

**PROJECT MANUAL
INCLUDING SPECIFICATIONS
FOR CONSTRUCTION**

**FIRE TRAINING HVAC
SAU Tech
Camden, Arkansas**

**ARCHITECT PROJECT NO. 24086
DATE: March 20, 2025**



11225 HURON LANE • SUITE 104 • LITTLE ROCK, AR 72211

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NOTICE TO BIDDERS

FIRE TRAINING HVAC
SAU TECH
CAMDEN, ARKANSAS

Sealed proposals will be received on General Contract for FIRE TRAINING HVAC, SAU TECH, CAMDEN, ARKANSAS. The Owner will receive sealed proposals until 1:00 p.m., May 1, 2025, at the Southern Arkansas University Tech Purchasing Office, 6251 Hussey Road, Camden, Arkansas, at which time they will be publicly read aloud. Any bids received after the stated time and opening date will be returned unopened.

The Proposed Contract Documents may be examined at the following locations:

Lewis, Elliott, McMorran, Vaden,
Ragsdale & Woodward, Inc. (Architect)
11225 Huron Lane, Suite 104
Little Rock, AR 72211

SAU Tech website:
<http://www.sautech.edu/invitation-to-bid>

Dodge Construction Network (DCN)
<http://Dodge.construction.com>

Construction Market Data, LLC
www.constructconnect.com

Southern Reprographics, Inc.
901 West 7th St.
Little Rock, AR 72201

Minority & Women Owned Business in Arkansas:
<https://www.arkansasedc.com/community-resources/Minority-and-Women-Owned-Business-Enterprise-Resources/directory>

General Contractors may secure copies of the Proposed Contract Documents from the Architect on the following basis:

Three sets of the Project Manual, including Specifications, plus three sets of Drawings upon payment of any costs of shipping and \$300 deposit. Deposit is completely refundable if all sets are returned to the Architect in good condition within five days after bid opening. General contractors who secure plans but do not submit legitimate bids shall forfeit their deposit.

Subcontractors and material suppliers may obtain additional copies of the Project Manual, including Specifications, plus additional sets of prints of the Drawings, upon payment of \$100 per set, nonrefundable.

No partial sets will be issued.

All bidders must be licensed in the State of Arkansas, as provided by Act 142 of 1967, amended by Act 293 of 1969, and Act 397 of 1971, and Act 546 of 1971, as enacted by the General Assembly of the State of Arkansas.

Bid proposals must be accompanied by a bidder's bond or cashiers check in the amount of five percent (5%) of the bid, made payable to the SAU Tech, Camden, Arkansas.

The successful bidder will be required to furnish satisfactory performance and payment bond using AIA Document A312.

The Owner reserves the right to waive any informality, or to reject any or all bids.

No bid shall be withdrawn for a period of thirty (30) days subsequent to the opening of the bids, without written consent of the Owner.

SAU Tech
Dr. Jerry Thomas, Chancellor
6415 Spellman Road
Camden, AR 71701

Lewis, Elliott, McMorran, Vaden,
Ragsdale & Woodward, Inc.
11225 Huron Lane, Suite 104
Little Rock, AR 72211
Telephone: (501) 223-9302

END OF NOTICE TO BIDDERS

INSTRUCTION TO BIDDERS

1. Securing Documents:

Copies of the proposed Contract documents are on file at the office of the Architect:

Lewis, Elliott, McMorran, Vaden,
Ragsdale & Woodward, Inc.
11225 Huron Lane, Suite 104
Little Rock, AR 72211

2. Definitions:

a. All definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, are applicable to these Instructions to Bidders.

3. Examination of Drawings, Specifications, and Site of Work:

a. Before submitting a bid, each bidder shall carefully examine the Drawings, read the Specifications and all other proposed Contract Documents, and visit the site of the Work. Each Bidder shall fully inform himself prior to bidding as to all existing conditions and limitations under which the Work is to be performed, and he shall include in his bid a sum to cover all costs of all items necessary to perform the Work as set forth in the proposed Contract Documents. No allowance will be made to any bidder because of lack of such examination or knowledge. The submission of a bid will be construed as conclusive evidence that the bidder has made such examination.

b. Should the bidder find discrepancies in, or omissions from the drawings, or other bidding documents, or should he be in doubt as to their meaning, he should at once, notify the Architect, who will send a written addendum to all bidders. Neither the Owner nor the Architect will be responsible for any oral instructions. Any addenda issued during the time of bidding are to be covered in the proposal and in closing a contract, they will become a part thereof.

4. Substitutions:

a. Where a definite material is specified, it is not the intent to discriminate against any "approved equal" product of another manufacturer. It is the intent to set a definite standard.

b. Open competition is expected, but in all cases, complete data must be submitted for comparison and test when required by the Architect.

c. The materials, products and equipment described in the Bidding documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.

d. No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. Information shall be submitted in a format that compares the proposed product in a direct comparison to the specified product; line number to line number in specifications. A statement setting forth changes in other materials, equipment or other portion of the Work including changes in the work of other contracts that incorporation of the proposed substitution would require shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

e. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

f. No substitutions will be considered after the Contract award unless specifically provided in the Contract documents.

g. No substitution shall be made unless authorized in writing, by the Architect.

h. All bidders shall base their proposals on the material or specialty specified. Any proposal for substitution shall be submitted within 30 days after the award of the contract.

i. Should a substitution be accepted and should the substitute material prove defective or otherwise unsatisfactory for the service intended within the guaranty period, the Contractor shall replace this material or equipment with that which was originally specified, without cost to the Owner.

5. Bid Bond:

a. Proposals must be accompanied by a Bidder's Bond in an amount equal to 5% of Bid, executed by a surety company approved by the Owner, and authorized to do business in the State of Arkansas. The Bidder may furnish a cashiers check, in an amount equal to 5% of Bid, drawn on National Bank or a Bank having a membership in the Federal Reserve System and signed by the President or Cashier, in lieu of bond. The successful bidder's security will be retained until he has signed the Contract and furnished the required Labor and Materials Payment and Performance Bond. The Owner reserves the right to retain the security of the next lowest bidder until the lowest bidder enters into contract or until 60 days after bid opening, whichever is shorter. All other bid security will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain his bid security as liquidated damages but not as a penalty.

END OF SECTION



STATE OF ARKANSAS
SOUTHERN ARKANSAS UNIVERSITY TECH
Purchasing Office
P.O. Box 3499
Camden, Arkansas 71711

INVITATION FOR BID
SOLICITATION DOCUMENT

SOLICITATION INFORMATION			
Solicitation Number:	SAUT/24-25/04	Solicitation Issued:	April 7, 2025
Description:	AFTA HVAC SYSTEM CONTRACTOR		
Division/Agency:	Southern Arkansas University Tech		

SUBMISSION DEADLINE			
Bid Opening Date:	May 1, 2025	Bid Opening Time:	1:00 p.m., Central Time
Bid responses for this Invitation for Bid must be delivered to the SAU Tech Purchasing Office on or before the submission deadline. Bids received after the submission deadline may be rejected as untimely.			

DELIVERY OF RESPONSE DOCUMENTS	
Delivery Address and IFB Opening Location	<p>Southern Arkansas University Tech Keisha Robinson 6251 Hussey Road Camden, Arkansas 71701</p> <p>Delivery providers, USPS, UPS, and FedEx deliver mail to the delivery street address on a schedule determined by each individual provider. These providers will deliver based solely on the street address. Prospective Contractors assume all risk for timely, properly submitted deliveries.</p>
Bid's Outer Packaging	<p>Seal outer packaging and properly mark with the following information. If outer packaging of bid submission is not properly marked, the package may be opened for bid identification purposes.</p> <ul style="list-style-type: none">• Solicitation number• Date and time of bid opening• Prospective Contractor's name and return address

DEPARTMENT NAME CONTACT INFORMATION			
Buyer:	Keisha Robinson	Buyer's Direct Phone Number:	870-574-4515
Email Address:	krobinso@sautech.edu	Department's Main Number:	870-574-4515
Department Website:	https://www.sautech.edu/invitation-to-bid/		

SECTION 1 – INFORMATION AND INSTRUCTIONS

1.1 INTRODUCTION

This Invitation for Bid (IFB) is issued by Southern Arkansas University Tech by the Purchasing Department to obtain pricing and a contract for replacing three (3) heat pump split systems with three (3) DX cooling/gas heat furnace split systems.

Direct all communications regarding this Solicitation to the Buyer on page one (1) of the IFB.

1.2 BID OPENING

The bid opening will be in the SAU Tech Manning Hall Administration Conference Room on the date and time specified on page one of this solicitation document. Any proposals received after the schedule opening date and time will be immediately disqualified. All proposals shall be guaranteed and binding for a period of not less than sixty (60) days past the proposal opening date. Telephone, email, and/or FAX responses to this bid will not be accepted.

The proposal opening will open to any interested party and the public. However, openings will serve only to open, read, and record the receipt of each proposal. No discussion will be entered into with any vendor as to quality or provisions.

1.3 TYPE OF CONTRACT

- A. As a result of this IFB, the Department intends to award a contract to a single Contractor (see *Contractor Selection*).
- B. The anticipated starting date for any resulting contract is May 19, 2025, except that the actual contract start date may be adjusted unilaterally by the State for up to three (3) calendar months. By submitting a signed bid in response to the IFB, the Prospective Contractor represents and warrants that it will honor its bid as being held open as irrevocable for this period.
- C. The initial term of a resulting contract will be for 5 months. Upon mutual agreement by the Contractor and Department, the contract may be renewed by the SAU Tech for up to two (2) additional months.

1.4 DEFINITION OF TERMS

- A. Unless otherwise defined herein, all terms defined in Arkansas Procurement Law have the same meaning herein.
- B. The terms "Invitation for Bid," "IFB," and "Solicitation" are used synonymously in this document.
- C. "Prospective Contractor" means a responsive and responsible bidder who submits a bid that meets the Requirements and criteria set forth in this Solicitation.
- D. "Requirement" means a term, condition, provision, deliverable, Specification, or a combination thereof, that is obligated under the Solicitation, resulting contract, or both.
- E. "Shall" and "must" mean the imperative and are used to identify Requirements and Specifications.
- F. "Specification" means any technical or purchase description or other description of the physical or functional characteristics, or of the nature, of a commodity or service. "Specification" may include a description of any Requirement for inspecting, testing, or preparing a commodity or service for delivery.
- G. "State" means the State of Arkansas. When the term "State" is used herein to reference any obligation of the State under a contract that results from this Solicitation, that obligation is limited to the Department using such a contract.
- H. "SAU Tech" stands for Southern Arkansas University Tech.

1.5 CONTRACTOR SELECTION

- A. Award is expected to be made to the responsive and responsible Prospective Contractor determined to have submitted the lowest bid that meets the Requirements and criteria set forth in the IFB, based on the **Total Cost** of the **Official Bid Price Sheet** submitted by the Prospective Contractor.
- B. If the SAU Tech so chooses, negotiations may be conducted with the lowest-bidding, responsive and responsible Prospective Contractor if:
 - 1. All bids received from responsive and responsible bidders exceed available funding; or
 - 2. It appears that additional savings to the state may result from negotiation.
- C. If negotiations fail to result in a contract, the SAU Tech may negotiate with the next lowest-bidding, responsive and responsible Prospective Contractor.
 - 1. The negotiation process may be repeated until an acceptable lower bid price is negotiated, or until such time the State determines negotiations are no longer in the best interest of the state.
 - 2. Negotiations are conducted at the sole discretion of the State.
- D. Once the anticipated awardee has been determined, the anticipated award will be posted to [the Solicitation posting](#), generally for a period of fourteen (14) days prior to the issuance of a contract. The postings are anticipated awards only, subject to protest.
- E. A contract is not effective prior to final award being made by the State; some contracts may be subject to Legislative review prior to final award.

1.6 CLARIFICATION OF SOLICITATION

- A. Submit questions regarding this Solicitation [via email to the Buyer on page one \(1\) of the IFB at \[krobinso@sautech.edu\]\(mailto:krobinso@sautech.edu\) and Austin Ply at \[aply@lemvrv.com\]\(mailto:aply@lemvrv.com\)](#) by midnight, Central Time on or before **April 24, 2025**.
 - 1. For each question submitted, Prospective Contractor should reference the specific Solicitation item number to which the question refers, as applicable.
 - 2. Prospective Contractors' written questions will be consolidated and answered by the SAU Tech as deemed appropriate. The SAU Tech's consolidated written response is anticipated to be [posted to the Solicitation posting at <https://www.sautech.edu/invitation-to-bid/>](#) by the close of business on **April 28, 2025**. If Prospective Contractor questions are unclear or non-substantive in nature, the SAU Tech may request clarification of a question(s) or decline to answer.
- B. The Prospective Contractor should notify the Buyer of any term, condition, etc., that precludes the Prospective Contractor from submitting a Responsive Bid. Prospective Contractors should note that it is the responsibility of the Prospective Contractor to seek resolution of all such issues, including those relating to the terms and conditions of the contract, prior to the submission of a bid.
- C. Prospective Contractors may contact the Buyer with non-substantive questions at any time prior to the bid opening.
- D. An oral statement by Southern Arkansas University Tech will not be part of any contract resulting from this Solicitation and may not reasonably be relied on by any Prospective Contractor as an aid to interpretation unless it is reduced to writing and expressly adopted by the Department.

1.7 RESPONSE DOCUMENTS

- A. All bids **must** be submitted to the delivery address and by the submission deadline on page one (1) of the IFB.
- B. *Bid Response Packet*
 - 1. Prospective Contractors **shall** utilize the *Bid Response Packet* attached to the Solicitation to submit their bids.

2. The following are bid submission Requirements and **must** be submitted as part of a Prospective Contractor's bid.
 - a. Signed *Bid Signature Page*; signature may be ink or digital.
 - b. Completed *Bid Response Packet*, which **must** be in English.
 - c. Completed *Official Bid Price Sheet attached to Bid Response Packet*.
 - i. Pricing **must** be proposed in U.S. dollars and cents.
 - ii. Quantities stated are estimates only and are not guaranteed. Prospective Contractor **must** bid unit price on the estimated quantity and unit of measure specified.
 - The State may order more or less than the estimated quantity on term contracts, and the Contractor **shall** sell to the Department quantities ordered at no more than the bid price.
 - iii. If pricing documents do not allow for accurate pricing, Prospective Contractor should notify the Buyer at least seventy-two (72) hours before the bid opening time.
 - iv. Prices **must** be firm offers and *adjustments may be negotiated at the time of contract renewal/annually/quarterly* or **shall not be subject to escalation**.
 - v. Discount from list bids pricing is not acceptable unless requested elsewhere in the Solicitation.
 - vi. State and local sales taxes should not be included in the bid price. Trade discounts should be deducted from the unit price and the net price should be shown in the bid.
 - d. Copy of Prospective Contractor's *Equal Opportunity Policy*
 - i. Pursuant to Arkansas Code Annotated § 19-11-104, OSP requires a Prospective Contractor bidding on a state contract to submit a copy of the Prospective Contractor's *Equal Opportunity (EO) Policy*. Prospective Contractors not required by law to have an *EO Policy* **must** submit a written statement to that effect.
 - e. *Proposed Subcontractors Form* (see [SRV-1](#) or [Standard Commodities Contract](#), section 14)
 3. The following items, which **must** be submitted prior to a contract award to the Prospective Contractor, may also be included with the Prospective Contractor's bid response:
 - a. *EO 98-04 Contract & Grant Disclosure Form* (see [SRV-1](#) or [Standard Commodities Contract](#), section 11)
 - b. *Voluntary Product Accessibility Template (VPAT)*, if applicable
 4. Prospective Contractors should not include any other documents or ancillary information, such as a cover letter or promotional marketing information.
- C. Prospective Contractors should not alter any language in Solicitation document(s) or *Official Bid Price Sheet* provided by the State.
- D. Prospective Contractors' bids cannot be altered or amended after the bid opening except as permitted by law or rule.
- E. As requested, Prospective Contractors **shall** provide clarification regarding Prospective Contractor's bid response.
- F. Prospective Contractors may submit multiple bids.

SECTION 2 – SPECIFICATIONS AND REQUIREMENTS

2.1 SPECIFICATIONS

See attached specifications.

2.3 PROPOSAL SECURITY (BOND)

Performance Bond will be required if cost of project exceeds \$50,000. Vendors must include a proposal security in an amount of 5% of the firm purchase price. Bid Bond may be cashier's check or Bid Bond form. The proposal security should be made out to Southern Arkansas University Tech and include the Solicitation number. All proposed securities will be returned upon contract award.

2.4 CONTRACTOR LICENSE

Arkansas contractor license is required, include license number or copy of license.

2.5 CERTIFICATE OF INSURANCE

Successful bidder must also furnish proof of Liability Insurance in the amount of \$250,000.

SECTION 3 – SOLICITATION TERMS AND CONDITIONS

3.1. ACCEPTANCE OF REQUIREMENTS

- A. A Prospective Contractor's past performance with the State may be used to determine if the Prospective Contractor is responsible (OSP Rule R1:19-11-235).
 - 1. Bids submitted by Prospective Contractors determined to be non-responsible will be rejected.
- B. A single Prospective Contractor **must** be identified as the prime contractor.
 - 1. The prime Contractor **shall** be responsible for the resulting contract and jointly and severally liable with any of its subcontractors, affiliates, or agents to the State for the performance thereof.
- C. By submitting a bid, the Prospective Contractor represents and warrants:
 - 1. That the prices in the bid have been arrived at independently, without any collusion with another competing Prospective Contractor.
 - a. Collusion violates Arkansas Procurement Law and can lead to suspension, debarment, and can be referred to the Attorney General's office for investigation and appropriate legal action (Arkansas Code Annotated § 19-11-240 and 19-11-245).
 - 2. That the Prospective Contractor has not retained a person to solicit or secure the resulting contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the Prospective Contractor for the purpose of securing business.
- D. Qualifications, services, and commodities **must** meet or exceed the required Specifications as set forth in the Solicitation.

