

INSTRUCTIONS FOR SUBMITTING BID PROPOSALS

- 1) FILL OUT THE INVITATION TO BID FORM COMPLETELY. YOU MAY LIST YOUR INFORMATION ON THE INVITATION TO BID FORM OR INCLUDE INFORMATION ON A SEPARATE SHEET, AS NEEDED.
- 2) **SIGN & NOTARIZE** THE AFFIDAVIT ON THE BACK OF THE INVITATION TO BID FORM AND COMPLETELY FILL OUT INFORMATION.
- 3) **SIGN & NOTARIZE** ALL AFFIDAVITS: A. AFFIDAVIT FOR CONTRACTS AND PAYMENTS (over \$25,000) and B. STATEMENT OF NON-COLLUSION ON BIDS.
- 4) **CLEARLY IDENTIFY OUTSIDE OF SEALED ENVELOPE AS FOLLOWS:**

BID # 2024-3 Construction of a New Election Board Building

- 5) FILE BID PROPOSAL WITH THE KIOWA COUNTY CLERK, EITHER BY MAIL OR IN PERSON, BEFORE 10:00 A.M. ON **May 20, 2024**. BIDS WILL BE OPENED ON OR AFTER THAT DATE.
- 6) ALL FORMS MUST BE FILLED OUT COMPLETELY. ANY INCOMPLETE FORMS WILL RESULT IN REJECTION OF THE BID, AS THE BOARD OF COUNTY COMMISSIONER'S CONSIDERS SUCH ACTION TO BE IN THE INTEREST OF THE COUNTY.
- 7) THE MAILING ADDRESS OF THE KIOWA COUNTY CLERK IS AS FOLLOWS:
NIKKI DODD, KIOWA COUNTY CLERK/ TAMMY NASH, PURCHASING AGENT
P.O. BOX 73
HOBART, OK 73651
- 8) ALL BID INFORMATION SHALL BE TYPEWRITTEN OR LEGIBLY WRITTEN IN INK. ALL CORRECTIONS SHALL BE INITIALED BY THE PERSON SIGNING THE INVITATION TO BID FORM.
- 9) IF YOU HAVE ANY QUESTIONS CONCERNING THE BID SPECIFICATIONS, PLEASE CONTACT THE FOLLOWING (AS APPLIES TO SPECIFIC BID.)

NIKKI DODD, KIOWA COUNTY CLERK/ TAMMY NASH, PURCHASING AGENT
(580) 726-5286

COMMISSIONERS OFFICE 580-726-3377

DISTRICT # 1 COMMISSIONER REEDER REESE, CURTIS STUBBS, FOREMAN-BARN 580-347-2586
DISTRICT # 2, COMMISSIONER, STAN FUNKHOUSER, DANIEL ROGERS, FOREMAN-BARN 580-846-9023
DISTRICT # 3, COMMISSIONER, GARY JENNINGS, LEE HORTON, FOREMAN-BARN 580-569-2550

FOR QUESTIONS CONCERNING DEADLINES AND BID RESULTS, CALL: NIKKI DODD

NOTE:

BID PROPOSALS WHICH DO NOT INCLUDE THE INVITATION TO BID FORM AND THE AFFIDAVIT FOR CONTRACTS AND PAYMENTS WILL BE REJECTED AS INCOMPLETE. ALL BID PROPOSALS, WHICH CONTAIN FORMS, WHICH DO NOT HAVE ALL REQUIRED SIGNATURES, AND NOTARIZATIONS WILL ALSO BE REJECTED. ANY BID RECEIVED AFTER BID CLOSING DATE AND TIME WILL BE REJECTED. ANY BID OPENED IN ERROR, DUE TO BEING IN AN UN-MARKED OR ELIGIBLY MARKED CONDITION, WILL BE RENDERED NULL AND VOID.

NO EXCEPTIONS WILL BE MADE

Kiowa

County, Oklahoma

COUNTY PURCHASING OFFICE

Kiowa

County Court House

Hobart

, Oklahoma

Phone Number +1 (580) 726-5286

Invitation to Bid

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

Date Issued Apr 24, 2024

Page ___ of ___

BID NUMBER

2024-3

BID CLOSING DATE AND HOUR

May 20, 2024 10:00 a.m.

