAWINGS

Contractor shall keep at least one set of colored corrected shop and design drawings at the site. Drawings shall be current, denoting approved modifications and installed departure.

All utilities which are installed below grade or concealed within walls shall be dimensionally located on the record drawings.

J. OWNER FURNISHED EQUIPMENT

All equipment that is furnished by the Owner is assigned to the Contractor that is designated to install the equipment as though the Contractor furnished the equipment itself. The Contractor is responsible for all aspects of the equipment including verifying the order, coordinating and accepting delivery, rigging, installation, start-up coordination, warranty repairs, collection and submittal of equipment manuals, and all other activities associated with the equipment unless specifically indicated otherwise. Refer to the pre-purchase specifications or order forms used by the Owner to select the equipment for any features included with each piece of equipment.

K. CUTTING AND PATCHING

This Contractor is responsible for any cutting, patching, painting, supports, and roofing as required to complete work indicated on drawings. Restoration shall be handled in a manner

acceptable to the engineer/architect. All floor or fire wall penetrations are to be firestopped. Use Dow Corning 3-6548 silicone RTV foam or approved equal.

- L. Repair adjacent construction and finishes in ceilings, walls, floors or partitions that have been damaged during demolition or created during extension of work. Repair all penetrations in fire rated ceilings, walls, floors or partitions to the original fire ratings using approved fire stop materials.

- M. PREPARATION

Coordinate the installation of equipment with the schedules of other trades to prevent unnecessary delays in the total project.

- N. EQUIPMENT VERIFICATION

Verify all equipment ratings, connections and locations with installing Contractor before installation.

This Contractor shall verify that all equipment furnished will properly fit in the space provided, that it will function properly, and that all parts of equipment requiring service are readily accessible.

- O. CLEANING / DEBRIS REMOVAL

This Contractor shall remove from the premises all accumulation of dirt, debris, waste materials and rubbish caused by his employees or work, at least once a week, except that combustible materials shall be removed daily.

Clean equipment to remove foreign objects and markings. Touch up paint as required. The Contractor is responsible for any damages caused by work of his trade.

- P. SUBSTITUTIONS

Certain makes of materials and equipment are specified and drawings are detailed according to this material. Contractor shall base his bid on furnishing and installing the specified make and model or the "equivalent" model of another of the specified manufacturers which meets all the qualifications of the specified items.

"Equivalent" materials and equipment are those of manufacturer which meet the same standards of performance, have equal or better materials of construction, and equal or better maintenance characteristics. All equivalents must fit the space provided in the building structure. Where the use of equivalents results in changes, this Contractor shall be responsible for such changes and any costs resulting from them.

If the Contractor intends to use equipment or materials not specified, he must receive written approval from the engineer/architect prior to the award of the contract. This prior approval only

permits submittal of a particular manufacturer's equipment in general. The specified item to be used must again be submitted for final review as specified under "shop drawings."

Q. WARRANTY

This Contractor shall provide a written warranty of all work done under this contract for a period of one year from date of substantial completion. The Contractor shall, at his own expense, remedy any defects due to faulty materials and or workmanship and pay any damage to other work resulting from such defects and or the remedying thereof, which shall appear within the warranty period.

All materials shall be free of defects or errors which would result in poor application or cause defects in workmanship.

R. PROJECT CLOSEOUT

Furnish three final copies of installation and maintenance manuals, warranties, and other submittal data indicated for inclusion. Bind in 3-ring binders with tabs for each division or major piece of equipment. Include wiring diagrams, parts listings, and other manufacturer's information.

Submit a certificate of final inspection and approval. Submit release of liens for all subcontractors and suppliers. Submit record drawings

Final payment will not be approved until all closeout items are received.

S. REFERENCES

Where applicable, the following standards shall apply to materials, equipment, and workmanship provided to meet these specifications:

ASME Sec. 9 - Welding and Brazing Qualifications.

ASME B16.3 - Malleable Iron Threaded Fittings Class 150 and 300.