3.2. GENERAL TERMS AND CONDITIONS

- E. The Contractor **must** be registered as a vendor to receive payment and may register by emailing a request for the New Vendor Forms to Keisha Robinson at krobinso@sautech.edu.
- F. If EFT payment is wanted, the Successful Contractor represents and warrants that, before any work is done for this Solicitation, the Successful Contractor has taken or **shall** take all actions necessary to receive payment from SAU Tech through Electronic Funds Transfer (EFT) for the services and/or commodities to be provided under any such contract. This includes, without limitation, the following actions:
 - 1. Providing all information requested by SAU Tech to set up EFT payments, including either a voided check or a letter from their financial institution that contains the following information:
 - a. Account holder's name
 - b. Account number
 - c. Routing number
 - d. Financial institution official's contact information and signature
 - 2. Email Keisha Robinson, Procurement Manager, at krobinso@sautech.edu all EFT information requested above or mail to:

Southern Arkansas University Tech

Attn: Procurement Manager

PO Box 3499

Camden, Arkansas 71711

3. In the event the EFT information changes, the Contractor **shall** be responsible for providing the updated information to SAU Tech at krobinso@sautech.edu. No interest or late payment penalty will apply if payment is delayed because of the Contractor's failure to initially provide or update information necessary for the State to make EFT payment.
- G. Pursuant to Arkansas State Procurement Law, the Contractor **shall** certify that, unless they offer to provide the goods or services for at least twenty percent (20%) less than the lowest certifying Prospective Contractor:
 1. They are not engaged in and **shall not**, during the aggregate term of the resulting contract, engage in a boycott of Israel (Arkansas Code Annotated § 25-1-503),
 2. They are not engaged in and **shall not**, during the aggregate term of the resulting contract, engage in a boycott of an Energy, Fossil Fuel, Firearms, or Ammunition Industry (Arkansas Code Annotated § 25-1-1102).
- H. Pursuant to Arkansas Procurement Law, the Contractor **shall** certify that the Contractor does not knowingly employ or contract with illegal immigrants and that the Contractor **shall not** knowingly employ or contract with illegal immigrants during the aggregate term of any contract with the State or any of its departments, institutions, or political subdivisions (Arkansas Code Annotated § 19-11-105).
- I. The Contractor **shall** invoice the SAU Tech as required by the Purchasing Office and should not invoice the SAU Tech in advance of delivery and acceptance of any commodities or services (Arkansas Code Annotated § 19-4-1206).
- J. **The Contractor must submit an itemized invoice to SAU Tech..** SAU Tech's purchase order number and/or the contract number should be referenced on each invoice. Invoices must be emailed to acctpay@sautech.edu and mailed to:

Southern Arkansas University Tech
Attn: Accounts Payable
PO Box 3499
Camden, Arkansas 71711
- K. Payment will be made in accordance with applicable State of Arkansas accounting procedures upon acceptance of commodities and services by the Department.
- L. Payment will be made only after the Contractor has successfully satisfied SAU Tech as to the reliability and effectiveness of the commodities or services purchased as a whole.
- M. The Prospective Contractor **shall** certify that they are not a company owned in whole or with a majority ownership by the government of the People's Republic of China (a "Scrutinized Company") and that they do not and **shall not** during the aggregate term of the resulting contract employ a Scrutinized Company as a contractor (Arkansas Code Annotated § 25-1-1203).
- N. This IFB incorporates all terms of this contract.
 1. A Prospective Contractor's bid may be rejected if a Prospective Contractor takes exception to any terms, conditions, or Requirements in this IFB.
- O. The Prospective Contractor agrees and **shall** adhere to all terms, conditions, and Requirements if selected as the Contractor.
 1. Items may only be modified if the legal requirement is satisfied and approved by the SAU Tech during negotiations.
 - 2.

3.3. MINORITY AND WOMEN-OWNED BUSINESS

- A. A minority-owned business is defined by Arkansas Code Annotated § 15-4-303 as a business owned by a lawful permanent resident of this State who is:
- African American
 - American Indian
 - Asian American
 - Hispanic American
 - Pacific Islander American
 - A Service-Disabled Veteran as designated by the United States Department of Veteran Affairs
- B. A women-owned business is defined by Act 1080 of the 91st General Assembly Regular Session 2017 as a business that is at least fifty-one percent (51%) owned by one (1) or more women who are lawful permanent residents of this State.
- C. The Arkansas Economic Development Commission conducts a certification process for minority-owned and women-owned businesses. If certified, the Prospective Contractor's Certification Number should be included on the *Bid Signature Page*.

3.4. PROPRIETARY INFORMATION

- A. The release of public records is governed by the Arkansas Freedom of Information Act (Arkansas Code Annotated § 25-19-101 et. seq.).
- B. Submission documents pertaining to the Solicitation become the property of the State and may be subject to the Arkansas Freedom of Information Act (FOIA).
- C. In accordance with FOIA, and to promote maximum competition in the State competitive sealed bidding, the State may maintain the confidentiality of certain types of information described in FOIA. Such information may include trade secrets and other information exempted from public disclosure pursuant to FOIA.
- D. Under no circumstances will pricing information submitted in response to an invitation for sealed bids be designated as confidential after the sealed bids have been opened.
- E. Consistent with and to the extent permitted under FOIA, any Prospective Contractor may designate appropriate portions of a bid as confidential by submitting a redacted copy of the bid. By so redacting any information contained in the bid, the Prospective Contractor warrants that, after having received such necessary or proper review by counsel or other knowledgeable advisors, it has formed a good faith opinion that the portions redacted are not considered public records under FOIA.
- F. If a Prospective Contractor deems part of the information contained in a response not to be a public record, the Prospective Contractor should submit one (1) complete copy of the submission documents from which any proprietary or confidential information has been redacted in their bid response. Except for the redacted information, the redacted copy **must** be identical to the original copy, reflecting the same pagination as the original and showing the space from which information was redacted.
- G. The Prospective Contractor is responsible for identifying all proprietary information and for ensuring the electronic copy is protected against restoration of redacted data.
- H. The redacted copy will be open to public inspection under the FOIA without further notice to the Prospective Contractor. If the State deems redacted information to be subject to a public record request under FOIA, the State will endeavor to notify the Prospective Contractor prior to release of the redacted record.
- I. The State has no liability to a Prospective Contractor with respect to the disclosure of Prospective Contractor's confidential or proprietary information ordered by a court of competent jurisdiction pursuant to FOIA or other applicable law.



Contract #: _____

STATE OF ARKANSAS SERVICES CONTRACT

Contract #		Federal ID #	
Service Type		Procurement Method	

1. **Contracting Parties.** State of Arkansas is hereinafter referred to as the Department and contractor is herein after referred to as the Contractor.

Department No. & Name	
Division	

Contractor Name			
Contractor Address			
Contractor Number		Minority/Women Owned Business	<input type="radio"/> Yes <input type="radio"/> No

2. **Objectives, Scope, and Performance.** Identify, in reasonable detail, the objectives and scope of the contractual agreement and the methods the Department will use to determine whether the objectives of the contract (Contract) have been achieved. If space below is insufficient it may be supplemented with Attachment 4.

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3. **Term Dates.** The original term (**Original Term**) of the Contract shall commence on _____, and shall continue until _____, unless earlier terminated or cancelled in accordance with the Contract or some other writing agreed to and signed by the parties, but in no event may the Original Term exceed a period of four (4) consecutive years from the effective date of the Original Term, unless exempt from Arkansas Code Annotated § 19-11-238(c)(1). By written agreement of the parties, the term of the Contract may be extended or renewed for additional time beyond the Original Term. This allows for a total possible term (**Total Possible Term**) beyond the Contract's Original Term, as defined in the following paragraph.

The **Total Possible Term** of the Contract is a period comprised of the Original Term plus any extensions or renewals that may be agreed to by the parties in writing, but in no event longer than a period of seven (7) consecutive years from the effective date of the **Original Term**, unless otherwise provided by law. Subject to applicable law, the terms hereof, and an appropriation of necessary funding, the Total Possible Term of this Contract expires no later than _____ (mm/dd/yyyy).

4. **Contractor's Performance Obligations.** Contractor, for the duration of the Contract and as consideration for the Department's payment as set forth below, shall provide the following to the Department:

The parties agree that this paragraph 4 of the Contract, and any incorporated attachment, fully sets forth the Contractor's performance upon which the Department's obligation to pay the Contractor is conditioned. (if the space provided is not enough to fully specify the Contractor's duty to perform and to identify the standards of satisfactory performance, the Contractor's covenant to perform must be set forth in Attachment 5 hereto, Performance Details, the terms of which, if any, are incorporated herein by reference.)

5. **Department's Payment Obligations.** Department, as consideration for the Contractor's satisfactory performance of the Contractor's Performance Obligations, as set forth above, shall pay the Contractor as follows:

The parties agree that this paragraph 5 of the Contract, and any incorporated attachment, fully sets forth all applicable rates, fees, charges, costs (transportation, per diem, subsistence, out-of-pocket allowances, and

any other costs that may apply), and items for which the Contractor is entitled to payment under the Contract as consideration for Contractor's satisfactory performance of its obligations under the Contract.

The Department shall not pay Contractor except as set forth. The parties also agree that the method(s) of determining the amount of payment corresponding to the Contractor's satisfactory performance is/are set forth in this paragraph 5 such that the total payment owed under the Contract can be determined by reference thereto. (If the space provided is not enough to fully set forth the information needed to determine proper compensation owed by the Department for Contractor's satisfactory performance under the Contract, that information must be set forth in Attachment 2, Calculation of Compensation, the terms of which, if any, are incorporated herein by reference.)

Assuming: (a) Contractor's full and satisfactory performance under the Contract for the duration of the **Original Term**, and (b) the corresponding compensation identified in paragraph 5; the maximum number of dollars that the Department may be obligated to pay to the Contractor under the terms of the Contract for the Original Term is: _____ (**Initial Contract Amount**).

Assuming: (a) Contractor's full and satisfactory performance under the Contract for the duration of its **Total Possible Term**, and (b) the corresponding compensation identified in paragraph 5, the maximum number of dollars that the Department may be obligated to pay to the Contractor under the terms of the Contract for the Total Possible Term is: _____ (**Total Projected Contract Amount**).

If either the **Total Projected Contract Amount** or the amount the Department may be obligated to pay the Contractor in any given year of the **Original Term**, or the **Total Possible Term** of the Contract meets or exceeds the threshold of Arkansas Code Annotated § 19-11-265, the Contract shall be submitted for legislative review prior to its effective date.

- 6. Terms and Conditions of Solicitation Incorporated and Order of Precedence.** The parties agree that the agreement in this Contract memorializes and incorporates by reference any and all written representations, warranties, terms, and conditions, set forth in the underlying solicitation document and the bid or proposal that became the basis of the Contract award, which representations, warranties, terms, and conditions continue in full force and effect unless expressly amended hereby.

Accordingly, the provisions of this memorialization of the Contract should be read as being consistent therewith and supplementary thereto to the extent reasonably possible. However, in the event of a conflict between the provisions of this memorialization and the specific provisions of the bid or proposal that was the basis of award, such conflict shall be resolved by giving priority to the documents in the order listed below, including but not limited to conflicting order of precedence provisions.

- A. This Contract, as may be amended in writing by the parties;
- B. The solicitation _____ (Solicitation number) including all Addenda;
- C. Contractor's response to the solicitation.

7. Termination & Cancellation Clauses.

- A. Non-Appropriation Clause Pursuant to §19-11-1012(11).** In the event the State of Arkansas fails to appropriate funds or make monies available for any biennial period covered by the term of this contract for the services to be provided by the Contractor, this Contract shall be terminated on the last day of the last biennial period for which funds were appropriated or monies made available for such purposes.

This provision shall not be construed to abridge any other right of termination the agency may have.

B. For Convenience. The Department may terminate this contract for any reason by giving the Contractor written notice of such termination no less than sixty (60) days prior to the date of termination.

C. For Cause. The Department may cancel this Contract for cause when the Contractor fails to perform its obligations under it by giving the Contractor written notice of such cancellation at least thirty (30) days prior to the date of proposed cancellation. In any written notice of cancellation for cause, the State will advise the Contractor in writing of the reasons why the State is considering cancelling the Contract and may provide the Contractor with an opportunity to avoid cancellation for cause by curing any deficiencies identified in the notice of cancellation for cause prior to the date of proposed cancellation. The parties may endeavor to agree to reasonable modifications in the Contract to accommodate the causes of the cancellation for cause and avoid the cancellation, to the extent permitted by law, and at the discretion of each party individually.

8. Non-negotiable Governing Law and Venue.

A. This contract shall be governed by and construed in accordance with the Laws of the State of Arkansas. Exclusive venue arising under this Contract is Pulaski County, Arkansas.

B. Any legislation that may be enacted subsequent to the date of this Contract, which may cause all or any part of the Contract to be in conflict with the laws of the State of Arkansas, will be given proper consideration if and when this contract is renewed or extended. At such time, the parties agree that the Contract shall be amended to comply with any applicable laws in effect.

C. Under Arkansas law, the release of public records is governed by the Arkansas Freedom of Information Act found at Section 25-19-101 et. seq. of the Arkansas Code Annotated.

9. Non-negotiable Sovereign Immunity. Nothing in this Contract shall be construed as a waiver of the State's sovereign immunity. Any claims Contractor wishes to assert against the State in connection with this Contract shall be brought in the Arkansas State Claims Commission.

10. Non-negotiable Intergovernmental/Cooperative Use. In accordance with Arkansas Code Annotated § 19-11-249, any State public procurement unit may participate in this Contract with a participating addendum signed by the Contractor and approved by the chief procurement officer of the procurement agency issuing the contract.

11. Non-negotiable Disclosure Required by Executive Order 98-04. Any contract or amendment to a contract executed by an agency which exceeds \$10,000 shall require the Vendor to disclose information as required under the terms of Executive Order 98-04 and the Regulations pursuant thereto. The Vendor shall also require the subcontractor to disclose the same information. The Contract and Grant Disclosure and Certification Form shall be used for this purpose. Contracts with another government entity such as a state agency, public education institution, federal government entity, or body of a local government are exempt from disclosure requirements.

The failure of any person or entity to disclose as required under any term of Executive Order 98-04, or the violation of any rule, regulation or policy promulgated by the Department of Finance and Administration pursuant to this Order, shall be considered a material breach of the terms of the contract, lease, purchase agreement, or grant and shall subject the party failing to disclose, or in violation, to all legal remedies available to the Agency under the provisions of existing law.

12. Compliance. The Contractor shall ensure, in cooperation with the Department, that the Contract adheres

to the requirements of Arkansas procurement law, including without limitation the inclusion of any mandatory language and the submission of the contract for any required review. The signature of the Contractor on this Contract serves as an acknowledgement that the Contractor is:

- A. Equally responsible with the Department for adhering to the requirements of Arkansas Procurement Law related to the content and review of the Contract; and
- B. Subject to the relevant ethical provisions of § 19-11-701 et seq.

13. **Indemnity.** The Contractor shall be fully liable for the actions of its agents, employees, partners, and assigns and shall fully indemnify, defend, and hold harmless the Department, and their officers, agents, and employees from third party suits, actions, damages, and costs of every name and description, including attorney's fees to the extent arising from or relating to personal injury and damage to real or personal property, caused in whole or in part by the negligence or willful misconduct of Contractor, its agents, employees, partners, or assigns.
14. **Assignment/Subcontracting.** Contractor shall not assign, sell, transfer, subcontract or sublet rights, or delegate responsibilities under this Contract, in whole or in part, without the prior written approval of the Department.
15. **Amendments.** The terms of this Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without written approval of both parties. Any amendment that increases compensation or represents a material substantive change may require review by Legislative Council or Joint Budget Committee pursuant to Arkansas Code Annotated § 19-11-265.
16. **Records.** Financial and accounting records reasonably relevant to State of Arkansas transactions under this Contract shall be subject to examination by appropriate Arkansas government authorities for a period of five (5) years from the date of expiration, termination or cancellation and final payment under this Contract, provided, however, that such government authorities will provide thirty (30) days written notice to the Contractor of its intent to conduct such examination contemplated by this section; and provided that such examination occurs pursuant to a mutually agreed upon location, during normal business hours and subject to reasonable confidentiality obligations.
17. **Non-waiver.** The failure by one party to require performance of any provision shall not affect that party's right to require performance at any time thereafter, nor shall a waiver of any breach or default of this Contract constitute a waiver of any subsequent breach or default or a waiver of the provision itself.
18. **Severability.** If any provision of this contract is held unenforceable, all remaining provisions of this Contract shall remain in full force and effect.
19. **ACH Payment.** All payments to the Contractor under this Contract shall be made exclusively through ACH (Automated Clearing House) direct deposit or through the State's authorized VISA Procurement Card (p-card). The Contractor agrees to provide the necessary banking information, including account number, routing number, and any other details required to facilitate ACH direct deposits. The Contractor is responsible for ensuring that the provided banking information is accurate and up to date. Any delays or errors in payment caused by incorrect or outdated information provided by the Contractor shall not be the responsibility of the Department. The Department will process payments according to the agreed payment schedule, and all payments made via ACH direct deposit shall be considered as duly received upon successful transmission to the Contractor's designated bank account.

20. Attachments.

1. Certification of Contractor
2. Calculation of Compensation, as applicable;
3. Source of Funds
4. Objectives, Scope, and Performance Standards, as applicable; and
5. Performance Details, as applicable
6. Additional Attachments as applicable
 - A. _____
 - B. _____
 - C. _____

21. Notices.

- A. Method of Notice.** The parties shall give all notices and communications between the parties in writing by (i) personal delivery, (ii) a nationally-recognized, next-day courier service, (iii) first-class registered or certified mail, postage prepaid[, (iv) fax, or (v) electronic mail to the party's address specified in this Contract, or to the address that a party has notified to be that party's address for the purposes of this section.
- B. Receipt of Notice.** A notice given under this Contract will be effective on
- i. the other party's receipt of it, or
 - ii. if mailed, the earlier of the other party's receipt of it and the fifth business day after mailing it.
- C. Issuance of Notice.** All notices and communications between the parties in writing shall be directed to the respective parties in accordance with the following:

Contact #1 – Department Representative submitting/tracking this contract

_____	_____
Name	Title
_____	_____
Telephone #	Email

Contact #2 - Department Representative with knowledge of this project (for general questions and responses)

_____	_____
Name	Title
_____	_____
Telephone #	Email

Contact #3 - Department Representative Director or Critical Contact (for time sensitive questions and responses)

Name_____
Title_____
Telephone#_____
Email

22. Technology Access. If the Commodities are electronic information processing hardware or software, including telecommunications hardware or software ("Information Technology"), then the Contractor represents and warrants it shall comply with federal and state law relating to accessibility by persons with visual impairments and nonvisual access standards established by the Division of Information System, which standards can be found at [Technology Access Clause](#) and are included herein by reference, as applicable.

23. SIGNATURES

DEPARTMENT SIGNATURE CERTIFIES NO OBLIGATIONS WILL BE INCURRED BY A STATE DEPARTMENT UNLESS SUFFICIENT FUNDS ARE AVAILABLE TO PAY THE OBLIGATIONS WHEN THEY BECOME DUE.