REQUIRED DELIVERY DATE

(Days after award of Purchase Order)

Date of Delivery

TERMS

Empty boxes for terms and delivery date.

ITEM	QUANTITY	UNIT OF ISSUE	DESCRIPTION	UNIT PRICE	TOTAL
			<p>SEE ATTACHED BID SPECIFICATIONS</p> <p>DAVIS BACON RULES APPLY</p> <p>For questions concerning this project contact the Kiowa County Commissioner's. Phone numbers are on the instruction sheet.</p> <p>The Board has the right to reject any and all bids.</p> <p>(OVER)</p>		

Request for Taxpayer Identification Number and Certification

Go to www.irs.gov/FormW9 for instructions and the latest information.

**Give form to the
 requester. Do not
 send to the IRS.**

Before you begin. For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

Print or type. See Specific Instructions on page 3.	1	Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.)
	2	Business name/disregarded entity name, if different from above.
	3a	Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only one of the following seven boxes. <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C corporation <input type="checkbox"/> S corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner. <input type="checkbox"/> Other (see instructions) _____
	4	Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any) _____ <i>(Applies to accounts maintained outside the United States.)</i>
	3b	If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions <input type="checkbox"/>
	5	Address (number, street, and apt. or suite no.). See instructions.
	6	City, state, and ZIP code
	7	List account number(s) here (optional)
		Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Social security number					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 40%; border: 1px solid black; height: 20px;"></td> </tr> </table>		-		-	
	-		-		
or					
Employer identification number					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 85%; border: 1px solid black; height: 20px;"></td> </tr> </table>		-			
	-				

Note: If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person	Date
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

AFFIDAVIT FOR CONTRACTS AND PAYMENTS

STATE OF OKLAHOMA)
) ss
 COUNTY OF)

THE UNDERSIGNED (ARCHITECT, CONTRACTOR, SUPPLIER OR ENGINEER), OF LAWFUL AGE, BEING FIRST DULY SWORN, ON OATH SAYS THAT THIS INVOICE OR CLAIM IS TRUE AND CORRECT. AFFIANT FURTHER STATES THAT THE (WORK, SERVICES OR MATERIALS) WILL BE (COMPLETED OR SUPPLIED) IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, ORDERS OR REQUESTS FURNISHED THE AFFIANT. AFFIANT FURTHER STATES THAT (S)HE HAS MADE NO PAYMENT DIRECTLY OR INDIRECTLY TO ANY ELECTED OFFICIAL, OFFICER OR EMPLOYEE OF THE STATE OF OKLAHOMA, ANY COUNTY OR LOCAL SUBDIVISION OF THE STATE, OF MONEY OR ANY OTHER THING OF VALUE TO OBTAIN PAYMENT OF THE INVOICE OR PROCURE THE CONTRACT OR PURCHASE ORDER.

 (CONTRACTOR, ARCHITECT, SUPPLIER, OR ENGINEER)

By _____

ATTESTED TO BEFORE ME THIS _____ DAY OF _____, 20____

 NOTARY PUBLIC (OR CLERK OR JUDGE)

NOTE: 62 O.S. § 310.9 (B), authorizes counties executing a contract with any architect, contractor, supplier or engineer for construction work, services or materials which are needed on a continual basis from such architect, contractor, supplier or engineer under the terms of such contract, or executing more than one contract during the fiscal year with such architect, contractor, supplier or engineer, may require that the architect, contractor, supplier or engineer complete a signed affidavit as provided for in subsection A of this section which shall apply to all work, services or materials completed or supplied under the terms of the contract or contracts.