ASME B16.22 - Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.

ASME B31.5 - Refrigeration Piping.

ASTM A53 - Pipe, Steel, Black and Hot-Dipped, Zinc Coated Welded and Seamless (GR. B - seamless).

ASTM A120 - Pipe, Steel, Black and Hot-Dipped Zinc Coated (Galvanized), Welded and Seamless, for Ordinary Uses.

AWS A5.8 - Brazing Filler Metal.

MSS SP58 - Pipe Hangers and Supports - Materials, Design and Manufacture.

MSS SP69 - Pipe Hangers and Supports - Selection and Application.

MSS SP89 - Pipe Hangers and Supports - Fabrication and Installation Practices.

AFBMA 9, 11 - Load Ratings and Fatigue Life for Ball and Roller Bearings.

IEEE 112 - Test Procedure for Polyphase Induction Motors.

NEMA MG1 - Motors and Generators.

NFPA 70 - National Electric Code.

ASTM E84 - Flame Spread/Smoke Developed Rating.

ASHRAE 15 - Safety Code for Mechanical Refrigeration.

NEMA 250 - Enclosure for Electrical Equipment.

UL 207 - Refrigerant Containing Components and Accessories.

PART 2 - PRODUCTS

A. EQUIPMENT

All equipment shall be as specified on the drawings and in the schedules. Provisions for substitutions are listed in Part 1.

B. IDENTIFICATION

All equipment shall be identified with laminated three-layer plastic engraved plastic nameplates with black letters on white background. nameplates will be mechanically fastened to the equipment. Glued application is not acceptable.

C. PIPE, FITTINGS AND VALVES

Domestic water piping -- 3" and smaller, above grade:

Copper Tubing; ASTM B88, Type L, hard drawn.

1. Fittings: ASME B16.18, cast brass, or ASME B16.22, solder wrought copper.
2. Joints: Solder, lead free, ASTM B32, 95-5 tin- antimony, or tin and silver, with melting range 430 to 535 degrees F.
3. Flanges: Bronze.
4. Dielectric Connections: Union with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.
5. Unions: 150 PSIG bronze unions, solder joints

Bronze Ball Valve; Solder ends, up to and including 2 inches:

1. Manufacturers: Watts Series B6001-SS, Grinnell Fig. 3700SJ-6, Apollo 70-200 series, or Owner approved Equal.
2. Bronze, two piece body, stainless steel ball and stem, teflon seats and stuffing box ring, lever handle (extended above surface of insulation) solder ends.
3. Rated for 200 psi at 100 F.

Butterfly Valve; Lugged, to 12 inches.

1. Manufacturers: Grinnell Series 8000, Jamesbury 815 series, Demco NE-C, Nibco LD-2000, Keystone Fig. 222, Centerline. or Owner approved Equal.
2. Iron body, stainless steel or aluminum bronze disc, resilient EPDM replaceable seat for service temperature, lug ends, 10 position lever handle for 6 inch and smaller, handwheel and gear actuator with indicator for 8 inch and larger.
3. Rated for 170 psi dead-end water services.

Domestic water piping -- 3" and smaller, below grade:

Copper Tubing; ASTM B88, Type K, soft.

1. Fittings: ASME B16.18, cast brass, or ASME B16.22, solder wrought copper.
2. Joints: Solder, lead free, ASTM B32, 95-5 tin- antimony, or tin and silver, with melting range 430 to 535 degrees F.
3. Flanges: Bronze.
4. Dielectric Connections: Union with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.

Sanitary vent, drain, condensate drain piping above or below grade:

PVC Pipe; ASTM D2729 or as acceptable to local codes

1. Fittings: PVC.
2. Joints: ASTM D2855, solvent weld with ASTM D2564 solvent cement.

PVC pipes may not be used in return air plenums.

Natural gas piping -- 2" and smaller, above grade, to 1/4 PSIG: Standard weight, Schedule 40, Type F, Grade B, screwed ends, black carbon steel pipe (ANSI/ASTM A53).