IN WITNESS WHEREOF, the Parties sign and cause this Contract to be executed. Notwithstanding verbal or other representations by the parties, the "Effective Date" of this Contract shall be the date provided in Section 3 above.

CONTRACTOR AUTHORIZED SIGNATURE

DEPARTMENT AUTHORIZED SIGNATURE

Printed Name_____
Printed Name_____
Title_____
Title_____
Address_____
Address_____
Signature_____
Signature_____
Date_____
Date

Attachment #1 CERTIFICATION OF CONTRACTOR

Sections A, B and C apply to all service contracts. Sections D and E apply to Professional and Consulting Services contracts only.

A. "I, _____ (Contractor) _____ (Title)

certify under penalty of perjury that, to the best of my knowledge and belief, no regular full-time or part-time employee of the State of Arkansas will receive any personal, direct or indirect monetary benefits as a result of the execution of this contract that would violate the law." Where the Contractor is a widely-held public corporation, the term 'direct or indirect monetary benefits' "shall not apply to any regular corporate dividends paid to a stockholder of said corporation who is also a State employee and who owns less than ten percent (10%) of the total outstanding stock of the contracting corporation."

B. List any other contracts or subcontracts Contractor has with any other state government entities. (Not applicable to contracts between Arkansas state departments. If no contracts or subcontracts, please put "Not applicable" or "None.")

C. Is Contractor currently engaged in any legal controversies with any state agencies or representing any clients engaged in any controversy with any Arkansas state department? If no controversies, please put "Not applicable" or "None."

D. Contractor shall list below, or on an attachment hereto, names, addresses, and relationship of those persons who will be supplying services to the State at the time of the execution of the contract. If the names are not known at the time of the execution of the contract, the Contractor shall submit the names along with the other information as they become known. Such persons shall, for all purposes, be employees or independent contractors operating under the control of the Contractor (sub-contractors), and nothing herein shall be construed to create an employment relationship between the departments and the persons listed below.

Name	Address	Relationship

CERTIFICATION OF CONTRACTOR CONT'D

E. The State has no managerial responsibilities over the Contractor or Contractor's employees. In carrying out this contract, Contractor understands and represents that there is no employment relationship between the contracting parties.

Pursuant to Arkansas law, a vendor must certify as specified below and as designated by the applicable laws.

1. Israel Boycott Restriction: For contracts valued at \$1,000 or greater.

A public entity shall not contract with a person or company (the "Contractor") unless the Contractor certifies in writing that the Contractor is not currently engaged in a boycott of Israel. If at any time after signing this certification the Contractor decides to boycott Israel, the Contractor must notify the contracting public entity in writing. See Arkansas Code Annotated § 25-1-503.

2. Illegal Immigrant Restriction: For contracts valued at \$25,000 or greater.

No state agency may contract for services with a Contractor who knowingly employs or contracts with an illegal immigrant. The Contractor shall certify that it does not knowingly employ, or contract with, illegal immigrants. See Arkansas Code Annotated § 19-11-105.

3. Energy, Fossil Fuel, Firearms, and Ammunition Industries Boycott Restriction: For contracts valued at \$75,000 or greater.

A public entity shall not contract unless the contract includes a written certification that the Contractor is not currently engaged in and agrees not to engage in, a boycott of an Energy, Fossil Fuel, Firearms, or Ammunition Industry for the duration of the contract. See Arkansas Code Annotated § 25-1-1102.

4. Scrutinized Company Restriction: Required with bid or proposal submission.

A state agency shall not contract with a Scrutinized Company or a company that employs a Scrutinized Company as a subcontractor. A Scrutinized Company is a company owned in whole or with a majority ownership by the government of the People's Republic of China. A state agency shall require a company that submits a bid or proposal for a contract to certify that it is not a Scrutinized Company and does not employ a Scrutinized Company as a subcontractor. See Arkansas Code Annotated § 25-1-1203.

By signing this form, the Contractor agrees and certifies they are in compliance with the certification requirements listed above that are relevant to this contract and will remain so for the aggregate term of any resultant contract.

Attachment #2 Calculation of Compensation**Calculation of Compensation** (for Professional & Consulting Service Contracts Only):

- A. In the table below, provide the various levels of expertise, the number of personnel for each level, the compensation rate, and total for each level, as applicable.

Level of Personnel	Number	Compensation Rate	Total for Level
TOTAL COMPENSATION EXCLUSIVE OF EXPENSE REIMBURSEMENT(S)			\$ 0.00

- B. In the table below, provide any allowable reimbursable expenses, estimated rates, and a total for each level.

Reimbursable Expense Items (Specify)	Estimated Rate of Reimbursement	Total
TOTAL REIMBURSABLE EXPENSES		\$ 0.00

Total compensation inclusive of expenses reimbursement: _____ \$ 0.00

Annual Contract Amount: _____

Calculation of Services and Commodities (for Technical & General Service Contracts Only):

- A. In the table below, as applicable, provide the various services to be rendered, the quantity, cost per item, and total cost.

Services	Quantity	Cost Per Item	Total Cost
TOTAL SERVICES			\$ 0.00

- B. In the table below, as applicable, provide the various commodities, quantity, cost per item, and total cost

Commodities	Quantity	Cost Per Item	Total Cost
TOTAL COMMODITIES			\$ 0.00

Total services inclusive of commodities: _____ \$ 0.00

Annual Contract Amount: _____

Attachment #3 Source of Funds

Source of Funds the Department intends to draw on. This is provided for informational purposes only. It is required under Arkansas Procurement Law and is not a performance obligation of the Department or an unconditional promise to pay from the sources identified.

Fund Source	Identify Source of Funds*	Fund	Fund Center	Amount of Funding	% of Total Contract Cost
					%
					%
					%
					%
					%
					%
TOTALS				\$ 0.00	0.00 %

Identify whether State general revenue funds (GRF), special revenue funds (SRF), federal funds (FED), or other public funds (Other) are the source. Identify each specific source of SRF, such as special taxes or fees, in the "Identify Source of Funds" column. Similarly, if Other public funds, such as tobacco funds, general improvement funds, etc., are being used to pay the Contractor, these should be specified in the "Identify Source of Funds" column.

REQUIRED CONTRACT FORMS

The following are the construction document forms that, where required by the Architect, will be used during this project. These documents are either furnished in the project manual or available for inspection at the Architect's office:

Lewis, Elliott, McMorran, Vaden,
Ragsdale & Woodward, Inc.
11225 Huron Lane, Suite 104
Little Rock, AR 72211

Bid Form.	As furnished in Project Manual
*Form of Agreement Between Owner & Contractor	AIA Document A101
Contractors Qualification Statement	AIA Document A305
Bid Bond	AIA Document A310 or Cashier's Check
Performance Bond and Labor and Material Payment Bond	AIA Document A312
Insurance and Bonds	AIA Document A101 – 2017 Exhibit A
*Change Order.	AIA Document G701
Application and Certificate for Payment	AIA Document G702 and G703
*Certificate of Substantial Completion.	AIA Document G704
Certificate of Insurance	Acord Form (See sample furnished)
Contractor's Affidavit of Payment of Debts and Claims.	AIA Document G706
Lien Waiver Form (Builder's or Contractor's Affidavit)	As furnished in Project Manual
Consent of Surety - to Reduction or Partial Releases of Retainage	AIA Document G707A
Consent of Surety Company to Final Payment	AIA Document G707
*Architect's Supplemental Instructions.	AIA Document G710
Proposal Request.	AIA Document G709
Construction Change Directive	AIA Document G714
Project Team Directory.	AIA Document G808

*Indicates forms furnished and procedures initiated by the Architect.

END OF REQUIRED CONTRACT FORMS

SAMPLE OF LIABILITY
INSURANCE FORM

GENERAL:

The Contractor's insurance carrier shall supply the "Acord Certificate of Insurance" form exactly as shown on the sample form furnished in this Project Manual, and a notarized letter of endorsement "Specifically permitting the waiver of rights provision in Article 11.1.2.7 of the General Conditions of the Contract for Construction, AIA Document A201, as amended by the Supplementary Conditions and bound into this Project Manual".

END OF SECTION



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

12/11/2023

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

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

PRODUCER ABC Insurance Agency Mailing Address City ST 11111		CONTACT NAME: Agency Contact Person PHONE (A/C, No, Ext): (111) 111-1111 FAX (A/C, No): (111) 111-1111 E-MAIL ADDRESS: agent@emailaddress.com	
INSURED ABC Construction Company Mailing Address City ST 11111		INSURER(S) AFFORDING COVERAGE INSURER A: Insurance Company INSURER B: Insurance Company INSURER C: Insurance Company INSURER D: Insurance Company INSURER E: Insurance Company INSURER F:	
		NAIC # 11111 11111 11111 11111 11111	

COVERAGES**CERTIFICATE NUMBER:** 2024 Sub Sample Cert**REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	Y	Y	Policy Number	12/10/2024	12/10/2025	EACH OCCURRENCE \$ 1,000,000	
	DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000							
	MED EXP (Any one person) \$ 5,000							
	PERSONAL & ADV INJURY \$ 1,000,000							
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			Policy Number	12/10/2024	12/10/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000	
	BODILY INJURY (Per person) \$							
	BODILY INJURY (Per accident) \$							
	PROPERTY DAMAGE (Per accident) \$							
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000	Y	Y	Policy Number	12/10/2024	12/10/2025	EACH OCCURRENCE \$ 1,000,000	
	AGGREGATE \$ 1,000,000							
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N Y	N/A	Y	Policy Number	12/10/2024	12/10/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	E.L. EACH ACCIDENT \$ 1,000,000							
	E.L. DISEASE - EA EMPLOYEE \$ 1,000,000							
	E.L. DISEASE - POLICY LIMIT \$ 1,000,000							
E	Builders Risk Property Insurance			Policy Number	12/10/2024	12/10/2025		

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

Project Name

CERTIFICATE HOLDER**CANCELLATION**

SAMPLE CERTIFICATE

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



ADDITIONAL REMARKS SCHEDULE

AGENCY ABC Insurance Company		NAMED INSURED Lewis, Elliott, McMorran, Vaden, Ragsdale And Woodward Inc.
POLICY NUMBER		
CARRIER	NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance: Notes

Attach policy forms regarding Additional Insured, Blanket Waiver of Subrogation, Notice of Cancellation, Primary/Non-Contributory status, etc that are applicable to the policies listed on this certificate:

General Liability:

- *Owner & Architect shall be named as an Additional Insured or included in Blanket Additional Insured policy form
- *Per Project Aggregate Limit of Liability
- *Primary Non-contributory endorsement
- *Waiver of Subrogation in favor of Certificate Holder
- *30 Day Notice of Cancellation in favor of Certificate Holder

Workers Compensation:

- *Waiver of Subrogation in favor of Certificate Holder

Umbrella:

- *Confirmation of Following Form for Additional Insured & Waiver of Subrogation on underlying policies

LIEN WAIVER FORM

STATE OF ARKANSAS

COUNTY OF _____

_____ of _____
(Name) (Address)

being first duly sworn deposes and says:

That he is the sub-contractor and/or material supplier who worked on or furnished material to be used in the construction and improvements on the property located in _____, more particularly described as follows:

Affiant further states that all material used therein was of the quality prescribed in plans and specifications approved by the architects, Owner, or both, that all laws, ordinances, building codes and civic regulations concerning construction or repair of building(s) have been complied with and that the Owner has inspected said improvements and accepted same as being complete and satisfactory.

Affiant further states that all charges and costs for labor performed, material furnished, and fixtures installed on said premises have been fully paid; that said premises are free and clear of all lienable claims whatsoever arising under and by virtue of said construction, and warrants and guarantees to hold Owner, and those claiming under the Owner, including any mortgagee or title insurance company, free and immune from any liability therefore.

The release is given in order to induce payment in the amount of _____ and on receipt of this amount due, this release may be recorded, becomes valid, enforceable and of full effect.

Affiant further states that said construction began on the _____ day of _____ 2025 and was completed on or before the _____ day of _____ 2025, and he acknowledges receipt of all monies due him in connection therewith.

Sub-Contractor/Material Supplier

STATE OF ARKANSAS

COUNTY OF _____

Subscribed and sworn to before me this _____ day of _____, 2025.

Notary Public

My commission expires:

_____ Seal

GENERAL CONDITIONS

"THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", STANDARD FORM OF THE AMERICAN INSTITUTE OF ARCHITECTS, 2017 EDITION, A.I.A. DOCUMENT, A201, ARTICLES 1 THROUGH 15 INCLUSIVE, CONSISTING OF THIRTY NINE PRINTED PAGES, ARE HEREBY INCORPORATED AS A PART OF THE PROJECT MANUAL AND SHALL BE AS THOUGH THEY WERE ATTACHED HERETO. THE GENERAL CONDITIONS ARE ON FILE FOR PUBLIC INSPECTION AT THE OFFICE OF LEWIS, ELLIOTT, MCMORRAN, VADEN, RAGSDALE & WOODWARD, INC., 11225 HURON LANE, SUITE 104, LITTLE ROCK, ARKANSAS."

SUPPLEMENTARY
CONDITIONS

1. The "General Conditions of the Contract for Construction", AIA Document A201, 2017, Articles 1 through 15 inclusive, is a part of this Contract.
2. The following supplements shall modify, delete, and/or add to the General Conditions. Where any article, paragraph, or subparagraph in the General Conditions is supplemented by one of the following paragraphs, the provisions of such article, paragraph, or subparagraph shall remain in effect and the supplemental provisions shall be considered an added thereto. Where any article, paragraph, or subparagraph in the General Conditions is amended, voided, or superseded by any of the following paragraphs, the provisions of such article, paragraph, or subparagraph not so amended, voided, or superseded shall remain in effect.
3. Add subparagraph 1.1.9:

"The word "Provide" shall mean to furnish and install, complete in place, operating, tested and approved".
4. Add subparagraph 1.1.10:

"The word "Product(s)" refers to the materials, systems, and equipment provided by the Contractor".
5. In subparagraph 3.4.3, add: "Any person whose work is unsatisfactory to the Owner or the Architect shall be removed from the work upon receipt of written notice from the Architect".
6. Add subparagraph 3.4.4:

"All Contractors and Subcontractors engaged in the Work shall conform to the labor laws of the State of Arkansas, and the various acts amendatory and supplementary thereto, and to all other laws, ordinances, and legal requirements applicable there to".
7. Add subparagraph 3.7.6:

"The Contractor shall be licensed contractor as provided by the Act Number 124 of the 1939 Act Number 217 of 1945 and Act Number 153 of 1951 and Act Number 150 of 1965 as enacted by the General Assembly of the State of Arkansas".
8. Delete subparagraphs 3.9.2 and 3.9.3 in their entirety and substitute the following subparagraph 3.9.2:

"The superintendent and assistants shall be satisfactory to the Architect, and shall not be changed except with the consent of the Architect, unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ".
9. Add subparagraph 3.13.1:

3.13.1 "All material shall be arranged and maintained in an orderly manner without hindering the use of walks, drives, roads, and entrances. Should it be necessary at any time to move material, sheds, or storage platforms, the Contractor shall do so as and when directed, and at his own expense".

10. Add subparagraphs 7.2.2 and 7.2.3:

7.2.2 The contractor shall be required to furnish the original bills and payrolls and support the statement with proper affidavits. The burden of proof of the costs rests upon the Contractor. Bills for extras will be allowed only when work is ordered in writing. No bills based on verbal orders will be allowed by the Architect unless accompanied by a written order from the Architect. The Contractor waives all claim for extension of time of completion on account of extra work, unless application for such extension is made by the Contractor in writing within twenty (21) days of the time such work is ordered.

7.2.3 The Contractor shall not make any changes except on written order of the Owner. Contractor's request for a Change Order to the Work shall be made on the AIA Document G709 and shall provide itemized breakdown of whole sum listing unit quantities and costs of all labor and materials. Contractor shall submit all verifying data as required to support claims, such as copies or original invoices, payrolls, etc. Requests shall identify percentage sums included for insurance, taxes, bonds, overhead and profit. Percentages shall not be allowed for changes altering allowances. Changes in the work by cost and a mutual acceptable fixed or percentage fee shall be computed as follows:

- a. Net cost of materials, plus State Sales Tax.
- b. Net delivery cost.
- c. Net placing cost plus W.C. Insurance premium and FICA Tax.
- d. 12% Overhead and Profit Charge on a. through c. allowed.
- e. Allowable Bond Premium.

Where changes in the work involve subcontract work, the General Contractor shall add to cost of subcontract work a profit charge of 5% total overhead and profit charge.

11. Delete subparagraph 7.4 and substitute the following:

"The Architect will have authority to order minor changes in the Work in the form of Field Orders which interpret the Contract Documents or order minor changes in the work without change in Contract Sum or Contract Time. Such changes shall be effected by written Field Order, and shall be binding on the Owner and the Contractor. The Contractor shall attend to such Field Order promptly".

12. Add subparagraphs 7.4.1 and 7.4.2:

7.4.1 "If the Contractor considers that a change in Contract Sum or Contract Time is required, he shall submit an itemized proposal to the Architect immediately and before proceeding with this work. If the proposal is found to be satisfactory and in proper order, the Field Order will in that event be superseded by a Change Order as provided in Paragraph 7.2. The Contractor shall attend to such Field Orders promptly".

7.4.2 "When the time required for processing a Change Order would cause a delay in the progress of the Work, the Architect may issue a Field Order which, when signed by the Owner and the Contractor, will authorize the Contractor to proceed with changes in the work, which may change the Contract Sum and/or the Contract Time. Such Field Orders will be subsequently incorporated in the work as Change Orders as provided in paragraph 7.2. The contractor shall attend to such Field Order promptly".

13. Delete subparagraph 9.3.1 and substitute the following:

"On or before the twenty-fifth day of each calendar month, the Contractor shall submit to the Architect an itemized Application for Payment on AIA Document G702, supported by data substantiating the Contractor's right to payment submitted on AIA Document G703 and attached thereto. The Contractor shall submit one (1) legible copy of these prepared Application for Payment forms and (1) legible copy of each invoice or statement supporting requests for payment of materials or equipment stored on job site or in an approved bonded warehouse". These forms can be emailed to the address as provided at the Pre-Construction meeting or by mailing, shipping or hand-delivery.

"Throughout entire job, the Owner will pay 95 percent of the amount due the Contractor on account of progress payments in compliance with Act 193 of 2009 amended AR. Code. Ann. §22-9-604(a). No retainage will be withheld on material and/or equipment stored on job site or in an approved bonded warehouse".

14. 10.2.2 Add the following new subparagraphs:

10.2.2.1 Project with trenching or excavation which exceeds five feet in depth shall comply with Arkansas Code Annotated §22-9-212.