CONTRACTORS CHECKLIST FOR BID SUBMITTAL

The Oklahoma Public Competitive Act of 1974 requires the following items to be submitted at the bid opening in order to be qualified bid:

1. **Bid Form** – Signed
2. **Business Relationships Affidavit** – Signed and notarized
3. **Non-Collusion Bid Affidavit** – Signed and notarized
4. **Bid Guarantee** (five percent of bid proposal)
 - A. Certified Check
 - B. Cashier's Check
 - C. Bid Bond
 - D. Irrevocable Letter of Credit from a banking institution insured by F.D.I.C. or F.S.L.I.C. (State Law limits this to a maximum of \$100,000 contracts.)
5. Acknowledge All Addendums on Bid Form
6. **Material Only** bids will not require a Bid Guarantee or Bonds.

I. ARTICLE 1 - DEFINITIONS:

- A. Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.
- B. Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201/CMA, AIA Document A232-2009, or in other Contract Documents applicable to the Bidding Documents.
- C. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
- D. A Bid is a complete and properly signed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- E. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
- F. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- G. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.
- H. A Bidder is a person or entity who submits a Bid.

II. BIDDER'S REPRESENTATIONS:

- A. The Bidder by making a Bid represents that:
 - 1. The Bidder has read and understands the Bidding Documents and the Bid is made in accordance therewith.
 - 2. The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, for other portions of the Project, if any, being bid concurrently or presently under construction.
 - 3. The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.
 - 4. The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.

INSTRUCTIONS TO BIDDERS

III. BIDDING DOCUMENTS:

A. Copies:

1. Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement or Invitation to Bid in the number and for the deposit sum, if any, stated therein. The deposit will be refunded to Bidders who submit a bona fide Bid and return the Bidding Documents in good condition within ten days after receipt of Bids. The cost of replacement of missing or damaged documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the Bidding Documents and the Bidder's deposit will be refunded.
2. *Bidding Documents will not be issued directly to Sub-bidders or others unless specifically offered in the Advertisement or Invitation to Bid, or in supplementary instructions to bidders.*
3. Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
4. In making copies of the Bidding Documents available on the above terms, the Owner and the Architect do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant permission for any other use of the Bidding Documents.

B. Interpretation or Correction of Bidding Documents:

1. The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.
2. Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request to the Construction Manager which shall reach the Architect at least seven days prior to the date for receipt of Bids.
3. Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

C. Substitutions:

1. The materials, products and equipment described in the Bidding Documents establish a standard or required function, dimension, appearance and quality to be met by any proposed substitution.
2. 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. A statement setting forth changes in other materials, equipment or other portions 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.

3. If the Architect approves a proposed substitution prior to the receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.
4. No substitutions will be considered after the Contract award unless specifically provided in the Contract Documents.

D. Addenda:

1. Addenda will be mailed or delivered to all who are known by the issuing office to have received a complete set of Bidding Documents.
2. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
3. No Addenda will be issued later than two days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.
4. Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

VI. BIDDING PROCEDURES:

A. Form and Style of Bids:

1. Bids shall be submitted on forms identical to the form included with the Bidding Documents.
2. All blanks on the bid form shall be filled in by typewriter or manually in ink.
3. Where so indicated by the makeup of the bid form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the amount written in words shall govern.
4. Interlineations, alterations and erasures must be initialed by the signer of the Bid.
5. All requested Alternates shall be bid. if no change in the Base Bid is required, enter "No Change",
6. Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidders' refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall make no additional stipulations on the bid form nor qualify the Bid in any other manner.
7. Each copy of the Bid shall include the legal name of the Bidder and a statement that the Bidder is a sole proprietor, partnership, corporation or other legal entity. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the bidder.

INSTRUCTIONS TO BIDDERS

B. Bid Security:

1. Each Bid shall be accompanied by a bid security in the form and amount required, pledging that the Bidder will enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the owner fails to comply with Subparagraph VI-B-1.
2. If a surety bond is required, it shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.
3. The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn, or (c) all Bids have been rejected.

C. Submission of Bids:

1. All copies of the Bid, the bid security, if any, and other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the project name, the Bidder's name and address, and if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.
2. Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.
3. The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.
4. Oral, telephonic or telegraphic Bids are invalid and will not receive consideration.

D. Modification or Withdrawal of Bid:

1. A bid may not be modified, withdrawn, or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.
2. Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder or by telegram; if by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.
3. Withdrawn Bids may be resubmitted up the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.
4. Bid security, if required, shall be in an amount sufficient for the Bid as modified or resubmitted.