D. PLUMBING SPECIALTIES

1. Valves

All plumbing equipment to be provided with stop valves, escutcheon plate and all required supplies for proper operation of specific equipment.

2. Hub drains

Deep seal cast iron trap with inlet funnel. Josam Series 88560 or equal.

3. Clean outs

Interior finished floor areas: cast iron, two piece body with double drainage flange, weep holes, reversible clamping collar and adjustable nickel-bronze cover. Zurn, Josam, or equal.

4. Backflow preventers

Reduced pressure principle type, ANSI/ASSE 1013, bronze body, threaded connections.

5. Trap primers

Automatic trap primer with vacuum breaker. Zurn "Sani-Guard" Model Z-1022.

6. Vacuum breakers

Polished brass, float disc, rated 125 PSIG and 180 max temp (F), designed to prevent back-siphonage into potable water supply, full size orifice for maximum flow. Watts 288A or equal by ITT Hoffman, Taco.

7. Water hammer arrestors

Stainless steel construction, pre-charged stainless steel bellows, rated for max working pressure of 150 psi. J.R. Smith, Watts, Sioux Chief are acceptable manufacturers.

8. Floor drains

ANSI A112.21.1 lacquered cast iron two piece body with double drainage flange, weep holes, reversible clamping collar, and round, adjustable nickel-bronze strainer; acceptable manufacturers: Zurn, J.R. Smith, Wade.

9. Hose bibs

Bronze or brass with integral mounting flange, replaceable hexagonal disc, hose thread spout, chrome plated where exposed with handwheel in conformance with ANSI/ASSE 1011.

E. PIPING SLEEVES

Provide and set sleeves to accommodate all pipes passing through walls, floors and partitions.

Sleeves shall be constructed of 16 gauge galvanized sheet steel and shall be fabricated to allow 1" clearance between pipe or insulation and sleeve. Sleeves shall be installed to allow for 1/2" minimum extension on both sides of floor or wall.

Where sleeves pass through a fire rated wall, floor or partition they shall have the same fire rating as the construction in which they are installed.

F. PIPE HANGERS

1. Insulated piping

"Grinnell" Fig. 65, carbon steel, galvanized, adjustable, clevis type, oversized to allow for insulation.

2. Uninsulated piping

"Grinnell" Fig. 65, carbon steel, galvanized, adjustable, clevis type, direct to pipe.

3. Hanger rods

"Grinnell" Fig. 146, carbon steel, galvanized, threaded rods. Attach hangers to concrete ceiling or bottom centerline of concrete beam using expansion cases, "Grinnell" Fig. 117.

Support hangers from roof joists using beam clamps, "Grinnell" Fig. 292. Do not attach hangers to roof deck.

Support spacing as follows:

PIPE SIZE	MAXIMUM SPACING	ROD DIAMETER
1/2" TO 1-1/4"	8'-0"	3/8"
1-1/2" TO 2-1/2"	10'-0"	3/8"
3" TO 3-1/2"	12'-0"	1/2"

G. PIPE INSULATION

1. Domestic water piping.

"Johns-Manville" Micro-Lock 650 AP or equal, heavy density fiber glass pipe insulation with factory applied vapor barrier jacket. ASTM C547, "K" value at 0.24 at 75 degrees F, maximum moisture absorption at 0.2 percent by volume and flame spread/smoke developed rating of 25/50 or less.

All fittings and valves to be covered with loose fiberglass insulation and PVC plastic one piece molded covers. All fittings to be covered with mitered and glued insulation joints. All fittings to be covered with mitered and glued insulation joints.

2. Inserts and shields

Piping 3" and below: provide galvanized steel shield between hanger and pipe insulation.

Piping over 3": provide hydrous calcium silicate insulation or other high density material of same thickness as adjoining insulation. Insert to be minimum of 6" long.

3. Exterior insulation jackets

All piping installed outdoors to have aluminum metal jacket installed over insulation. Aluminum jacket to be .010" thick and shall be sealed and caulked weathertight at all seams. Fittings to be covered with aluminum factory fabricated jackets. Childers or approved equal.