10.2.2.2 The current edition of OSHA Standard for Excavation and Trenches Safety System, 29 CFR 1926, Subpart P, shall be incorporated by reference in this contract.

15. NOTE: Refer to Sample of Liability Insurance Form for Sample Acord Form. Add the following clauses to 11.1.1:

11.1.1.1 The Contractor shall purchase and maintain Workers Compensation insurance providing Statutory Workers compensation benefits as well as Employers Liability Coverage of at least \$1,000,000.00 Limit of Liability.

The following endorsements providing extensions of coverage shall be attached forming a part of said Workers compensation policy:

- a. Broad Form All States Endorsement
- b. Maritime or Jones Act coverage - where applicable, such as work on navigable waters.
- c. United States Longshoremen's & Harbor Workers Coverage (may be voluntary if job is not close to body of water).

11.1.1.2 Comprehensive General Liability insurance shall be purchased and maintained by the contractor providing the following coverages and limits of liability:

- a. Premises & Operations
- b. Independent Contractors
- c. Completed Operations and Products
- d. X-Explosion, C-Collapse, U-Underground Property Damage Coverage – When Applicable Included
- e. Contractual Liability/Blanket Coverage
- f. Personal Injury Coverage with Employee Exclusion Removed
- g. Owner and Architect shall be named as an Additional Insured on CGL Policy including Completed Operations
- h. Additional insured shall be provided with a certificate of insurance

Limits No Less Than:

\$1,000,000 Per Occurrence

\$2,000,000 Annual Aggregate

\$2,000,000 Products/Completed Operations Aggregate

“Per Project Aggregate” endorsement shall be included.

11.1.1.3 Business Auto Liability or Comprehensive Auto Liability policy shall be purchased and maintained by the contractor providing coverage for all owned, non-owned and hired autos.

Limit of Liability required shall be:

\$1,000,000.00 Combined Single Limit.

11.1.1.4 An Umbrella Liability Policy shall be purchased and maintained by the contractor providing coverage over and above required underlying Employers Liability, Comprehensive General Liability, and Business Auto Liability coverages.

Limits of Liability shall be no less than \$1,000,000.00 per Occurrence/\$1,000,000.00 Aggregate.

The Owner and Architect shall be named as an Additional Insured.

11.1.1.5 Property Insurance, (Builder's Risk, Installation Floater, Boiler & Machinery coverage when applicable), providing All-Risk Coverage shall be purchased and maintained by the contractor providing full coverage for all materials, including labor, destined to be part of job and/or already part of job.

The Owner, Architect, Contractor and all Subcontractors shall be included as Named Insureds covering their interest of the said job.

The policy shall reflect a Deductible of \$250.00 per occurrence which shall be paid in all cases by the Contractor.

11.1.1.6 Miscellaneous Requirements:

- a. All required insurance coverages and bonds shall be provided by an insurance company of a sound financial rating and licensed to do business in the state of the designated job.
- b. Certificates of Insurance shall be filed in duplicate with the Architect and approved by the Owner prior to commencement of the work. The certificates shall reflect coverages, limits of liability, and wording at least as broad as the attached specimen. Use the Accord Certificate of Insurance form as shown by specimen included in this set of specifications. All certificates shall include 30 day written notice of cancellation applicable to the General Liability, Workers Compensation, Automobile and Umbrella policies.

- c. The contractor shall not commence work under this contract or allow any subcontractor or anyone directly or indirectly employed by anyone of them to commence work until he has obtained all insurance required under this, and two duly executed Certificates of such insurance shall have been filed with the Architect and approved by the Owner and Contractor has complied with bonding requirements and work order has been issued. Each such certificate and policy shall contain a provision that coverages afforded under the policies will not be cancelled or materially altered until at least thirty days prior written notice has been given to the Owner.
 - d. The insurance carrier shall issue an endorsement specifically permitting the waiver of rights provision in AIA Document A201, Article 11.3.1.
16. Add subparagraph 11.1.1.7:
- If by the terms of this insurance any mandatory deductibles are required, or if the Contractor should elect, with the concurrence of the Owner, to increase the mandatory deductible amounts or purchase this insurance with voluntary deductible amounts, the Contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.
17. Add subparagraph 11.1.2.1:
- "Contractor shall furnish and pay for an Executed Performance Bond on AIA Document A311 and Labor and Material Payment bond on AIA Document A311 in the amount of 100% of the contract sum. No modification to the standard bond forms will be allowed without written consent of the Architect".
18. Add subparagraph 11.1.2.2:
- "After being approved by the Architect and prior to any work under this contract, the Contractor shall file the bonds with the circuit clerk and recorder of the county in which the work to be performed is located. Contractor shall obtain from the circuit clerk certificates as evidence that the bonds have been approved and filed with the clerk and said certificates shall be filed with the Architect".
19. Add subparagraph 11.1.5:
- "If at any time a surety on any such bond is declared bankrupt or loses its right to do business in this state, Contractor shall notify the Owner immediately and within ten (10) days, furnish an acceptable bond (or bonds), in such form and sum and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable Bond to the Owner. Failure to comply with the above requirements may be deemed sufficient grounds for termination of this contract".
20. Delete subparagraph 11.2.1 in its entirety and substitute the following:
- The Contractor shall be responsible for purchasing and maintaining liability insurance as will protect the Owner against claims which may arise from operations under the contract.

21. Delete subparagraph 11.2.2 in its entirety and substitute the following:

11.2.2 The Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. Such insurance shall be in a company or companies against which the Owner has no reasonable objection. This insurance shall include the interests of the Owner, the Contractor, Subcontractors, and Subcontractors in the Work and shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief. If not covered under all risk insurance or otherwise provided in the Contract Documents, the contractor shall effect and maintain similar property insurance on portions of the work stored off the site or in transit when such portions of the work are to be included in an application for Payment under subparagraph 9.3.2. The form of policy for this coverage shall be completed value.

22. Add subparagraph 11.5.3

The Owner's occupancy or use of any completed or partially completed portion of the Work prior to Substantial Completion shall not commence until the insurance company or companies providing the insurance under Section 11.1.1.5 Property Insurance have consented in writing to the continuance of coverage. The Owner and the Contractor shall take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of insurance, unless they agree otherwise in writing.

23. Delete subparagraph 15.1.6.2 in its entirety and substitute the following:

"Extension of Time Due to Weather Delays: Claims for extension of time due to unusual inclement weather shall be granted only because such unusual inclement weather prevented the execution of major items of the work. Unusual inclement weather is defined as severe weather which is beyond the normal weather recorded and expected for the month of the year as shown in the chart below. Extension of time due to weather delays shall be granted only for those days in excess of the number of days shown. Extension of time requests shall be submitted in writing within 30 days of occurrence and submitted with current pay request.

PRECIPITATION

<u>MONTH</u>	<u>AVERAGE NO. OF DAYS .01" OR MORE</u>
January	10
February	9
March	10
April	10
May	10
June	8
July	9
August	7
September	7
October	6
November	8
December	9

24. In paragraph 15.3, omit any and all references to arbitration.

25. Delete paragraph 15.4 in its entirety.

END OF SUPPLEMENTARY CONDITIONS

52.222-5 Davis-Bacon Act—Secondary Site of the Work.

As prescribed in [22.407](#)(h), insert the following provision:

DAVIS-BACON ACT—SECONDARY SITE OF THE WORK (JULY 2005)

(a)(1) The offeror shall notify the Government if the offeror intends to perform work at any secondary site of the work, as defined in paragraph (a)(1)(ii) of the FAR clause at [52.222-6](#), Davis-Bacon Act, of this solicitation.

(2) If the offeror is unsure if a planned work site satisfies the criteria for a secondary site of the work, the offeror shall request a determination from the Contracting Officer.

(b)(1) If the wage determination provided by the Government for work at the primary site of the work is not applicable to the secondary site of the work, the offeror shall request a wage determination from the Contracting Officer.

(2) The due date for receipt of offers will not be extended as a result of an offeror's request for a wage determination for a secondary site of the work.

(End of provision)

52.222-6 Davis-Bacon Act.

As prescribed in [22.407](#)(a), insert the following clause:

DAVIS-BACON ACT (JULY 2005)

(a) Definition.—“Site of the work”—

(1) Means—

(i) *The primary site of the work.* The physical place or places where the construction called for in the contract will remain when work on it is completed; and

(ii) *The secondary site of the work, if any.* Any other site where a significant portion of the building or work is constructed, provided that such site is—

(A) Located in the United States; and

(B) Established specifically for the performance of the contract or project;

(2) Except as provided in paragraph (3) of this definition, includes any fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards, etc., provided—

(i) They are dedicated exclusively, or nearly so, to performance of the contract or project; and

(ii) They are adjacent or virtually adjacent to the “primary site of the work” as defined in paragraph (a)(1)(i), or the “secondary site of the work” as defined in paragraph (a)(1)(ii) of this definition;

(3) Does not include permanent home offices, branch plant establishments, fabrication plants, or tool yards of a Contractor or subcontractor whose locations and continuance in operation are determined wholly without regard to a particular Federal contract or project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, yards, etc., of a commercial or material supplier which are established by a supplier of materials for the project before opening of bids and not on the Project site, are not included in the “site of the work.” Such permanent, previously established facilities are not a part of the “site of the work” even if the operations for a period of time may be dedicated exclusively or nearly so, to the performance of a contract.

(b)(1) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, or as may be incorporated for a secondary site of the work, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Any wage determination incorporated for a secondary site of the work shall be effective from the first day on which work under the contract was performed at that site and shall be incorporated without any adjustment in contract price or estimated cost. Laborers employed by the construction Contractor or construction subcontractor that are transporting portions of the building or work between the secondary site of the work and the primary site of the work shall be paid in accordance with the wage determination applicable to the primary site of the work.

(2) Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (e) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period.

(3) Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

(4) The wage determination (including any additional classifications and wage rates conformed under paragraph (c) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the primary site of the work and the secondary site of the work, if any, in a prominent and accessible place where it can be easily seen by the workers.

(c)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the:

The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to paragraphs (c)(2) and (c)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(d) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(e) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(End of clause)

52.222-7 Withholding of Funds.

As prescribed in [22.407](#)(a), insert the following clause:

WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(End of clause)

52.222-8 Payrolls and Basic Records.

As prescribed in [22.407\(a\)](#), insert the following clause:

PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional [Form WH-347](#) (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the—

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402

The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify—

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional [Form WH-347](#) shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(End of clause)

52.222-9 Apprentices and Trainees.

As prescribed in [22.407\(a\)](#), insert the following clause:

APPRENTICES AND TRAINEES (JULY 2005)

(a) Apprentices.

(1) An apprentice will be permitted to work at less than the predetermined rate for the work performed when employed—

(i) Pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS) or with a State Apprenticeship Agency recognized by the OATELS; or

(ii) In the first 90 days of probationary employment as an apprentice in such an apprenticeship program, even though not individually registered in the program, if certified by the OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program.

(3) Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (a)(1) of this clause, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination.

(5) Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(6) In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees.

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS). The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by OATELS.

(2) Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the OATELS shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed.

(3) In the event OATELS withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) *Equal employment opportunity*. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

(End of clause)

52.222-10 Compliance with Copeland Act Requirements.

As prescribed in [22.407](#)(a), insert the following clause:

COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

(End of clause)

52.222-11 Subcontracts (Labor Standards).

As prescribed in [22.407\(a\)](#), insert the following clause:

SUBCONTRACTS (LABOR STANDARDS) (JULY 2005)

(a) *Definition.* “Construction, alteration or repair,” as used in this clause, means all types of work done by laborers and mechanics employed by the construction Contractor or construction subcontractor on a particular building or work at the site thereof, including without limitation—

(1) Altering, remodeling, installation (if appropriate) on the site of the work of items fabricated off-site;

(2) Painting and decorating;

(3) Manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work;

(4) Transportation of materials and supplies between the site of the work within the meaning of paragraphs (a)(1)(i) and (ii) of the “site of the work” as defined in the FAR clause at [52.222-6](#), Davis-Bacon Act of this contract, and a facility which is dedicated to the construction of the building or work and is deemed part of the site of the work within the meaning of paragraph (2) of the “site of work” definition; and

(5) Transportation of portions of the building or work between a secondary site where a significant portion of the building or work is constructed, which is part of the “site of the work” definition in paragraph (a)(1)(ii) of the FAR clause at [52.222-6](#), Davis-Bacon Act, and the physical place or places where the building or work will remain (paragraph (a)(1)(i) of the FAR clause at [52.222-6](#), in the “site of the work” definition).

(b) The Contractor shall insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled—

(1) Davis-Bacon Act;

(2) Contract Work Hours and Safety Standards Act—Overtime Compensation (if the clause is included in this contract);

(3) Apprentices and Trainees;

(4) Payrolls and Basic Records;

(5) Compliance with Copeland Act Requirements;

(6) Withholding of Funds;

(7) Subcontracts (Labor Standards);

(8) Contract Termination—Debarment;

(9) Disputes Concerning Labor Standards;

(10) Compliance with Davis-Bacon and Related Act Regulations; and

(11) Certification of Eligibility.

(c) The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor performing construction within the United States with all the contract clauses cited in paragraph (b).

(d)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed [Standard Form \(SF\) 1413](#), Statement and Acknowledgment, for each subcontract for construction within the United States, including the subcontractor’s signed and dated acknowledgment that the clauses set forth in paragraph (b) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed [SF 1413](#) for such additional subcontract.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e) in all subcontracts for construction within the United States.

(End of clause)

52.222-12 Contract Termination—Debarment.

As prescribed in [22.407](#)(a), insert the following clause:

CONTRACT TERMINATION—DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act—Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of clause)

52.222-13 Compliance with Davis-Bacon and Related Act Regulations.

As prescribed in [22.407](#)(a), insert the following clause:

COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are hereby incorporated by reference in this contract.

(End of clause)

52.222-14 Disputes Concerning Labor Standards.

As prescribed in [22.407](#)(a), insert the following clause:

DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(End of clause)

52.222-15 Certification of Eligibility.

As prescribed in [22.407](#)(a), insert the following clause:

CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, [18 U.S.C. 1001](#).

(End of clause)

"General Decision Number: AR20250020 01/03/2025

Superseded General Decision Number: AR20240020

State: Arkansas

Construction Type: Building

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Counties: Calhoun, Clark, Columbia, Dallas, Hempstead, Howard, Lafayette, Montgomery, Ouachita, Pike and Sevier Counties in Arkansas.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"> . Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"> . Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number Publication Date
0 01/03/2025

CARP0216-003 01/01/2024

	Rates	Fringes
MILLWRIGHT.....	\$ 31.65	11.83

ENGI0624-006 01/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Crane.....	\$ 34.25	15.00
Forklift.....	\$ 33.25	15.00

IRON0321-010 08/01/2024

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 28.00	21.21

PAIN0424-008 07/01/2021

	Rates	Fringes
PAINTER (Spray).....	\$ 16.25 **	10.42

SUAR2015-017 01/09/2017

	Rates	Fringes
BRICKLAYER.....	\$ 19.18	1.60
CARPENTER, Excludes Drywall		
Hanging.....	\$ 16.03 **	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 19.14	0.00
DRYWALL HANGER.....	\$ 16.19 **	0.00
ELECTRICIAN.....	\$ 21.21	5.74
LABORER: Common or General.....	\$ 12.84 **	0.00
LABORER: Mason Tender - Brick...	\$ 12.88 **	0.00
OPERATOR:		
Backhoe/Excavator/Trackhoe.....	\$ 23.95	0.00
OPERATOR: Bulldozer.....	\$ 18.13	0.00
PAINTER (Brush and Roller).....	\$ 17.02 **	6.42
PLUMBER.....	\$ 24.42	4.86
SHEET METAL WORKER (HVAC Duct		
Installation Only).....	\$ 20.06	6.75
TRUCK DRIVER: Dump Truck.....	\$ 15.00 **	0.00

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.75) or 13658 (\$13.30). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", "SA", or "SC" denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates

in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE:

UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination

- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

=====

END OF GENERAL DECISION"

SUMMARY OF WORK

PART ONE - GENERAL

1.1 WORK COVERED BY THE CONTRACT DOCUMENTS

A. The work generally consists of:

1. Replacing three (3) heat pump split systems with three (3) DX cooling/gas heat furnace split systems.

1.2 LAYOUT OF NEW WORK

- A. The General Contractor shall be responsible for correct layout of all proposed improvements in accordance with the Drawings. He shall establish building lines, grades and elevations called for on the Drawings.

1.3 CONTRACT TIME

- A. The Contract Time shall be that time set forth in the Bid Form.

1.4 CONTINGENCY ALLOWANCE

- A. The Contractor shall include in the bid a contingency amount of \$5,000. This contingency shall be used only upon written approval from the Architect. Any difference in cost above or below this amount shall be adjusted by change order. Overhead and profit shall not be allowed if use of the contingency is necessary.

PART TWO – PRODUCTS

Not Used

PART THREE – EXECUTION

Not Used

END OF SECTION

PROJECT MEETINGS

PART ONE - GENERAL

1.1 PRECONSTRUCTION CONFERENCE

- A. Before the work order has been issued on the project by the Architect, a preconstruction conference shall be held on the job site with the following personnel; Architect's representative, Prime Contractor, Superintendent (who will be on the job at all times), and, if he so desires, the Owner. This meeting is designed for a two-fold purpose: To clarify any questions about the plans and specifications and the transfer of ideas as to what the Architect will expect for all trades and subcontractors.
- B. The purpose being as follows: Distribution by Prime Contractor of following:
 - 1. List of subcontractors, including addresses, telephone numbers and person to contact (to be used also as a Job Directory).
 - 2. Tentative Progress Schedule prepared in accordance with the following provisions:
 - a. Schedule and regulate all construction activities. The schedule shall indicate start and finish dates for activities, submittal and delivery dates for major materials and equipment, and final completion date.
 - b. Prepare tentative Progress Schedule for preview at initial progress meeting, final schedule being prepared shortly thereafter.
 - c. Discussion of following:
 - 1) General over-all progress based on tentative Progress Schedule as presented by Prime Contractor.
 - 2) Shop Drawing submission procedure as presented by Architect-Engineer.
 - 3) Change Order processing procedure as presented by Architect-Engineer.
 - 4) Pay request submission procedure as presented by Architect-Engineer.
 - 5) Clarification of Architect-Engineer and Contractor personnel, duties, functions and responsibilities.
 - d. A pre-work conference shall be required between the Architect's representative, job superintendent and major trades subcontractor before their phase of work begins.