V. CONSIDERATION OF BIDS:

- A. Opening of Bids: Unless stated otherwise in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be opened publicly and will be read aloud. An abstract of the Bids will be made available to Bidders. When it has been stated that Bids will be opened privately, an abstract of the same information may, at the discretion of the Owner, be made available to the bidders within a reasonable time.
- B. Rejection of Bids: The Owner shall have the right to reject any or all Bids, reject a Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or reject a Bid which is in any way incomplete or irregular.
- C. Acceptance of Bid (Award):
 - 1. It is the intent of the Owner to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities or irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.
 - 2. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.
 - 3. *NOTE: Owner shall have the right to accept or reject any bid package and any combination of bid packages.

VI. POST-BID INFORMATION:

- A. Contractor's Qualification Statement:
 - 1. Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted as a prerequisite of Bidding Documents.
- B. Owner's Financial Capability:
 - 1. The Owner shall, at the written request of the Bidder to which award of a Contract is under consideration and no later than seven days prior to the expiration of the time for withdrawal of Bids, furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Unless such reasonable evidence is furnished, the Bidder will not be required to execute the Agreement between the Owner and Contractor.
- C. Submittals:
 - 1. The bidder shall, as soon as practicable after notification of selection for the award of a Contract, furnish to the Architect through the Construction Manager in writing:
 - a. A designation of the Work to be performed with the Bidder's own forces
 - b. Names of the manufacturers, products and the suppliers of principal items or systems of materials and equipment proposed for the Work; and
 - c. Names of persons or entities (including those who are to furnish material or equipment fabricated to a special design) proposed for the principal portions of the Work.

INSTRUCTIONS TO BIDDERS

2. The Bidder will be required to establish to the satisfaction of the Construction Manager, Architect, and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.
3. Prior to the award of the Contract, the Construction Manager will notify the Bidder in writing if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid, or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.
4. Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

VII. PERFORMANCE BOND AND PAYMENT BOND AND MAINTENANCE BOND:

A. Bond Requirements:

1. The Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Bonds may be secured through the Bidder's usual sources.
2. The furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. The furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.
3. If the Owner requires that bonds be secured from other than the Bidder's usual sources, changes in cost will be adjusted as provided in the Contract Documents.

B. Time of Delivery and Form of Bonds:

1. The Bidder shall deliver the required bonds to the Construction Manager not later than seven days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Subparagraph.
2. Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.
3. The bonds shall be dated on or after the date of the Contract.
4. The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

VIII. FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

Form to be used: Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on AIA Document A133-2009, Standard Form of Agreement between the Owner and Construction Manager as Constructor Where the Basis of Payment is The Cost of the Work plus a Fee with a Guaranteed Maximum Price.

END OF SECTION

The following Articles are supplementary to AIA document A201/CMA, General Conditions of the Contract for Construction or Document A232-2009 General Conditions of the Contract for Construction, Construction Manager as Adviser, and shall take precedent over any portion of that document where variances occur. Where any portion of the GENERAL CONDITIONS is modified by these Supplements, the unaltered provisions of that portion shall remain in effect.

I. COMPLIANCE WITH CODES AND ORDINANCES:

- A. All Work shall comply with local and other governing ordinances, codes, and regulations and it shall be the responsibility of the Contractor to make himself familiar with such requirements prior to the submission of a proposal. No claims for additional payment will be approved for changes in the Work made to comply with any such requirements.
- B. The Contractor shall cooperate fully with the Construction Manager and all applicable State, City, and Local jurisdiction at all times and shall provide proper documentation for any required inspection of the Work.
- C. Compliance with all governing ordinances, codes, and regulations, shall not relieve the Contractor of meeting any requirements of the Drawings and Specifications which exceed those of such ordinances, codes, and regulations.
- D. All required permits and fees, including the Occupancy Permit, will be paid for by the Contractor or Sub-contractors and the costs of said permits and fees shall be included in the Proposal.