5. Schedule

PIPING SYSTEM	PIPE SIZE	THICKNESS
DOMESTIC WATER PIPING (DCW, DHW, & DHWR)	ALL	1"

H. PIPE LABELING

Furnish and install pipe markers on all indoor piping systems using the ANSI a13.1 standard scheme for identification of piping systems. Markers shall be the vinyl pressure sensitive type as manufactured by "Seton" Nameplate Corporation. Overwrap ends of markers with matching color 1/2" wide tape (2" overlap). Locate markers at each change of pipe direction and at 50 ft. Maximum spacing.

PART 3 - EXECUTION

A. SCHEDULING OF WORK

Work is to be scheduled with Owner's representative and all other trades to accommodate occupancy dates and to expedite the timely completion of the project. Any utility outages or work which interferes with use of facility must be scheduled 24 hours in advance.

Coordinate the installation with all conditions and the work of other Contractors. The Contractor shall incur all costs for relocation of equipment conflicting with existing equipment or new work by other disciplines.

Trenching, saw cutting, coring, or other structural modifications shall not be performed without notification of the Owner and careful field verification by the Contractor to insure that no adverse effect to the building's structural integrity will occur.

B. PIPE TESTING AND CLEANING

All new domestic water piping shall be hydrostatically tested to 1-1/2 times the maximum working pressure and held for a period of not less than 2 hours.

All natural gas piping to be pneumatically tested and held for one hour or per standard of governing authority.

Tests shall be witnessed by the Owner's representative. Test results shall be submitted to engineer.

All potable water systems shall be sanitized in accordance with all state and local requirements.

Sanitary and vent piping shall be tested in accordance with state and local codes.

C. PIPING AND EQUIPMENT INSTALLATION

All piping shall be run parallel or perpendicular to building walls and framing system unless noted otherwise on the plans. All vertical runs shall be held against walls, columns, etc. as possible to permit making of pipe joints.

Provide isolation valves, easily accessible, for all major plumbing equipment, fixture groups, suites and/or tenant spaces.

Perform all cutting, patching and repairing required for the installation of the plumbing systems unless otherwise noted on the drawings.

All systems and equipment shall be installed in accordance with all state and local codes, ANSI B31.9 Building Service Piping and all additional standards as listed.

Install all equipment and products in accordance with manufacturer's recommendations.

Provide all sleeves, caulking and sealants as required for the installation of piping and equipment.

Provide inserts and shields on all piping 2 inch diameter and larger to protect insulation from being crushed by the piping weight. Insert to be heavy density insulating material, minimum 6 inch long. Shield to be galvanized steel, contoured to fit particular application and installed between the hanger and the insert.

Install each fixture with trap, easily removable for servicing and cleaning.

Provide chrome plated rigid or flexible supplies to plumbing fixtures including screwdriver stops, reducers, and escutcheons.

Seal fixtures to wall and floor surfaces with sealant, color to match fixture.

At completion, clean plumbing fixtures and equipment.

END OF SECTION



NON-COLLUSION BIDDING CERTIFICATION

_____ (PROJECT NAME)

STATE OF OKLAHOMA)
)SS
COUNTY _____)

A. For purposes of competitive bids, I certify:

1. I am the duly authorized agent of _____, the bidder submitting the competitive bid which is attached to this statement, for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and state officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the bid to which this statement is attached;
2. I am fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and has been personally and directly involved in the proceedings leading to the submission of such bid; and
3. Neither the bidder nor anyone subject to the bidder's direction or control has been a party to the following:
 - a. Any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding;
 - b. Any collusion with any state official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract; and
 - c. Any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract.

B. I certify, if awarded the contract, whether competitively bid or not, that neither the Contractors nor anyone subject to the Contractor's direction or control has paid, given, or donated or agreed to pay, give, or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring the contract to which this statement is attached.