1.2 PROGRESS MEETINGS

- A. General Contractor, major subs and all trades on job at the time shall attend bi-monthly (twice a month) progress meetings upon request of the Architect.
- B. Architect reserves the right to initiate additional meetings between above parties as he deems necessary.

PART TWO – PRODUCTS

Not Used.

PART THREE – EXECUTION

Not Used.

END OF SECTION

SHOP DRAWINGS, PRODUCT
DATA & SAMPLES

PART ONE - GENERAL

1.1.1 Work included:

1.1.1.1 Wherever possible throughout the Contract Documents, the minimum acceptable quality of workmanship and materials has been defined by manufacturer's name and catalog number, reference to recognized industry and government standards, or description of required attributes and performance.

1.1.1.2 To ensure that the specified products are furnished and installed in accordance with design intent, procedures have been established for advance submittal of design data and for their review by the Architect. All required submittals, shop drawings, product data, and samples shall be submitted within four (4) weeks after construction contracts have been signed.

1.1.1.3 Make all submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements.

1.1.1.4 Material Safety Data Sheets (MSDS) shall not be submitted as part of the submittal package. They are not a requirement of the Contract Documents.

1.1.2 Related work described elsewhere: Individual requirements for submittals are described in pertinent other Sections of these Specifications.

1.2 QUALITY ASSURANCE

1.2.1 Coordination of submittals: Prior to each submittal, carefully review and coordinate all aspects of each item being submitted and verify that each item and the submittal for it conforms in all respects with the requirements of the Contract Documents. By affixing the Contractor's signature to each submittal, certify that this coordination has been performed. Any Shop Drawing submitted to the Architect that has not been checked thoroughly, stamped and signed by the Contractor will be rejected.

1.2.2 Progress schedule: Designate in the Progress Schedule, or in a separate coordinated schedule, the dates for submission and the dates that reviewed Shop Drawings, Product Data, and Samples will be needed.

1.3 SHOP DRAWINGS – ELECTRONIC SUBMITTAL PROCEDURES

1.3.1 Summary:

1. Shop drawings and product data submittals shall be transmitted to Architect in electronic (PDF) format via Architect's SharePoint Portal (sp.laeprojects.com).
2. Details shall be identified by reference to sheet and detail, schedules, or room numbers shown on the Contract Drawings.
3. The intent of electronic submittals is to expedite the construction process by reducing paperwork, improving information flow, and decreasing turnaround time.
4. The electronic submittal process is not intended for color samples, color charts, or physical material samples.
5. Shop Drawings shall be present in a clear and thorough manner.

1.3.2 Requirements:

1. All participants in electronic documentation process will be required to have internet access.
2. Necessary software Adobe Acrobat (www.adobe.com) or Bluebeam PDF Revu (www.bluebeam.com) to produce, view, apply comments and save to PDF files. A PDF reader only will not be adequate.

1.4 PRODUCT DATA

1.4.1 Preparation:

1. Provide cover page with project name and contractor name(s).
2. Include "Table of Contents" if multiple items are included in submittal.
3. Clearly mark each copy to identify pertinent products or models.
4. Show performance characteristics and capacities.
5. Show dimensions and clearances required.
6. Show wiring or piping diagrams and controls.
7. Include special installation instructions.

1.4.2 Manufacturer's standard schematic drawings and diagrams:

1. Modify drawings and diagrams to delete information which is not applicable to the Work.
2. Supplement standard information to provide information specifically applicable to the Work.

1.4.3 Submission:

1. Contractor shall request access to Architect's SharePoint Portal (sp.laeprojects.com).
2. Submittal Preparation - Contractor may use any or all of the following options:
 - a. Subcontractors and Suppliers provide electronic (PDF) submittals to Contractor through means provided by and required by Contractor.
 - b. Subcontractors and Suppliers provide paper submittals to General Contractor who electronically scans and converts to PDF format.
3. Contractor shall review and apply electronic stamp certifying that the submittal complies with the requirements of the Contract Documents including verification of manufacturer / product, dimensions and coordination of information with other parts of the work.
4. Contractor shall transmit each submittal to Architect using the Architect's SharePoint Portal (sp.laeprojects.com).
5. At discretion of Architect's Reviewer, paper copies can be requested upon receipt of electronic submittal in order to assist in review. Request will be made through email. Contractor will provide the number of paper copies requested.
6. Architect / Engineer review comments will be made available on the Architect's SharePoint Portal for downloading. Contractor will receive email notice of completed review.
7. Distribution of reviewed submittals to subcontractors and suppliers is the responsibility of the Contractor.

1.5 SAMPLES

1.5.1 Samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integrally related parts and attachment devices.
2. Full range of color, texture and pattern.
3. Workmanship when applicable.

1.5.2 Field samples and mock-up:

1. Erect at the project site at a location acceptable to the Architect.
2. Size or area: That specified in the respective specification section.
3. Fabricate each sample and mock-up complete and finished.
4. Remove mock-ups at conclusion of the Work or when acceptable to the Architect.

1.6 NOTIFICATION

1.6.1 Notify the Architect in writing, at the time of submission, of any deviations in the submittals from requirements of the Contract Documents.

1.6.2 Notify the Architect in writing, at the time of resubmission, of changes made on re-submittals other than those previously requested by the Architect.

PART TWO – PRODUCTS

Not Used.

PART THREE – EXECUTION

Not Used.

END OF SECTION

TEMPORARY FACILITIES
AND CONTROLS

PART ONE – GENERAL

1.1 DESCRIPTION

- A. Work included: Temporary facilities and controls required for this Work include, but are not necessarily limited to:
 - 1. Field Offices and sheds.
 - 2. Sanitary facilities.
 - 3. Enclosures such as tarpaulins, barricades, and canopies.

1.2 REQUIREMENTS OF REGULATORY AGENCIES

- A. Comply with National Electric Code.
- B. Comply with Federal, State and local codes and regulations.

1.3 TEMPORARY SANITARY FACILITIES

- A. Provide temporary sanitary facilities in the quantity required, for use of all personnel. Maintain in a sanitary condition at all times.
- B. Service, clean, and maintain facilities and enclosures.

1.4 REMOVAL

- A. Completely remove temporary facilities and equipment when their use is no longer required.
- B. Clean and repair damage caused by temporary installations or use of temporary facilities.

1.5 FIELD OFFICES AND SHEDS

- A. Provide a field office building and sheds adequate in size and accommodation for all Contractor's offices, supply and storage.
- B. The entire facility, including furniture, will remain the property of the Contractor and shall be removed from the site after completion of the Work.

1.6 ENCLOSURES

- A. Furnish, install, and maintain for the duration of construction all required scaffolds, tarpaulin, barricades, canopies, warning signs, steps, bridges, platforms, and other temporary construction necessary for proper completion of the work in compliance with all safety and other regulations.

1.7 PROJECT SIGNS

- A. Provide 4' x 8' x 3/4" exterior grade plywood on two 8' x 4' x 4' treated wood posts. Paint sign as directed by Architect.
- B. Allow no signs or advertising of any kind on the job site except as specifically approved in advance by the Architect.

PART TWO – PRODUCTS

Not Used.

PART THREE - EXECUTION

- 3.1 Maintain all temporary facilities and controls as long as needed for the safe and proper completion of the Work. Remove all such temporary facilities and controls as rapidly as progress of the Work will permit, or as directed by the Architect.

END OF SECTION

PART ONE - GENERAL

1.1 WORK INCLUDED

- A. Execute cleaning during progress of the Work and at completion of the Work.

PART TWO - PRODUCTS

2.1 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.

PART THREE - EXECUTION

3.1 FINAL CLEANING

- A. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- B. Ventilating systems:
 - 1. Clean permanent filters and replace disposable filters if units are operated during construction.
 - 2. Clean ducts, blowers and coils if units were operated without filters during construction.
- C. Rake clean surfaces of the grounds disturbed during construction.

END OF SECTION

CONTRACT CLOSEOUT

PART ONE - GENERAL

1.1 PRODUCT CLOSEOUT

- A. Upon completion of the project, the Contractor shall remove all temporary structures and facilities from the site, and leave the premises in the condition required by the Construction Documents. The Contractor shall notify the Architect, in writing, as to the date when, in his opinion all or a designated portion of the work will be substantially completed and ready for final observation and the punch list to be performed on the building. If the Architect determines that the state of preparedness is as represented, the punch list will promptly be started on the building.
- B. The Architect will give written copies of the Punch List to the Contractor of observed defects. The Contractor shall promptly remedy any defects due to noncompliance of Construction Documents, faulty materials, or workmanship and pay for any damage to other work resulting therefrom.

1.2 FINAL OBSERVATION

- A. When defects are remedied as acceptable and upon receipt of punch list with each item initialed and dated acknowledging same, Architect shall arrange for final observation with the Owner, General Contractor and the Architect. Should Architect/Engineer perform additional observations due to failure of work not complying with the claims of status of completion made by the Contractor, the Architect/Engineer will be compensated for such additional observations by the Contractor. The amount of compensation due to the Architect/Engineer shall be deducted from the final payment to the Contractor.
- B. Immediately prior to final observation and acceptance, remove protective covers or markings and complete surface treatments, washing or polishing as specified, leaving all interior surfaces, including projections, in such condition that all areas can be occupied and used without further cleaning. (This includes all plumbing fixtures, trim, heat and air conditioning grilles, etc. provided under the Mechanical Work and all electrical fixtures and switch plates, etc., provided under the Electrical Work.)

1.3 PAPER WORK

- A. Final payment of the retainage will be withheld until the following documents are delivered to the Architect on two (2) USB flash drives – one (1) for the Architect and one (1) for the Owner.
 - 1. Shop Drawings:
An approved copy of each shop drawing, manufacturer's brochures, test data, etc., submitted to the Architect for approval during the course of construction shall be included with an index listing material, manufacturer and subcontractor of each submittal.

2. Operating Manuals:
Include all operating and instruction manuals (not submittals, shop drawings, etc.) for all material, equipment or assemblies furnished or installed as part of this contract. All items shall be arranged in alphabetical order and shall include an index of contents as its first page with name of subcontractor and material supplier on each separate item.
 3. Record Documents:
Provide, as described in Section 01 78 39, one (1) set of project record documents, with all dimensions of utility locations, variances from original drawings, etc., clearly documented in red.
 4. The following shall also be included:
 - a. Project Directory: Complete listing of all subcontractors, mechanics, and material suppliers involved in the work under this contract.
 - b. Guarantees/Warranties: Submit signed and notarized copies of all manufacturers, mechanics, contractors or supplier guarantees required by the contract documents, including General Contractor's one year warranty. Form and wording of guarantees must be as specified and/or as submitted by the Contractor and approved by the Architect prior to bidding.
 - c. AIA Forms:
 - 1) AIA Document G704 – Certificate of Substantial Completion issued by the Architect. (To be signed by Owner, Architect, and Contractor.)
 - 2) AIA Document G706* - Contractor's Affidavit of Payment of Debts And Claims (To be completed by the General Contractor.)
 - 3) AIA Document G706A* - Contractor's Affidavit of Release of Liens (To be completed by the General Contractor.)
 - 4) AIA Document G707* - Consent of Surety Company to Final Payment (To be completed by the General Contractor.)
- *Forms can be obtained from:
AIA Dallas, (214)764-3153, www.aiadallas.org or www.aia.org
- d. Lien Waivers: Submit signed and notarized lien waivers from all subcontractors, mechanics, and material suppliers involved in the work of this contract. No partial lien waivers shall be accepted. Lien Waiver form to be as supplied by the Architect.

PART TWO – PRODUCTS

Not Used.

PART THREE – EXECUTION

Not Used.

END OF SECTION

PROJECT RECORD
DOCUMENTS

PART ONE - GENERAL

1.1 DESCRIPTION

- A. Reference: Applicable provisions of the General and Supplementary Conditions and Division 1, General Requirements, govern all work of this Section.

1.2 WORK

- A. Maintain at the site for the Owner one record copy of:
 - 1. Drawings, Specifications, Addenda, Change Orders, and other modifications to the Contract.
 - 2. Approved Shop Drawings, and Product Data.
 - 3. Field Test Records.
- B. Record actual construction on drawings at the job site. Provide the job site set of drawings with close-out documents as required and one (1) photo copied set to the Architect.

1.3 RELATED REQUIREMENTS

- A. Submittals - Section 01 33 23
- B. Conditions of the Contract

1.4 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Maintain documents in a secure, clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
- B. Make documents available at all times for inspection by Architect.

1.5 RECORDING

- A. Label each document "PROJECT RECORD" in neat large printed letters with felt tip marking pen.
- B. Record information concurrently with construction progress.
 - 1. Do not conceal any work until required information is recorded.
- C. Legibly mark drawings to record actual construction:
 - 1. Field changes of dimension and detail.
 - 2. Changes made by Field Order or by Change Order.
 - 3. Details not on original contract drawings.

1.6 SUBMITTAL

At Contract Close-out, Record Documents shall be included on the two (2) USB flash drives as requested in Section 01 77 19 - Contract Closeout.

PART TWO – PRODUCTS

Not Used

PART THREE – EXECUTION

Not Used

END OF SECTION

PART ONE - GENERAL

1.1 GENERAL

- A. Work Included: This section covers all cast-in-place, reinforced and non-reinforced concrete construction as shown and specified.

1.2 REFERENCE STANDARDS

- A. ACI 318 "Building Code Requirements for Reinforced Concrete".
- B. Concrete Reinforcing Steel Institute, "Manual of Standard Practice".

1.3 DELIVERY, STORAGE AND HANDLING OF MATERIALS

- A. All materials shall be so delivered, stored and handled as to prevent the inclusion of foreign materials and the damage of materials by water or breakage. Package materials shall be delivered and stored in original packages until ready for use. Packages or materials showing evidence of water or other damage shall be rejected. All materials shall be of the respective quantities specified herein. Frozen or partially frozen aggregates shall not be used.

1.4 SUBMITTALS

- A. The contractor shall submit one hard copy (not to be returned) and one electronic copy in PDF format as per Section 01 33 23, through an approved testing laboratory, the proposed concrete mix to be used to the architect for approval. The proposed concrete mix must be proved by 3 cylinder tests in accordance with ASTM C-31. The owner shall pay for all design mixes and cylinder tests.
- B. Reinforcing steel fabricator shall submit one hard copy (not to be returned) and one electronic copy in PDF format as per Section 01 33 23 of detailed shop drawings for approval by the Architect on reinforcing bars and anchor bolts seating plans before fabrication or shipment.

PART TWO - PRODUCTS

- 2.1 CONCRETE: Concrete for interior slabs and footings shall have a 28-day minimum compressive strength of 3000 psi. Maximum water-cement ratio - .53 by weight. Exterior concrete shall have a 28 day minimum compressive strength of 4000 psi w/air entrainment of 6% \pm 1%. Maximum water-cement ratio - .50 by weight. No other admixtures shall be used without approval of Architect.

- A. Portland cement shall conform to ASTM C-150, Type I/II, or ASTM C-595, Type IL.
- B. Water shall be potable.
- C. Aggregate shall conform to ASTM C-33.

2.2 REINFORCING STEEL

- A. Deformed bars shall conform to ASTM A615, Grade 60.
- B. Welded wire fabric shall conform to ASTM A-185. Provide 6 x 6 W1.4 x W1.4 in all floor slabs unless noted otherwise.

2.3 VAPOR BARRIER: See specification section 07 26 16.

2.4 CONSTRUCTION JOINTS OR CONTROL JOINT: Provide 24 gage galvanized preformed steel screed keys as manufactured by Dayton Superior or approved equal. Provide steel stakes and splice plates as required by manufacturer.

2.5 Premolded expansion joint material shall be asphalt impregnated expansion joint material to meet ASTM specification D-1751-73. Expansion joint material shall have a “zip strip” or “tear tab” for ease in installation of backer rod and sealant.

PART THREE - EXECUTION

3.1 FORMS AND SCREEDS

- A. Form shall be so constructed that the finished concrete will conform to the shapes, lines, grades, and dimensions indicated on the drawings.
- B. Set all screeds with instrument. Wet screeds are unacceptable.

3.2 PLACING REINFORCEMENT

- A. Reinforcing shall be unpainted and uncoated, free from rust or scale and shall be cleaned and straightened before being shaped and put into position.
- B. Reinforcing shall be accurately positioned and securely tied.

3.3 CONCRETE MIXING

- A. Concrete shall be Ready-Mix in accordance with ASTM C-94.

3.4 CONCRETE PLACING

- A. Notify Architect 36 hours prior to placing to permit inspection of forms and reinforcing.
- B. Concrete shall be handled from the mixer to the forms as rapidly as possible by methods which shall prevent the separation of ingredients.
- C. Consolidate concrete as required.

3.5 CURING

- A. Moisture Cure: The slabs shall be moisture cured by ponding, continuous sprinkling and application of absorptive mats or 1 1/2 inch of sand kept continuously wet. Whichever method used, the slabs shall be kept continuously wet for 7 days.
- B. Curing Compound: Provide curing compound as recommended by manufacturer.

3.6 FINISHES: Interior slabs shall receive a steel trowel finish typically. Exterior slabs shall receive a light broomed finish over a steel trowel finish.

- A. Apply curing compound to interior and exterior concrete. Curing compound shall not be applied to slabs to receive floor hardener.

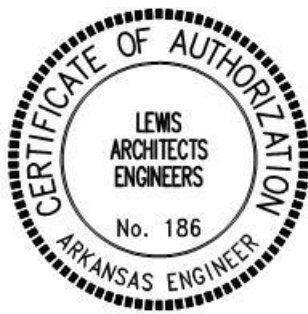
3.7 TESTING

- A. Samples and tests of the concrete shall be made by an approved independent testing and inspection laboratory. At Contractor's expense, a certified ACI technician shall take test cylinders at the job site. All other test shall be at paid for by the owner unless noted otherwise. Not less than one test for 40 cu. yd. of concrete, or fraction thereof, will be required, and in any event not less than one test for each day's pour. Not less than four specimens will be made for each test. Specimens shall be made and cured in accordance with current ASTM Specifications C-39 and C-31. A slump test shall be made for each set of test cylinders.
- B. Test cylinders shall be made in accordance with ASTM C-31, latest edition. Test one cylinder at 7 days, one at 14 days and two at 28 days. Test cylinders shall be cast on the project site and cured under conditions approaching that of concrete poured on job as nearly as possible. If average strength of test cylinders falls below strength called for, the Architect shall have the right to order removal and replacement of any defective concrete at the contractor's expense.

END OF SECTION

The Engineer of Record for Fire Training HVAC, SAU Tech, Camden, Arkansas Division 23 of the specifications.