II. STARTING TIME, COMPLETION, AND LATE COMPLETION:

The Contractor shall commence work within ten (10) days as specified in the Contract. The Work shall be completed in the time stated unless an extension of time has been approved in accordance with the Contract Documents. When the work is not completed in the time specified, no additional payments will be made by the Owner until the project is one hundred percent (100%) complete. The Architect shall bill the Owner for additional architectural/engineering services and expenses as a result of the late completion. This additional fee to the Owner will be deducted from the Contractor's final payment.

III. TIME EXTENSION:

Requests for time extension to the contract completion date shall be made in writing to the Architect and submitted with the contractor's monthly payment request. The request shall cover only the period for which payment is being requested. No requests for time will be considered for previous time periods.

IV. INCLEMENT WEATHER:

The following chart indicates the number of potential lost working days to inclement weather that has been considered in determining the construction time period. No additional time due to inclement weather conditions will be considered for time extension until the numbers indicated are exceeded.

January – 10	July – 1
February – 8	August – 2
March – 7	September – 3
April – 6	October – 4
May – 8	November – 4
June – 3	December – 7

The construction period has been determined by factors including but not limited to building location, structural system, soil conditions, and time of year construction is scheduled to start. Figures determined by information from National Oceanic and Atmospheric Administration, Asheville, N.C.

V. RETAINAGE:

For each progress payment made prior to substantial completion of the Subcontractor's work, the Contractor may withhold 5% retainage from the payment otherwise due.

VI. CASH ALLOWANCES:

The Cash Allowances included in the Specifications do not include sales taxes. Such taxes shall be included in the proposal and the sum due to differences in the actual cost and stated allowances will include sales taxes in addition to allowance amounts.

VII. SUBCONTRACTOR:

- A. Not later than 30 days from the contract date, the Subcontractor shall provide a list showing the name of the manufacturer proposed to be used for each of the products identified in the project manual, and where applicable. The list shall be tabulated by, and be complete for, each specification section.
- B. Products are generally specified by ASTM or other reference standard, and/or by manufacturer's name and model number or trade name. When specified only by reference standard, the contractor may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the contractor has the option of using any product and manufacturer combination listed.
- C. The Architect will promptly reply in writing to the Contractor stating whether the Owner or the Architect, after due investigation, has reasonable objection to any such proposal. If adequate data on any proposed manufacturer or installer is not available, the Architect may state that action will be deferred until the Contractor provides further data. Failure to object to a manufacturer shall not constitute a waiver of any of the requirements.
- D. Only prior to bid, the Construction Manager, Architect, and Owner will consider a formal request for the substitutions of products in place of those specified.
- E. By making requests for substitutions based on Paragraph D above, the Contractor:
 - (1) Represents that he has personally investigated the proposed substitute product and determined that is equal or superior in all respects to that specified;
 - (2) Represents that he will provide the same warranty for the substitution that he would for that specified;
 - (3) Certifies that the cost data presented is complete and includes all related costs under this contract but excludes costs under separate contracts, and excludes the Architect's redesign costs, and waives all claims for additional cost related to the substitution which subsequently become apparent; and
 - (4) Will coordinate the installation of the accepted substitute, making such changes as may be required for the work to be complete and acceptable in all respects.

VIII. TEMPORARY FACILITIES:

- A. The Contractor is to provide a weather tight Field Office Building with raised floors at the site. This building is to contain adequate space for the Contractor's needs and space for the use of the Architect or Clerk-of-the-works. Telephone service is to be provided and maintained at the site during the course of the Work. Provide Architect with telephone number as soon as possible.
- B. Temporary sanitary facilities are to be provided as required by law.

IX. SUBMITTALS / SHOP DRAWINGS:

- A. Submit (6) copies of the shop drawings for Construction Manager and Architect approval.
- B. A minimum of six (6) copies of submittals of manufacturer's data shall be submitted. The Architect will retain three (3) copies for his own use.
- C. Subcontractor must provide all color charts/samples as required per specifications.

X. CLEANING:

The Contractor shall clean all glass, finished surfaces, hardware and fixtures in accordance with the provision of Paragraph 4.15.