Certified this _____ day of _____, 20__.

(Signature)

(Print Name)

(Position in the Company)

BUSINESS RELATIONSHIPS AFFIDAVIT

_____ (PROJECT NAME)

STATE OF OKLAHOMA)
)SS
COUNTY OF _____)

_____, of lawful age, being duly sworn, on oath says that he or she is the agent authorized by the bidder to submit the attached bid. Affiant further states that the nature of any partnership, or other business relationship presently in effect, of which existed within one (1) year prior to the date of this statement with the architect, engineer, or other party to the project is as follows:

Affiant further states that any such business relationship presently in effect of which existed within one (1) year prior to the date of this statement between any officer or director of the bidding company and any officer or director of the architectural or engineering firm or other party to the project is as follows:

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

(If none of the business relationships herein above mentioned exist, affiant should so state.)

(Signature of Affiant)

Subscribed and sworn to before me this _____ day of _____, 20 ____

Notary Public _____

My Commission Expires _____





Date Issued: May 08, 2023

Bid Number: **2023-#14**

Closing Date: June 05, 2023 at 9:00 am

PO Box 458, 201 N. Choctaw Ave., El Reno, OK 73036

Opening Date: June 05, 2023 during the Commissioner's Meeting that begins at 9:00 am

Commissioner's Meeting Room, 201 N. Choctaw Ave., El Reno, OK 73036

**TO HELP PREVENT BIDS FROM BEING REJECTED FOR LACK OF COMPLETION
PLEASE CHECK FOR THE FOLLOWING:**

Is the Invitation to Bid Signed and Notarized? _____

Is the bid bond or cashier's check enclosed? _____

Is the Business Relationships Affidavit enclosed? _____

Is the Non-Collusion Bidding Certificate enclosed? _____

Are all applicable spaces filled in? _____

Are all necessary papers enclosed? _____

Is the Bid # and Opening Date on outside of return envelope? _____

**Bids will be received beginning 9:00am Tuesday, May 30, 2023 until 9:00am Monday, June 05, 2023.
(DO NOT turn bid in BEFORE Tuesday, May 30, 2023 @ 9:00am – Bid will NOT be opened or considered)**

Thank You,

Lena Marquez, Purchasing Agent



Date Issued: May 08, 2023
Bid Number: 2023-#14
Closing Date: June 05, 2023 at 9:00 am
PO Box 458, 201 N. Choctaw Ave., El Reno, OK 73036
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Commissioner's Meeting Room, 201 N. Choctaw Ave., El Reno, OK 73036

~ AFFIDAVIT~

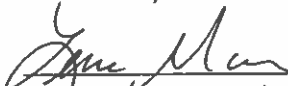
Plumbing Retrofit Project / Children's Justice Center

State of Oklahoma)
County of Canadian) §

I, Lena Marquez, Purchasing Agent, in and for said County and State, do hereby certify that "Invitations to Bid" were sent to the following:

- | | | |
|--|--|---|
| BidClerk
projects@bidclerk.com | Bid News
projects@isqft.com | ePlan
1400 Forum Blvd. Ste 7B
Columbia, MO 65203 |
| Online Data Services
5425 Peachtree Parkway NW
Peachtree Corners, GA 30092 | 6-L Mechanical LLC
PO Box 3706
Shawnee, OK 74802
6lmechanical@gmail.com | Bailey Brothers
800 Industrial Dr
Yukon, OK 73036 |
| Jackson Mechanical
2600 N Oklahoma Ave
Oklahoma City, OK 73105 | Orcutt Mechanical Contractors, Inc.
6200 NW 39th
Bethany, OK 73008
mweber@orcuttmech.com | TankCo
1800 South Shepard Ave
El Reno, OK 73036 |
| United Mechanical
117 NE 38th Terrace
Oklahoma City OK 73105 | Utility Technology Services
9636 West Reno
Oklahoma City, OK 73127 | |

Witness my hand and seal this 8th day of May, 2023.


Lena Marquez, Purchasing Agent