March 20, 2025



HEATING, VENTILATION
AND AIR CONDITIONING

PART ONE - GENERAL

1.1 DESCRIPTION

1.1.1 Work included: This specification includes the furnishing of all labor, materials, tools, equipment, drayage, rigging, fees, permits, etc., unless specifically furnished by others, necessary or reasonably required, for the complete installation and operation of all the work as herein specified and/or as shown on the Drawings. The entire work shall be delivered in a complete and perfect working order to the satisfaction of the Architect.

1.1.1.2 The scope of the work shall include the general listings as shown below in addition to which this contractor shall furnish and install all required pipe, fittings, valves, hangers, supports, sleeves, insets, traps, and other such equipment, items, and appurtenances as may be required for a complete and operative system or systems, including all parts auxiliary to the system or systems whether or not specifically set forth herein and/or shown on the Drawings.

1. Systems of Heating And Air Conditioning
2. Automatic Temperature Controls
3. Systems of Natural Gas
4. Miscellaneous equipment and accessories
5. Tests, inspections, balancing and adjustment

1.2 APPLICABLE GENERAL SPECIFICATIONS AND REGULATIONS

1.2.1 The General Conditions, Supplementary Conditions, Instruction to Bidders and other pertinent documents, as issued by the Architect, are a part of these specifications and shall be complied with in every respect.

1.2.2 All Heating, Ventilation and Air Conditioning work and equipment, in whole or in part, shall conform to the applicable sections of the latest edition of the following ordinances, codes, and regulations which shall form a part of this specification.

1. National Electrical Code
2. American Gas Association Recommended Practices
3. National Fire Protection Association Recommended Practice
4. Local, City and State Codes and Ordinances
5. American Society of Mechanical Engineers Plumbing and Air Conditioning Codes
6. SMACNA

1.3 SUBMITTALS

1.3.1 The Contractor shall furnish electronic shop drawings using the submittal procedure as detailed in Section 01 33 23. Shop drawings are required even though the equipment is as specified.

1.3.2 All submittals must be on the manufacturer's standard certified submittal sheets or other approved sheets; faxed material will not be accepted. Each item must be marked with the symbol, letter, or number designating it in the specifications or on the plans and items must be arranged in the order specified or scheduled.

1.3.3 All performance data, details, dimensions, special features and accessories must be clearly marked.

1.3.4 Substitutions will not be considered without prior approval from the engineer.

1.3.5 Shop drawings are required even though the equipment is as specified.

1.3.6 Provide shop drawings on the following items:

1. Heating/Cooling Equipment
2. Thermostats
3. Gas Valves
4. All Accessories

1.3.7 If there are electrical revisions required due to substitute equipment, the Mechanical Contractor shall be responsible for any additional changes incurred by the Electrical Contractor.

1.3.8 When submitting substitute equipment with different rough-in requirements from the specified equipment, i.e. packaged unit ductwork openings, the Mechanical Contractor shall submit a sketch indicating the proposed installation for review by the Engineer. The Engineer may approve, revise or reject the proposal. If rejected, the Contractor shall provide the specified equipment or resubmit another approved substitute.

1.3.9 After shop drawings are approved, this contractor shall advise the General Contractor of any changes required in equipment supports and foundations and provide copies of shop drawings so that necessary provisions can be made.

1.3.10 Should a substitution be approved for use in lieu of that specified and should the substituted material prove defective or otherwise unsatisfactory, in the judgement of the engineer, for the service required within the guaranty period, the contractor shall replace the material or equipment as originally specified without additional cost to the Owner.

1.3.11 If submittals are "not approved" or marked "revise and resubmit", the complete package shall be corrected and returned for review. The contractor may provide a separate bound submittal which includes only the sections marked "not approved, or "revise and resubmit". Any additional submittal data requested shall also be provided in resubmittal.

1.4 COORDINATION

1.4.1 Chases, recesses and other openings in the building construction required for the location of pipes, or other, mechanical equipment, will be provided by the General Contractor. The mechanical Contractor shall advise the General Contractor of the sizes and locations, and furnish the necessary drawings in sufficient time to allow for provision of same; otherwise the additional cost caused thereby shall be paid by the mechanical contractor.

1.5 FEES AND PERMITS

1.5.1 Contractor shall pay for all fees, permits and charges for utility connections. This includes all fees required for improvement district non-refundable contribution.

1.6 OPERATION AND MAINTENANCE MANUALS

1.6.1 Refer to Section 01 77 19 – Contract Closeout for complete instructions.

1.7 CONTRACTOR REVISED DRAWINGS

1.7.1 The contractor shall, during the progress of the work, keep an accurate record of all changes and corrections from the layouts shown on the drawings. Record of changes may be kept by accurately making all changes on a set of prints during the progress of the job. Exact location of all underground utility service entrances and their connections to utility mains as well as all valves, etc., which will be concealed in the finished work shall be accurately indicated on the drawings by measured distances. Upon completion of the work and prior to final payment, the contractor shall furnish to the Owner one set of "as-built" prints legibly and accurately marked to indicate all changes, additions, deletions, etc., from the Contract Drawings.

1.8 OPERATION AND MAINTENANCE INSTRUCTIONS

1.8.1 Provide complete operation and maintenance instructions on all equipment and instruct Owner's representative in their operation.

1.9 NAME PLATES

1.9.1 All mechanical equipment (furnaces, packaged units, condensing units, energy recovery ventilators, exhaust fans, boilers, pumps, etc.) excluding PTAC units shall be labeled with black and white laminated bakelite nameplates securely fastened to the device.

1. Nameplate size shall be 1" x 2 1/2 " with beveled edges and 1/4" letters.
2. Nameplate shall have the equipment designation as noted on plans.
3. Nameplates shall be secured to equipment with rivets or sheetmetal screws.
4. Embossed stick back will not be allowed.
5. Nameplates for switches may be omitted for equipment where the disconnect is adjacent to the unit and is labeled by the Electrician.
6. Sample:

● CU-1 ●

PART TWO - PRODUCTS

2.1 METAL DUCTWORK

2.1.1 Furnish and install all supply, return, outside air, exhaust and other ductwork shown, together with splitters, deflectors, dampers, etc. All work shall comply with all requirements of NFPA #90-A. All ductwork, supports, bracing, etc., shall be galvanized.

2.1.2 All galvanized ductwork shall be fabricated by using ASTM A90, A568, A653, and A924 commercial grade lock forming G-90/G-60 materials.

2.1.3 All material and gauges can be fabricated per SMACNA's construction standards based on system operating pressure.

2.1.4 Special duct construction materials such as 16 ga. steel, aluminum, stainless steel and spiral shall be as noted on drawings or other areas in this specification.

2.2 DUCT INSULATION

2.2.1 Furnish and install on all square and rectangular supply, and return air ducts, internally (unless otherwise noted), 1" thick, Owens/Corning type 150 duct liner. Exterior ducts internally lined shall be with 1 1/2" thick type 200 duct liner.

2.2.2 Round duct work shall be insulated externally with 2", 3/4 lb. fiberglass stapled 4" o.c. and seal seams and joints with 4" wide aluminum tape. Insulation for outside air ductwork may be 1-1/2" thick.

2.3 AUTOMATIC CONTROLS

2.3.1 Thermostats for packaged units without hot gas reheat, gas fired and heat pump split systems shall be programmable equal to Carrier 33CS2PP2S-02 which is compatible with 1 and 2 stage heating/cooling for heat pumps and gas or electric heat systems. Thermostats shall have seven (7) day independent programming, automatic changeover, holiday scheduling, 4 hours setback override, lost power memory, security keypad lockout, compressor time guard and adjustable set point limiting.

2.4 CONDENSING FURNACE EXHAUST, CONDENSATE AND INTAKE PIPING AND FITTINGS

2.4.1 Piping and fittings shall be schedule 40 PVC conforming to ASTM D1785, D2466 and D2665. PVC primer and cement shall be per ASTM D2564.

2.4.2 Piping and fittings, including intake and exhaust piping terminations, shall be sized and installed in strict accordance with manufacturer's recommendation.

2.4.3 Exhaust piping shall be sloped back to furnace with a sufficient amount of hangers in order to prevent sagging and collecting of condensation. (Minimum 5 feet spacing).

2.4.4 When using a Wall Mounted Termination Kit, insert a No. 2 or 3 mesh painted galvanized hardware cloth bird screen inside exhaust opening of exterior or factory furnished screen.

2.4.5 Pipe hangers shall be carbon steel adjustable Clevis type, Grinnell Fig. 260 with all-thread rod to structure.

2.5 ROOF CURBS AND FLASHING

2.5.1 On Metal Roofs where mechanical items require curbs or flashing when penetrating roof, the Mechanical Contractor shall per detail coordinate with roof manufacturers to maintain existing roof warranty.

2.6 CONDENSATE LINES

2.6.1 Condensate lines shall be Schedule 40 PVC. Lines shall be vented, graded and securely anchored. Interior condensate drains which are condensing on the exterior surface after start up shall be insulated per cold water or refrigerant pipe insulation specification.

2.7 REFRIGERANT PIPING AND FITTINGS

2.7.1 Furnish and install piping, provide refrigerant and test the piping. Refrigerant piping, including liquid and hot gas lines, shall be hard drawn copper, Type "L" pipe (degreased). Soft copper will be permitted when sleeving below grade or installing in wall to eliminate fittings. Soft copper may also be installed on units less than 1 1/2 tons.

2.7.2 Joints shall be made with wrought copper fittings and silfos.

2.7.3 All suction lines to be insulated with 3/4" Armaflex II pipe insulation. (Suction and liquid lines shall be insulated on ductless split systems.) Tubular insulation shall be slipped on to piping and sealed with Armstrong 520 adhesive. Insulate all valves, tees and other fittings with AP Armaflex insulation tape and secure in place with black plastic cable ties. If it is necessary to slit the tubular insulation because of specific construction requirements, insulation shall be sealed along entire length with Armstrong 520 adhesive and secured with plastic ties 12" o.c. All exterior insulation shall be thoroughly coated with weather resistant protective finish as manufactured by Armstrong. Finish is a water base latex enamel coating for use over all forms of Armaflex. Install finish prior to installation of insulation and touch up damaged areas after installation is complete. Secure control wiring, not in conduit, to suction line with plastic ties at 12" o.c.

2.7.4 Do not run refrigerant lines thru return air plenum unless approved by engineer.

2.7.5 Hangers shall be carbon steel light weight Clevis hangers equal to Grinnell Fig. 65 with all-thread rod to structure at 6'0" maximum spacing. Suction and liquid lines can be supported by same hanger. Multiple lines in parallel shall be supported on unistrut trapeze hanger with all-threads to structure.

2.7.6 Moisture-Liquid Indicators: Forged brass, single port, removable cap, polished optical glass, solder connections, UL-listed, 200 degrees F (93 degrees C) temperature rating, 500 psi working pressure as manufactured by Sporlan Valve Company or Parker-Hannifin Corp.

2.7.7 Filter Driers: Sporlan HPC-100 Series Catch-All Liquid Line Dryer. Size per manufacturer's recommendation. Provide reversible type for heat pump applications.

2.8 GAS PIPING

2.8.1 Below grade:

2.11.1.1 All gas pipe below grade, and exterior of building, shall be approved plastic pipe unless otherwise indicated on plans or directed by local gas company. Plastic pipe shall conform to ASTM-D2513 and shall be installed per Arkansas Gas Code. An approved transition riser shall be used when connecting between plastic and steel. Provide tracer wire along entire length of all plastic below grade. Tracer wire shall not come in contact with the plastic pipeline. Tracer wire shall be 12 GAUGE, THHN copper.

2.8.2 Above grade:

1. All pipe shall be schedule 40 black steel assembled with 150 pound black malleable iron fittings. Piping exterior of building shall be painted with a rust-retardant enamel paint with color to match building. Pipe shall be painted where rising on building. All fittings and joints shall be painted same as pipe. No unpainted pipe or fittings will be allowed. All valves shall be screwed.
2. Provide full size dirtlegs at all low points of the system and at each appliance.
3. Provide a gas cock, union and appliance regulator at each gas using appliance.
4. Each segment of piping intended to be operated at pressure of less than 1 psig shall be given a leak test at a pressure of 25 psig for a period of 15 minutes without any drop in pressure. Use 3 inch gauge with 100 psig maximum scale.

2.8.3 Gas Valves:

1/2" & 3/4" A.Y. McDonald 10710 low pressure ball valve with handle
(interior only)

2" or smaller A.Y. McDonald 10685B flat/T-head iron body plug valve with check stop
if installed on exterior

2.8.4 Gas regulators: Sensus Model 243-8 (7"-14" WC), size and capacities as required for pounds to ounce service. Model 043 may be used for low pressure/low demand appliances.

2.9 MECHANICAL EQUIPMENT

2.9.1 All mechanical equipment shall be supplied as scheduled on plans. Substitutions must be approved in writing one week prior to bid date. No exception. All condensing units to have filter-drier, L.L. sight glass with moisture indicator, thermostatic expansion valve on coil, and crankcase heater.

2.10 MANUAL DAMPERS

2.10.1 Round dampers, unless integral to duct takeoff, shall be equal to Ruskin MDRS25, 20 ga. galvanized steel, 3/8" square axle shaft and molded synthetic bearings.

2.10.2 Rectangular dampers shall be equal to Ruskin MD25, 22 ga. galvanized steel 3/8" square axle shaft and molded synthetic bearings.

2.10.3 Provide lever handle operator with locking nut and mounting plate shown "OPEN" and "CLOSED" positions. Lever handle shall indicate damper position between open and closed. Lever handle shall be provided with a stand-off bracket to extend lever above external insulation where applicable. Shop fabricated dampers are not acceptable.

PART THREE - EXECUTION

3.1 AIR DISTRIBUTION

3.1.1 Metal Ductwork:

1. Ducts shall be installed with special care and shall present a neat appearance. Plenum chambers shall be 22 gauge, reinforced with structural angles. Exterior ductwork and all exposed, rectangular interior ductwork shall have all joints made watertight equal to Ductmate 25/35/45 connection system with roll-formed flanges, corner pieces, gasket and cleat.
2. All ducts with one side over 24 inches shall be cross broken for rigidity.
3. All four (4) sides of return air plenums, excluding ceiling plenums, shall be completely lined with 1" duct-liner.
4. Plastic duct tape shall not be used to hold joints together. Seal all joints in sheet metal supply, return and exhaust ductwork with "Hardcast" type DT sealing tape and type FTA adhesive, installed in strict accordance with manufacturer's instruction. Clean all dirt, oil, moisture, etc., before applying adhesive. At contractor's option, Hardcast Iron Grip IG-601, Foil Grip 1402 or Aluma Grip AFT-701 may be used on joints. However, if these products are substituted for DT mesh and adhesive, it is critical that the area of application is clean from dirt, oil, grease and moisture. Failure to do so will require reapplication of sealant. All joints on round duct to be screwed prior to sealant application. Seal all joints around equipment which permit leakage of conditioned air with Hardcast Foil Grip 1402.
5. Flexible duct connections: On duct connections of air moving equipment greater than 2000 CFM or as required for equipment installation, provide 30 ounce woven glass fabric, double coated with neoprene "Ventglas", or equal, canvas connections to give no less than 3" clear break between metals jointed. Insulate with 1" minimum fiberglass duct wrap with a vapor barrier facing of foil reinforced kraft. Seal with reinforced aluminum tape. Flexible connections on exterior shall be protected from weather with sheetmetal cover which shall be coated for protection same as ductwork.

3.1.2 Duct insulation:

3.1.2.1 Application:

1. Method 1: All ducts requiring insulation liner shall be lined by cutting pieces to fit snugly against the interior duct surfaces. The liner shall be fastened to the duct with a heavy coat of quick tacking rubber based adhesive spread over the entire duct surface. The top and bottom pieces are to lap the side piece and all exposed edges of the insulation at the duct ends shall be coated with adhesives. The heavy density surface shall face the air stream. The strength of Ultra-liner fiber assures positive attachment to adhesive and will not shear.
2. Method 2: All ducts requiring insulation liner shall be lined by carefully adhering to the liner in a continuous piece to clean flat metal sheets with a quick-tacking rubber based adhesive and forming the liner with the metal through the brake. The smooth heavy density surface shall face the air stream.
3. Method 3: All ducts over 24" in width or breadth shall be lined in accordance with Method 1 or Method 2 and in addition, the liner shall be secured with sheet metal screws and washers, or stud welded pins and clips.
4. All transfer ducts shall be in a "U" configuration and fully insulated with grilles located on both ends of the duct.

5. Externally insulate range hood exhaust duct with a UL classified duct wrap system to provide zero clearance to combustible protection. Wrap shall be equal to Pyroscat FP as manufactured by Premier Refractories and Chemicals, Inc. Duct wrap shall be installed in accordance with manufacturer's instructions.
6. All kitchen make-up air and air conditioning ducts shall be externally insulated.

3.1.3 Balancing and adjusting:

3.1.3.1 All systems shall be balanced and adjusted to the satisfaction of the Owner and the Engineer including the following items:

1. Adjust all fan belts to the proper tension.
2. Check all motor amperages and set speeds to avoid overloading.
3. This contractor shall verify that all new units supply airflow as indicated on schedule. Complete air balance forms shall be delivered to the design engineer for approval. Amount of fresh air shall be noted.
4. Check all systems for noise and vibration which may be objectionable.
5. When Contractor is satisfied that all systems may be acceptable to the design engineer, the Contractor shall call for an inspection.
6. Systems shall not be accepted until properly balanced.

3.1.4 Gas piping, general:

3.1.4.1 Provide full size dirtlegs at all low points of the system and at each appliance.

3.1.4.2 Provide a gas cock, union and appliance regulator at each gas using appliance.

3.1.4.3 Gas regulators shall be Sensus Model 243-8 (7"-14" WC), size and capacities as required for pounds to ounce service. Model 043 may be used for low pressure/low demand appliances.

3.1.4.4 Provide electrodes, sleeves, vents, valves, and comply with all applicable portions of the 2006 Arkansas Fuel Gas Code. Minimum depth below grade shall be 18".

3.1.5 Natural gas system testing:

3.1.5.1 Each segment of piping intended to be operated at pressure of less than 1 psig shall be given a leak test at a pressure of 25 psig for a period of 15 minutes without any drop in pressure. Use 3 inch gauge with 100 psig maximum scale.

3.1.5.2 Each segment of piping intended to be operated at a pressure of 1 psig or above shall be given a leak test at a pressure of 90 psig for a period of 15 minutes without any drop in pressure. Use 3 inch gauge with 150 psig maximum scale.