XI. CONTRACT:

The construction contract between the Owner and Contractor will be prepared on AIA Document A133-2009, Standard Form of Agreement between Owner and Construction Manager as Constructor, where the basis of payment is the Cost of the Work plus a Fee with a Guaranteed Maximum Price.

XII. INSURANCE:

The Contractor, prior to commencing work, shall obtain and have in force insurance as follows:

Type of insurance or bond	Limit of liability or bond amount (\$0.00)
General Liability (Each Occurrence)	\$1,000,000.00
General Aggregate	\$2,000,000.00
Personal & Adv. Injury	\$1,000,000.00
Products-Comp/Op Agg	\$2,000,000.00
Med Exp (Any One Person)	\$5,000.00
Automobile Liability-Combined Single Limit (Ea. Occurrence)	\$1,000,000.00
Workers Compensation-E.L. (Ea. Accident)	\$1,000,000.00
E.L. Disease - Ea. Employee	\$1,000,000.00
E.L Disease - Policy Limit	\$1,000,000.00

NOTE: The Construction Manager/Contractor, Owner, and Architect shall be named as additional insured.

- A. Contractor's Worker's Compensation Insurance policy shall provide Employer's Liability coverage in accordance with Oklahoma Worker's Compensation Statute.
- B. Contractor's Public Liability Policy shall be provided.

SUPPLEMENTARY CONDITIONS

- C. Contractor's Public Liability Policy shall be written on a Comprehensive Form, and shall contain the following coverages and endorsements:
- (1) Explosion, Collapse, and Underground hazards covered.
 - (2) Products/Completed Operations hazards covered
 - (3) Contractual Liability coverage to extend to all " Hold Harmless" agreements contained in AIA Document 201
 - (4) Broad Form Property Damage provided
 - (5) Independent Contractors coverage provided
 - (6) Personal Injury coverage provided with Exclusion "C" deleted
 - (7) Owner, Architects, Engineers, and Surveyors as additional named insureds
- D. Contractor's Motor Vehicle Insurance shall be written on a Comprehensive Form, including coverage for Non-owned vehicles and Hired Vehicles.
- E. Physical Loss Insurance (Builder's Risk):
- (1) The Owner shall maintain a Completed Value Builder's Risk policy in effect insuring the perils of fire, extended coverage, vandalism, and malicious mischief. The amount of insurance shall be 103% of the contract price of this project. The Named Insureds on this policy shall include the Owner, the Contractor, the Architect, and all sub-contractors and sub-sub-contractors as their interest ant appear.
- F. Certificate of Insurance required by Paragraph 11.1.1 of AIA Document A201 General Conditions shall be furnished for all insurance coverage required.
- G. The Owner may waive Insurance Coverage based on contract amounts with the approval of the Construction Manager.

XIII. COMPLIANCE WITH PUBLIC COMPETITIVE BIDDING ACT OF 1974:

All work and all Contract and payment documents shall comply with the provisions of the Public Competitive Bidding Act of 1974 of the State of Oklahoma, as amended. It is the responsibility of the Contractor and all the Sub-contractors and suppliers to familiarize themselves with this law and to comply fully with all of its provisions.

XIV. COMPLIANCE WITH STATE LAW REGARDING ASBESTOS:

It is the intent of this Contract that no asbestos shall constitute any part of any permanently installed product, item, or construction material on this project. Any item determined to contain asbestos shall be removed at the Contractor's expense by a method currently approved by the applicable state and federal laws. The Contractor shall then replace the item or material with a similar item approved by the Architect.

XV. COORDINATING HAZARDOUS COMMUNICATION STANDARD PROGRAMS:

Refer to the requirements of the Department of Labor, Public Health and Safety regarding hazardous communication standard program.