3.2 REFRIGERANT PIPING TESTING

3.2.1 Testing shall be done during progress of work or at completion to insure tight seams. Soap Test R-22 hot gas at 235 psi and liquid and suction lines at 300 PSI; R-500 liquid and suction lines at 245 PSI. Allow system to stand for 24 hours under pressure and, if no change in pressure, system may be considered tight.

3.2.2 Testing shall be done during progress of work or at completion to insure tight seams. Soap Test R-410A Suction and Liquid lines at 535 PSIG; R-407C Suction and Liquid lines at 380 PSIG. Allow system to stand for 24 hours under pressure and, if no change in pressure, system may be considered tight.

3.2.3 Before charging, evacuate the system to 0.15 inches of mercury absolute pressure. All pumps to operate at least four (4) hours at this reading.

3.3 GUARANTEE

3.3.1 This Contractor shall furnish a written certificate, guaranteeing all materials, equipment, and labor furnished by him to be free of all defects for a period of one (1) year from and after, the date of final acceptance of the work by the Owner, and this Contractor shall further guarantee that if any defects appear within the stipulated guaranty period, such work shall be replaced without charge.

3.3.2 This guarantee shall be extended to include the capacity and integrated performance of the component parts of the various systems, in strict accordance with the true intent and purpose of the specifications. The Contractor shall conduct such tests as are herein before specified, or as may be required by the Architect, to demonstrate the capacity and performance ability of the various systems and their component parts.

END OF SECTION

The Engineer of Record for Fire Training HVAC, SAU Tech, Camden, Arkansas Division 26 of the specifications.

March 20, 2025



COMMON WORK RESULTS
FOR ELECTRICAL

PART ONE - GENERAL

1.1 DESCRIPTION

1.1.1 Work included: This specification includes the furnishing of all labor, materials, tools, equipment, drayage, rigging, fees, permits, etc., unless specifically furnished by others, necessary or reasonably required, for the complete installation and operation of all the work as herein specified or as shown on the Drawings. The entire work shall be delivered in a complete and perfect working order to the satisfaction of the Architect.

1.1.1.2 The scope of the work shall include the general listings as shown below in addition to which this contractor shall furnish and install all required conduit, wire, fittings, boxes, connectors, hangers, supports, sleeves, poles, concrete bases and other such equipment, items, and appurtenances as may be required for a complete and operative system or systems, including all parts auxiliary to the system or systems whether or not specifically set forth herein and/or shown on the drawings.

1.2 APPLICABLE GENERAL SPECIFICATIONS AND REGULATIONS

1.2.1 The General Conditions, Supplementary Conditions, and other pertinent documents as issued by the Architect, are a part of these specifications and shall be complied with in every respect.

1.2.2 All electrical work and equipment, in whole or in part, shall conform to the applicable portions of the latest edition of the following ordinances, codes, and regulations in effect on the date of invitation for bids, which shall form a part of this specification.

- A. National Electrical Code
- B. American Gas Association Recommended Practices
- C. National Fire Protection Association Recommended Practice
- D. Local, City and State Codes and Ordinances
- E. American Society of Mechanical Engineers Plumbing and Air Conditioning Codes

1.2.3 In case of difference between building codes, specifications, state laws, local ordinances, industry standards, and utility company regulations and the contract documents, the most stringent shall govern.

1.2.4 Non-compliance: Should the subcontractor perform any work that does not comply with the requirements of the applicable building codes, state laws, local ordinances, industry standards and utility company regulations, he shall bear all cost arising from correcting the deficiencies.

1.3 FEE, PERMITS, AND INSPECTIONS

1.3.1 All required fees, permits and inspections shall be obtained and paid for by the electrical subcontractor for all electrical work.

1.3.2 This subcontractor shall upon completion of his work, furnish a certificate of final inspection to the Architect from the inspection department having jurisdiction.

1.3.3 Should any part of the drawings or specifications be found to be in conflict with applicable codes or ordinances, the contractor shall notify the Architect before submitting his bid. After entering into the contract, the Contractor shall complete all work necessary to meet the requirements of all codes or ordinances without additional expense to the Owner.

1.4 INSPECTION

1.4.1 The Contractor shall notify the Architect when the work reaches the following stages of construction, so that inspection of the work may be accomplished prior to the covering up of these items:

- A. All underground or under slab items in place and tested, but not covered.
- B. Interior items prior to being concealed.
- C. Tests.

1.4.2 The Contractor shall give to the proper authorities all requisite notices relating to the work under his charge, shall afford all authorized inspectors every facility for inspection and all violations of the law shall be the responsibility of the Contractor.

1.4.3 All materials and each part or detail of the electrical work shall be subject at all times to observation by the Engineer, and the Contractor shall be held strictly to the true intent of the electrical specifications in regard to quality of materials, workmanship, and the diligent execution of the contract. Such observation may include mill, plant, or shop. The engineer shall be allowed access to all parts of the work and shall be furnished with such assistance and information by the Contractor as is required to make a complete and detailed observation.

1.5 SUBMITTALS

1.5.1 Contractor shall provide shop drawings and required field drawings as required or instructed by the Architect. Deviation from the drawings and specifications shall be called to the attention of the Architect in writing at the time of submission of shop drawings. The Engineer's approval of any drawings shall not release the subcontractor from responsibility for such deviations. The subcontractor shall check the work described by the catalog data with the engineer's contract documents for deviation and errors. All shop drawings submitted shall bear signed certification that the Contractor has carefully checked shop drawings and found them to be correct and that they comply with plans and specifications. The Architect will not review any shop drawings which are not accompanied by this certification.

1.5.2 The Contractor shall furnish electronic shop drawings using the submittal procedure as detailed in Section 01 33 23. Shop drawings are required even though the equipment is as specified.

1.5.3 All submittals shall give complete catalog data for every manufactured item of equipment and all components to be used.

1.5.4 Where equipment requiring different arrangement of connections from those shown is approved, it shall be the responsibility of the subcontractor to install the equipment to operate properly and in harmony with the intent of the contract documents, and to make all change in the work required by the different arrangement of connections.

1.5.5 Submittals shall be submitted not later than thirty (30) days after awarding of the contract and before beginning the fabrication of any material or the installation of any equipment. Failure to submit in this period shall constitute grounds for rejecting the substitution. The Contractor may be requested to install proposed substitution adjacent to item specified for review by the Architect or the Owner.

1.5.6 The subcontractor shall correct the shop drawings, to conform to any corrections and/or changes requested by the Engineer.

1.5.7 Electrical submittals must be typewritten and factory approved. Long hand submittals and field sketches will not be accepted. Submittals shall indicate proper numbering sequence of all circuit breakers. Submittals not reflecting the sequence will be returned without further consideration.

1.5.8 Should a substitution be approved for use in lieu of that specified and should the substitute material prove defective or otherwise unsatisfactory, in judgement of the engineer, for the service required within the guaranty period, the contractor shall replace the material or equipment as originally specified without additional cost to the Owner.

1.5.9 If submittals are "not approved" or marked "revise and resubmit", the complete package must be corrected and returned for review. Partial submittals, including only the items not approved, are not acceptable.

1.5.10 The contractor shall provide shop drawings on, but not limited to, the following:

- A. Gear/Disconnects
- B. Wiring Devices/Coverplates
- C. Wire/Cable

1.6 INTENT

1.6.1 The intent of the electrical drawings and specifications is that the subcontractor shall furnish all labor and materials, equipment and transportation necessary for the proper execution of the work unless specifically noted otherwise. The work of this subcontractor as related to the other trades is shown in its majority on the drawings, but this subcontractor shall thoroughly examine the drawings and specifications relating to other trades in order to include all necessary work in his bid. No additional payments shall be considered for failure to properly interpret the responsibility to other trades. The subcontractor shall do all the work shown on the drawings and described in the specifications and all incidental work considered necessary to complete the work ready for use, occupancy, and operation by the Owner. The Architect reserves the right to make any reasonable changes in the locations indicated without cost to the Owner.

1.6.2 If there be conflicting variance between the drawings and specifications, the provisions of the most stringent shall control. In case of conflict between the General Conditions of the Contract or any modifications thereof and the electrical specification, the electrical specification shall control.

1.7 SITE INSPECTION

1.7.1 This contractor shall visit the site before submitting a bid on the work and shall thoroughly acquaint himself with conditions to be met and the work to be accomplished. Failure to comply with this shall not constitute grounds for any additional payment in connection with removing or modifying any part of the existing installation or installing any new work.

1.8 CONSTRUCTION DRAWINGS

1.8.1 At the completion of this project the Contractor shall provide the Owner two (2) sets of plans showing all piping systems, control systems, fixtures and equipment installed by this Contractor. These Drawings shall be correct in every detail and shall incorporate all changes made in the course of the conduct of the construction. These drawings shall be prepared in such a manner as to enable the Owner to properly operate, maintain and repair both exposed and concealed work.

1.9 UTILITIES, LOCATIONS, AND ELEVATIONS

1.9.1 Locations and elevations of the various utilities, included within the scope of this work, have been obtained from utility maps and/or other substantially reliable sources and are offered separate from the contract documents as a general guide only, without guarantees as to accuracy. This Contractor shall examine the site and shall verify to his own satisfaction the location and elevation of all utilities and shall adequately inform himself of their relation to the work before entering into a contract.

1.10 SOIL CONDITIONS

1.10.1 This specification and the drawings in no way imply as to the conditions of the soil to be encountered. When excavating may be required in execution of the work, this contractor agrees that he has informed himself regarding conditions affecting the work and labor and materials required, without recourse to any representation as to soil conditions that may appear, or seem to be implied, in any portion of the contract documents.

1.11 CUTTING AND PATCHING

1.11.1 This Contractor shall do all cutting and patching made necessary by his work, but in no case shall he cut through or into any structural member without written permission of the Architects. This Contractor shall furnish and pay for the installation of all sleeves required for his work.

1.12 EQUIPMENT FURNISHED UNDER OTHER SECTIONS

1.12.1 This Contractor shall furnish all necessary material and labor for the connection to the mechanical and electrical systems of all fixtures and equipment requiring such connections, and which fixtures and equipment are furnished by the Owner or are specified under other section of these specifications. If any such fixtures or equipment are not delivered prior to final acceptance, the services shall be capped or plugged at walls or floors as directed, and shall be left ready for future connection.

1.13 DEFECTIVE WORK

1.13.1 If inspections or tests show defects such defective work or material shall be replaced and inspections and tests repeated. All repairs shall be made with new material.

PART TWO - PRODUCTS

2.1 CONDUCTORS

2.1.1 The Drawings reflect sizes for copper conductors (no aluminum). Conductors shall be tested for opens and grounds before energizing. Suitable lugs for aluminum to copper connections at panels, motors, etc., shall be included. In no case shall wire be smaller than #12 A.W.G. All branch circuit wiring shall be solid N.E.C. type THWN or THHN for size #10 and smaller, with THHN where fluorescent fixture channel is used as a wireway.

All feeder wire shall be type THHN 90°C to all panels and motors of one horsepower and above. Aluminum wire shall not be used.

2.1.2 Insulation resistance tests shall be made in accordance with the National Electrical Code in the presence of the Architect or his representative, and the results filed with the Architect and Engineer before final acceptance.

2.1.3 If conductors are larger than set screw terminal provisions in panelboards, switches, etc., contractor shall furnish Burndy Type YE-P compression adaptors or AYP connectors as required. Adaptor shall match aluminum or copper as required. Cutting strands of conductors will not be allowed.

2.2 CONDUIT

2.2.1 Conduit below grade shall be Schedule 40 PVC with rigid 90° elbows, rigid steel or IMC. Interior branch circuits above floor slab shall be EMT. Exterior exposed conduit shall be galvanized rigid steel (RSC) only.

- A. Electrical metallic tubing shall be employed for all branch circuits. (Route all branch circuits above grade unless specifically shown or noted otherwise.)
- B. All steel conduit shall be galvanized inside and out, and aluminum conduit may be used only when soft nosed fish tapes are used to prevent scoring. No conduit or E.M.T. smaller than three quarter inch (3/4") IPS shall be used unless noted otherwise.
- C. The conduit system shall be electrically continuous for grounding purposes. Bond across all insulating bushings.
- D. Provide four 3/4" empty conduit from each flush mounted branch panel board to the attic or joist space.
- E. Flexible metal conduit shall not be smaller than 1/2" except as allowed in Article 350-3 of N.E.C. Contractor shall not use lengths longer than 6' and shall be supported as per 350-4 N.E.C. Flexible metal conduit shall not be used to go from light fixture to light fixture. Contractor shall securely anchor outlet box above each group of fixtures and then install flexible conduit to each fixture.
- F. Conduit 1" and smaller below slab shall be installed 6" below compacted fill. Conduit larger than 1" shall be 18" below compacted fill.
- G. Electrical contractor is responsible for installation of all conduit including power and all mechanical control systems.

- H. Install 3/4" EMT from all T-stat locations to 6" above ceiling. Verify location with Mechanical Contractor.
- I. Feeders and branch circuits installed outside of building slab shall be a minimum of 24" below finished grade.
- J. See section 3 for support and securing of conduit.
- K. MC and NM cables are not acceptable.

2.3 RACEWAY FITTINGS

2.3.1 Insulated bushings must be provided for all conductors number four (#4) and larger when entering or leaving a conduit. All rigid steel conduit without insulated bushings shall have malleable iron bushings.

2.3.2 Couplings, whether threadless or not, shall be run up tight to assure electrical continuity. Conduit threads must be devoid of non-conductive coatings, and connectors must be watertight where buried in concrete or fill.

2.3.3 Outlet, pull, and junction boxes shall be of sufficient sizes to properly nest the conductors passing in and out. Size and gauge shall not be smaller than that required by the National Electrical Code. All non-weatherproof outlet boxes shall be galvanized steel. All free-standing weatherproof outlet boxes shall be cast aluminum, hub or hubless, equal to Killark FS Series. Pull and Junction Boxes shall be as noted on plans.

2.3.4 Set screw and indenter fittings are not allowed.

2.4 SAFETY SWITCHES

2.4.1 Safety switches shall conform to governing industry NEMA Standards, heavy duty. They shall be listed by Underwriters Laboratories, Inc., where applicable. All safety switches shall be front operated with factory enamel finishes. All switches shall be either NEMA TYPE 1 or 3R, depending on moisture conditions or direct exposure to exterior conditions. Furnish complete with equipment ground kits.

2.5 DEVICES AND PLATES

2.5.1 Devices shall be equal to as follows unless noted otherwise on plans:

- Switch, single pole (S), Leviton CS120-2*
- Switch, double pole (S2), Leviton CS220-2*
- Receptacle, duplex, Leviton 5342*
- Receptacle, duplex, WP, G5362-WT* with TAYMAC MX4280S cover
- Receptacle, ground fault interrupter, Leviton 7899-SG*
- Receptacle, commercial grade, tamper-resistant, 5362-SG*
- Receptacle, commercial grade, GFCI, tamper Resistant, G5362-WT*

2.5.2 Plates: All non-weatherproof coverplates shall be Leviton nylon plates, color as noted by Architect. Provide horizontal or vertical gang plates where more than one device is concurrent at the same elevation or location. For interchangeable door mullion switches use narrow cover plates as manufactured by Arrow-Hart T-1650. Furnish blank plates for outlets without a device. All non-weatherproof coverplates throughout project shall be of the same material, color, finish and design and shall match any existing device coverplates as directed by architect.

- A. Blank weatherproof cover plates shall be cast aluminum with rubber gasket equal to Killark FSBC Series.

2.5.3 Heights: Switches shall be installed at 46" centerline to finish floor on strike side of doors. Receptacles and other outlets are at eighteen inches (18") centerline to finish floor unless noted otherwise on the drawings. Where receptacles occur where built-in cabinets or table tops exist, they shall be installed above working surfaces as directed. All receptacles to have grounding slots below parallel slots.

2.5.4 All of the following receptacles shall be GFCI type:

- A. Receptacles in bathrooms or within 6'-0" of a sink.
- B. NEMA 5-20R receptacles for a kitchen or concession area.
- C. Exterior receptacles shall be GFCI and WR type.

Notes 1: Receptacles for electric water coolers shall be on GFCI breaker.
2: Feed through protection of outlets is not allowed.

2.5.5 All exterior outlets and kitchen stub-up outlets shall be weatherproof boxes.

2.6 CIRCUIT BREAKER/PANELBOARDS

2.6.1 Furnish and install circuit breaker panelboards as indicated in panelboard schedule. Panelboards shall be of a dead front safety type equipped with thermal magnetic molded case circuit breakers. Panelboards shall be as manufactured by Cutler-Hammer, General Electric or Square D. Use bolt on breakers only. Two section panelboards shall be of equal size in both sections.

2.6.2 Panelboard doors shall have a cylinder tumbler type lock, and all doors shall be keyed alike, but different from telephone cabinets. On doors more than 48 inches high, provide a three point catch and lock; for double tub panelboards provide two reverse acting doors mounted. A complete typed circuit directory shall be provided, on the inside of each door identifying each circuit and load fed by that circuit. All boxes shall be factory painted gray.

2.6.3 Circuit breakers shall be quick-make, quick-break, thermal magnetic trip indicating, and have common trip on all multipole breakers. Handle ties will not be accepted.

All panelboards and circuit breakers shall be fully rated to AIC rating as noted on drawings. (No series rating allowed.)

2.6.4 All sub-feed breakers shall be connected to line side of main circuit breaker.

2.6.5 All circuit breakers shall be in proper sequence according to panel schedule. Factory rearranged sequence will not be accepted. See Section 1.5.7.

2.6.6 Each panelboard shall be labeled with a bakelite name tag indicating voltages, phase, and wire, and panelboard identification. See Section 2.10. Each circuit shall be identified by numbers furnished by factory as 1 thru 42 or 1 thru 84 in 2 section panelboards. Any change or alteration in numbering shall be corrected by contractor at his expense.

2.6.7 Main Circuit Breakers "MCB" shall be Separate Vertically Factory Mounted on bus bars and not "back-fed" branch style. Service Entrance Main Breakers shall also have barriers to comply with UL 67 and NEC 230.

2.7 GROUNDING

2.7.1 The service entry equipment, including switchboard frame and grounding bus and all outgoing feeder and/or motor supply connections shall be permanently and effectively grounded as required per Article 250.50 of the National Electric Code. The grounding electrode system shall consist of the following:

- A. 1" metal water pipe with connection within 5'0" of point of entry to building.
- B. Concrete encased rebar.
- C. Metal frame of the building or structure.
- D. 3/4" x 10'0" ground rod.
- E. Ground ring consisting of 20'0" of #2 AWG base copper conductor.