*****END OF SECTION*****

DIVISION A - BIDDING REQUIREMENTS

00130 -BID FORM PROPOSAL FOR SCHOOL PROJECTS

00141 -NON-COLLUSION AFFIDAVIT

00151 -BUSINESS RELATIONSHIP AFFIDAVIT

DIVISION B - CONTRACT FORMS

00221 -CONTRACT AFFIDAVIT

00225 -CIVIL RIGHTS COMPLIANCE AFFIDAVIT

00231 -INVOICE AFFIDAVIT

00241 -REQUIREMENTS FOR BONDING

00251 -DESIGNATION OF PURCHASING AGENT

DIVISION ONE - GENERAL REQUIREMENTS

01405 – TESTING LABORATORY SERVICES

01800 -ASBESTOS PROHIBITION FOR PUBLIC WORKS PROJECTS

01810 -LEAD CONTAMINATION CONTROL ACT

01820 -AMERICANS WITH DISABILITIES ACT

01830 -LEAD-BASED PAINT POISONING PREVENTION ACT

DIVISION TWO - SITE WORK

02050 -EXCAVATION, FILLING AND BACKFILLING

02280 –SOIL TREATMENT

02518 -JOINT SEALING IN CONCRETE PAVEMENT AND WALKS

02530 -CONCRETE SIDEWALKS AND PADS

DIVISION THREE - CONCRETE

03100 -CONCRETE FORMWORK

03250 -CONCRETE REINFORCEMENT

03300 -CAST-IN-PLACE CONCRETE

DIVISION SIX - WOOD AND PLASTICS

06010 -ROUGH CARPENTRY

06410 -MILLWORK

DIVISION SEVEN - THERMAL AND MOISTURE PROTECTION

07101 -ASPHALT MASTIC PROTECTION

07160 – UNDERSLAB VAPOR RETARDERS

07200 -BUILDING INSULATION

07205 -PERIMETER INSULATION

07711 -GUTTERS AND DOWNSPOUTS (PRE-FINISHED)

07920 -SEALANTS

DIVISION EIGHT - DOORS AND WINDOWS

08110 -FLUSH HOLLOW METAL DOORS

08115 -PRESSED STEEL FRAMES

08200 -WOOD DOORS

08710 -FINISH HARDWARE

08780 -MILLWORK HARDWARE

08810 -GLASS AND GLAZING

DIVISION NINE - FINISHES

09251 -DRYWALL CONSTRUCTION

09300 –PORCELAIN TILE

09650- LVT FLOORING (MATERIAL ALLOWANCE)

09651 -RUBBER BASE

09901 –PAINTING

DIVISION TEN - SPECIALTIES

10522 -FIRE EXTINGUISHER AND CABINETS

10810 –TOILET ACCESSORIES

DIVISION FIFTEEN - MECHANICAL

15050 –MECHANICAL BASIC MATERIALS AND METHODS

DIVISION SIXTEEN - ELECTRICAL

16010 –GENERAL CONDITIONS FOR ELECTRICAL WORK

16049 –TEMPORARY FACILITIES (TEMPORARY POWER)

----- **END OF SECTION** -----

DIVISION A - BIDDING REQUIREMENTS

**BID FORM PROPOSAL
FOR MUNICIPAL PROJECTS**

SECTION 00130

Proposal for: **KIOWA COUNT ELECTION BOARD OFFICE**

Owner: Kiowa County
316 South Main Street
Hobart, OK 73651

Architect: PRA, PLLC.
P.O. Box 2618
Blanchard, Oklahoma 73010

Bidder: _____ (COMPANY NAME)

_____ (ADDRESS)
_____ (CITY, STATE)
_____ (TYPE OF ENTITY)

SCOPE

It is understood that the Work included under this Proposal includes all General Construction, Mechanical Work, Electrical Work and all other Work described in the Bidding Documents. It is also understood that all sales taxes are to be deleted from the Bid.

Gentlemen,

Having carefully studied and examined the Bidding Documents for the above referenced Project and having visited the Project Site and examined all conditions affecting the Project, the undersigned proposes to furnish all Work called for by said Bidding Documents for the Contract Sum set forth as follows:

BASE BID

To furnish all labor and materials in accordance with the Bidding Documents for the construction of the above-described Project, complete, for the sum of:

_ Dollars. (WRITTEN) (\$ _____) (FIGURES)

TIME OF COMPLETION (BASE BID ONLY)

If Awarded the Contract, the undersigned Bidder agrees to complete the Work included in the Base Bid within the following number of calendar days from the date specified in the Notice to Proceed: () Calendar Days.