Use Burndy Bar Connector or Cadwell to attach to water line. Contractor to verify that the resistance to ground is less than 25 ohms. Ground wire to panel shall be in PVC. All connection shall be visibly inspected and approved by Engineer.

2.8 NAME PLATES

2.8.1 All electrical equipment, timer switches, safety switches, starters, panels, and transformers shall have black or red and white laminated bakelite nameplates securely fastened to device.

- A. Nameplate size shall be 1-1/2" x 4" with beveled edges and 1/4" letters.
- B. Nameplate shall include panel or equipment designation. Include amperage, voltage, phase and wire for the panels, and "panel fed from" for the equipment.
- C. Nameplates shall be installed to panels, cabinets, switches, etc. with rivets or sheet metal screws. Plates attached to drywall or block on interior may be adhesive back. Nameplates for normal equipment shall be black, emergency equipment shall be red. Letters shall be white.
- D. Embossed stick back will not be allowed.
- E. Name plates for switches may be omitted for furnaces when the equipment which is serviced is obvious to service technicians.
- F. Where equipment disconnect is at panel, secure nameplate (with unit designation and "Fed From Panel") to the equipment.

G. Samples:

PANEL A 225A, 120/208V, 3P, 4W
CU-1 FED FROM PANEL E

2.9 SYSTEMS CONDUIT

2.9.1 All conduit shall be left sealed against moisture collection, and a number sixteen (#16) gauge galvanized pull wire left between each box or outlet for the installer. Provide a minimum of 1" EMT to all systems boxes to include, but not limited to: telecom, data, voice, video, audio, security, surveillance and fiber. (Fire alarm and intercom shall be 3/4" EMT minimum.)

PART THREE - EXECUTION

3.1 EQUIPMENT AND MATERIAL

3.1.1 In order to establish standards of quality, the engineer has, in the detailed specifications referred to certain products by name and catalog number. This procedure is not to be construed as eliminating from competition other products of equivalent or better quality by other manufacturers where fully suitable in design. Where multiple manufacturing sources are shown on the drawings or herein specified, the subcontractor shall limit his bid to one of those manufacturers.

3.1.2 The subcontractor shall abide by the engineer's judgement when proposed substitute materials or items of equipment are judged to be unacceptable and shall furnish the specified material or item of equipment in such case. All proposals for substitution shall be submitted in writing by the General Contractor and not by the electrical subcontractor or material suppliers. The engineer will approve or disapprove proposed substitution in writing within a reasonable time and, if any request for a substitution is rejected, the Contractor shall automatically furnish material specified. No substitute materials shall be used unless approved in writing.

- A. Delivery and storage: Equipment and materials shall be delivered to the site and stored in original containers, suitably sheltered from the elements. All items subject to moisture damage (such as coils of dry transformers) shall be stored in dry, heated spaces.
- B. Protection: Equipment shall be tightly covered and protected against dirt, water, chemical, or mechanical damage or theft. At the completion of the work, fixtures, equipment, and materials shall be cleaned and polished thoroughly and turned over to the Owner in a condition satisfactory to the Architect. Damage or defects developing before acceptance of the work shall be made good at no expense to the Owner.
- C. Main switchboard shall be provided with a heater of type approved by Architect. Heater shall be installed in switchboard, and shall remain as directed by Architect from time of installation until final acceptance.

- D. Manufacturer's directions: Shall be followed completely in the delivery, storage, protection and installation of all equipment and materials. The electrical subcontractor shall promptly notify the Architect in writing of any conflict between any requirements of the contract documents and the manufacturer's directions and shall obtain the Architect's written instructions before proceeding with the work. Should this subcontractor perform any work that does not comply with the manufacturer's directions or such written instruction of the Architect he shall bear all costs arising in connection with correcting the deficiencies.

3.2 COORDINATION

3.2.1 This subcontractor shall compare the electrical drawings and specifications with the drawings and specifications of all other trades, and shall report any discrepancies to the Architect and obtain from him written instruction for changes necessary in the electrical work. The electrical work shall be installed in cooperation with other trades installing inter-related work. Before installation, the subcontractor shall make proper provision to avoid interferences in a manner approved by the engineer. All changes required in the work of the contractor caused by his neglect to do so shall be made by him at his own expense.

3.2.1.1 The orientation of Light Fixtures in the same space shall match and be approved by Architect.

3.2.1.2 Contractor shall power 0-10V low-voltage wiring to all fixtures throughout circuit whether shown or not.

3.2.1.3 Occupancy sensor and lighting control manufacturer specified shall be provided layout shop drawings prior to beginning work.

3.2.1.4 Anchor bolts, sleeves, inserts and supports shall be installed by this subcontractor where required. Any expense resulting from the location of such appurtenances shall be borne by the electrical subcontractor.

3.2.1.5 Slots, chases, openings, and recesses: Slots, chases, openings, and recesses through floors, walls, ceilings, and roofs, as specified, will be provided by the electrical subcontractor in the proper material, and he shall properly coordinate the location. No structural member shall be disturbed in any manner without written permission of the Architect.

3.2.1.6 Sleeves: All conduits passing through masonry construction shall be fitted with 20 gauge galvanized steel sleeve. Each sleeve shall extend through its respective floor or wall, and shall be cut flush with each surface, except floor sleeves which shall be extended to a minimum of 1 inch above the floor. Unless otherwise noted, the sleeve shall be two sizes larger than the overall outside diameter of the conduit. Sleeves thru non-fire rated structure may be PVC. Sleeves in walls below grade shall be a pre-engineered assembly equal to LINK-SEAL as manufactured by Thunderline Corporation; assembly shall be sized and installed in accordance with manufacturer's recommendations. All sleeves shall be fastened in place prior to pouring concrete and caulked with flexible caulking or LINK-SEAL device as applicable. Sleeves or conduits shall not be installed in spread footing. Core drilling will not be permitted without consent of the structural engineer. Sleeves in grade beams shall be installed near center.

3.3 PENETRATION WALL/FLOOR FIRESTOP

3.3.1 All fire walls, fire barriers, fire partitions, upper floors of multi-story buildings where pipe or ducts pass through, into, or out of, shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E 814, with a minimum positive pressure differential of 0.01 inch of water and shall have an F rating of not less than the required fire-resistance rating of the wall penetrated.

3.3.2 A UL approved firestop system shall be as specified by 3M Fire Protection Products, SpecSeal Firestop Products, or approved equal.

3.3.3 Firestopping material and method of installation shall be submitted to the Architect for approval.

3.3.4 Steel electrical boxes in fire walls, barriers or partitions shall be covered on the back with UL classified putty pads.

3.3.5 Cable tray penetrations thru fire walls, barriers and partitions shall be sealed with removable intumescent firestop pillows.

3.4 OPERATION AND MAINTENANCE INSTRUCTIONS

3.4.1 Provide complete operation and maintenance instructions on all equipment and instruct Owner's representative in their operation.

3.5 METERING

3.5.1 This contractor shall furnish and install all conduit, wire, cabinets, weatherheads, etc., as required by local utility company for metering purposes. Contractor shall verify with utility the type, location, and general requirements for metering.

3.6 SERVICE

3.6.1 The Contractor shall arrange with the utility companies for the electrical and the telephone service as shown. The Contractor shall obtain the consent of each serving utility company for the electrical and telephone service connections shown for the project. Each utility shall be requested by the Contractor to examine the contract documents and reply in writing their consent to service. This contractor shall furnish and install all material required by local utility company for metering.

3.6.2 The electrical service entrance will be installed by this subcontractor as shown and detailed on the drawings. The electrical service characteristics are to be as shown on the drawings, and conductors shall be code type THHN or THWN installed in rigid conduit or as noted.

3.6.3 Underground telephone service shall be installed by utility serving facility. Contractor shall pay all cost associated with service as required by the telephone company. Refer to Riser Diagram for specific details.

3.6.4 Contractor shall pay all costs, furnish all material, labor, drawings, etc., as required by utility companies for relocation of existing telephone and electric service. Contractor shall pay all additional costs for underground service, pad mounted transformer and pad.

3.7 CLEANUP

3.7.1 The contractor shall remove his tools, machinery, debris, etc., from the premises when his part of the work is finished. He shall leave the premises free of all obstructions and hindrances.

3.8 WARRANTY

3.8.1 The electrical subcontractor shall warrant all equipment furnished and work performed under the electrical subcontract for a period of one (1) year from the date of written acceptance of the work. This guarantee shall cover all patching, refinishing, etc., required to restore the faulty condition at no additional expense to the Owner.

3.9 EXCAVATION FOR UTILITIES

3.9.1 Existing utilities encountered in excavating for this contract shall be relocated outside the building lines as directed by the Architect.

3.9.2 Each contractor shall perform all excavations of every description and of whatever substances encountered, to the depths indicated on the drawings and required for the installation of his portion of the utilities systems. Wherever possible, all exterior lines shall be installed with a minimum of 30" of cover, unless shown otherwise. All excavated materials not required for fill or backfill shall be removed and wasted as directed by the Architect. All excavations shall be made by open cut. The banks of trenches shall be kept as nearly vertical as practicable and where required shall be properly sheeted and braced. Rock shall be excavated to a minimum overdepth of 4" below the trench depths specified. The overdepth rock excavation shall be backfilled with loose, moist earth, thoroughly tamped. All grading in the vicinity of excavations shall be controlled to prevent surface ground water from flowing into the excavations. Any water accumulated in the excavations shall be removed by pumping, or by other approved method.

3.9.3 The trenches shall be carefully backfilled with the excavated materials approved for backfilling, or other approved material free from large clods of earth or stones. The backfill shall be in layers, moistened and tamped. Any trenches where settlement occurs shall be reopened for proper compaction.

3.10 SAFETY

3.10.1 The electrical subcontractor is completely responsible for how all his work is performed; safety, in, on, or about the job site; methods of work performance; and timeliness in such performance. In the event he is unsatisfied with the performance and/or cooperation of other trades, he shall set forth such complaints in writing for the Architect's review. In no event shall this subcontractor expect to be specifically directed in the protection of personnel or material by the Owner, Architects, or Engineer.

3.11 BRANCH CIRCUIT WIRING

3.11.1 All branch circuit wiring shall be installed in conformance with the National Electrical Code. Conductors shall be code Type THW or THHN. For all runs from low voltage panels where the first outlet is not more than fifty feet (50') to the panelboards, use minimum number twelve (#12) AWG; for runs fifty-one to eighty (51' to 80') to the first outlet, use number ten (#10) AWG; for runs over eighty feet (80'), use number eight (#8) AWG unless otherwise noted. Branch circuit color coded as follows: Phase "A" black; Phase "B" red; Phase "C" blue; switch legs yellow or orange on brown; grounding - green. All joints shall be twisted and inserted into a Scotchlok insulated connector. Provide ground wire in all branch circuits.

3.11.2 This subcontractor is warned to adhere strictly to the circuitry shown on the plans to achieve optimum system balance. Failure to properly circuit according to plans shall result in rewiring as directed at no additional cost to the Owner.

3.11.3 All parallel conductors shall be of the same length, of the same conductor material, circular - mil area, same insulation type and terminated in the same manner. No parallel conductors smaller than #1/0 are acceptable.

3.12 ELECTRICAL WIRING

3.12.1 The electrical wiring for the mechanical equipment furnished by others is separated into two main wiring divisions: (1) Power wiring by electrical contractor, and (2) control wiring below 120V by the mechanical contractor.

- A. Power wiring shall be the energy source and include installation of circuit protective devices, motor starters or controllers, conduit, wiring and safety disconnects from the power supply, and termination at the motor or appropriate terminals on the equipment. This also includes all 120V control wiring.
- B. Control wiring shall comprise all wiring not included in power wiring and below 120V. This wiring shall specifically include all automatic temperature control wiring, safety pilot interlocking wiring, push button starting, pilot light and signal wiring, etc., that is not included as part of pre-wired equipment but necessary for the proper operation and safety of the equipment. All conduit, boxes, etc., required for control wiring shall be provided and installed by the electrical contractor. See Section 2.3.1.

3.12.2 The mechanical contractor shall furnish to the electrical contractor all magnetic motor starters and operators for installation and connection by the electrical contractor except for kitchen hood interlock system. (See wiring diagrams on drawings). Electrical contractor shall interlock 120V or above wiring between fans and operable louvers. Electrical contractor to furnish all manual motor starters.

3.13 MOTOR CONNECTIONS

3.13.1 Wherever equipment is shown requiring electrical connection as specified, all wiring shall be furnished and installed under this section of the specifications. Starting switches, protective devices, and other means for the operation and control of equipment shall be furnished under the various sections and installed under the ELECTRICAL SECTION unless specifically noted otherwise on the Drawings.

3.13.2 Additional disconnects required by the National Electrical Code shall be furnished, installed and connected under the ELECTRICAL SECTION. Motor terminal or equipment connection shall terminate in a junction box or disconnect adjacent to the equipment.

3.13.3 Install approximately twelve inches (12") maximum of flexible conduit at final connection of equipment. For motors or equipment in exterior damp/wet locations, use polyvinyl chloride jacketed flexible metallic conduit.

3.14 TEMPORARY CONSTRUCTION POWER

3.14.1 This contractor shall furnish and install temporary construction power wiring as required to provide sufficient power and lighting for all construction needs. Temporary electrical service shall be obtained in the name of the General Contractor and it will be the General Contractor's responsibility to pay all power company charges. The temporary service shall be obtained from the local utility company. All receptacles shall be grounding type. Provide temporary lighting as required or directed by the Architect for adequate illumination for construction purpose.

3.15 WORKMANSHIP

3.15.1 All conduits shall be thoroughly swabbed out before pulling wire; all ends of conduit shall be free of burrs or defects.

- A. Bends shall be made with an approved bender, and no conduit shall be installed with crimps or indenters. Where applicable, factory formed long radius ells are recommended.
- B. Electrical raceways shall be concealed where possible. All conduit runs shall be grouped where possible, properly supported by approved conduit or pipe hangers and run parallel or perpendicular to building lines. Where surface mounted panelboards are utilized, contractor shall mount all conduits above and below panel to Unitstrut Channels with P2900 Series Universal clamps or equal. Conduit shall be arranged in a neat and orderly manner. Failure to comply with the above will result in replacement without additional cost to the Owner.
- C. All conduit shall be supported with Cast "C" clamps, "U" straps or ring hangers, attached to rods and/or plates to prevent sag and undue strain. Perforated straps or wire will not be permitted.
- D. Caddie clips shall not be attached to ceiling grid wire.
- E. All conduit to be supported every 10' and within 3' from outlet boxes. Conduit shall be attached to support with clamps or caddie clips. Wire is not acceptable.

3.16 ROOFING FLASHING

3.16.1 Where electrical items penetrate the roofing, the Contractor shall coordinate location and size as required for factory vent flashing assembly to be furnished and installed by the Roofing Contractor in strict accordance with the Roof Manufacturer's recommendation.

3.16.2 If single ply membrane roof is used, Contractor shall use factory pipe flashing assembly as recommended by Roofing Manufacturer. Coordinate locations with Roofing Contractor.

3.17 NOISE AND VIBRATION CONTROL

3.17.1 The electrical systems as installed shall be free from objectionable noise or vibration. The Contractor shall isolate motor starters, conduits, fixture ballast, transformers, equipment, etc., as directed or required so as to insure an acceptable noise level free from objectionable vibration.

END OF SECTION

SEEDING

PART ONE - GENERAL

1.1 WORK INCLUDED

- A. Preparation of sub-grade
- B. Placing topsoil
- C. Seeding 10' around new building and areas disturbed by construction
- D. Fertilizing and watering
- E. Compacting disturbed gray gravel area that is not seeded

1.2 SUBMITTALS

Submit certification that the seed meets the specifications requirements, and that it complies with the requirements of the Arkansas State Plant Board.

PART TWO - PRODUCTS

2.1 MATERIALS

- A. Topsoil: Use topsoil excavated from the site only if conforming to the specified requirements:
 - 1. Existing topsoil: Natural, fertile, agricultural soil capable of sustaining vigorous plant growth, not in frozen or muddy condition, containing not less than 6% organic matter, and corrected to pH value of 5.9 to 7.0. Free from subsoil, slag, clay stones, lumps, live plants, roots, sticks, crabgrass, cough grass, noxious weeds, and foreign matter.
 - 2. Imported topsoil: Natural, fertile, agricultural soil typical of locality, capable of sustaining vigorous plant growth, from well drained site free of flooding, not in frozen or muddy condition, not less than 6% organic matter, and lumps, live plants, roots, sticks, crabgrass, cough grass, noxious weeds and foreign matter.
- B. Fertilizer: FS 0-F-241, commercial type.
 - 1. Proportions: 10N-20P-10K, unless soil test analysis indicated different proportions are required.
- C. Seed: Common hulled bermuda.

PART THREE - EXECUTION

3.1 PREPARATION OF SUB-GRADE

- A. Fine grade sub-grade, eliminating uneven areas and low spots. Maintain lines, levels, profiles, spot elevations, and contours shown on the drawings. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials, undesirable plants and their roots, stones, and debris subject to termite attack, rot or corrosion. Do not bury foreign material beneath areas to be seeded or sodded. Remove sub-soil which has been contaminated with petroleum products.
- C. Cultivate sub-soil to a depth of 3" where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted sub-soil. Depressions where water will stand or inequalities in the grade shall be corrected before topsoil is spread.

3.2 PLACING TOPSOIL

- A. Furnish, place, and spread topsoil to a minimum depth of three inches over entire areas to be sodded or seeded.
- B. Place topsoil during dry weather and on dry unfrozen sub-grade.
- C. Grade to eliminate rough and low areas, ensuring positive drainage. Maintain levels, profiles, spot elevations, and contours of sub-grade. For seeding areas, rake until surface is smooth. Provide positive surface drainage away from the building walls in all directions.
- D. Remove stones, roots, grass, weeds, debris and other foreign non-organic material while spreading.

3.3 FERTILIZING SEEDED AREAS

- A. After fine grading apply fertilizer at a rate recommended by the manufacturer.
- B. Mix thoroughly into upper two inches of topsoil.
- C. Lightly water to aid breakdown of fertilizer and to provide moist soil for seed.
- D. Apply fertilizer within 48 hours before seeding.

3.4 SEEDING

- A. Apply seed at rate of one to two pounds per 1000 square feet.
- B. Roll seeded area with rollers not exceeding 112 pounds.

- C. Apply water with fine spray immediately after sowing.
- D. Water shall be applied on all seeded areas in quantities and at intervals to provide optimum growing conditions for the establishment of a healthy, uniform stand and cover of grass. Maintain seeded areas until end of project.

END OF SECTION