ADDENDA

The undersigned Bidder acknowledges the receipt of:

_____ written or faxed Addenda; and

_____ Telephone Addenda

issued during the time of bidding, and the several clarifications, modifications and changes included therein are included in this Proposal.

In submitting the Bid, the undersigned agrees that his Proposal will not be withdrawn for a period of thirty (30) calendar days from the date hereof and it is understood that the right is reserved by the Owner to reject any and all Bids and to waive informalities and irregularities.

Date Bidder's Signature (TITLE)

Seal: (If bid by a Corporation) _____

By: _____

----- **END OF SECTION** -----

DIVISION A- BIDDING REQUIREMENTS

NON-COLLUSION AFFIDAVIT

SECTION 00141

STATE OF _____)
) ss.
COUNTY OF _____)

_____, of lawful age, being first duly sworn, an oath says that _____ is the Agent authorized by the Bidder to submit the attached Bid. Affiant further states that the Bidder has not been a party to any collusion among Bidders in restraint of freedom of competition by agreement to Bid at a fixed price or to refrain from bidding; or with any Government Official or employee or representative as to quantity, quality, or price in the prospective Contract, or any other terms of said prospective Contract; or in any discussions between bidders and any Government Official or employee or representative concerning exchange of money or other thing of value for special consideration in the letting of a Contract; that the Bidder has not paid, given or donated or agreed to pay, give or donate to any officer or employee of the Government (or other entity) any money or other thing of value, either directly or indirectly in the procuring of the award of a contract pursuant to this Bid.

Company Name

By

Date

Title

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

Notary Public

My commission expires:

Execute and include with Bid Proposal.

-----END OF SECTION-----

DIVISION A- BIDDING REQUIREMENTS

BUSINESS RELATIONSHIP AFFIDAVIT SECTION 00151

STATE OF _____)
 COUNTY OF _____) ss.

_____, of lawful age, being first duly sworn, an oath says that _____ is the Agent authorized by the Bidder to submit the attached Bid. Affiant further states that the nature of any partnership, joint venture, or other business relationship presently in effect or which existed within one (1) year prior to the date of this statement with the Architect, Consulting Engineer, or other party to the project is as follows:

 --

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

 --

 --

 --

 --

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

 --

 --

 --

 --

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

Company Name

Signature and Title

Date

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

Notary Public

My commission expires _____

Execute and include with Bid Proposal.

-----END OF SECTION-----

DIVISION B - CONTRACT FORMS

CONTRACT AFFIDAVIT

SECTION 00221

STATE OF _____)
COUNTY OF _____) ss.

_____, of lawful age, being first duly sworn, an oath says that _____ is the Agent authorized by Contractor to submit the attached Contract to the governmental agency, in the County as stated below, in the State of Oklahoma. Affiant further states that Contractor has not paid, given or donated or agreed to pay, give or donate to any officer or employee of the government (or other agency), any money or other thing of value, either directly or indirectly, in the procuring of the Contract.

Project Name: Kiowa County Election Board Office
Owner: Kiowa County
Address: 316 South Main Street Hobart, OK 73651

Company Name

By _____ Date _____

Title

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

Notary Public

My commission expires:

Execute and include with Contract.

-----END OF SECTION-----

DIVISION B - CONTRACT FORMS

CIVIL RIGHTS COMPLIANCE AFFIDAVIT

SECTION 00225

STATE OF _____)
COUNTY OF _____)ss.

PROJECT: _____

The undersigned Contractor, of lawful age, being first duly sworn, on oath affirms compliance with all federal laws relating to nondiscrimination during the term of the Project. Affiant further states that this affirmation applies to all aspects of the Contractors operations.

Nondiscrimination laws include, but are not limited to:

- 1) Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-1) which prohibits discrimination on the basis of race, color or national origin;
- 2) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794) which prohibits discrimination on the basis of handicap;
- 3) The Age Discrimination Act of 1975, as amended (42 U.S.C. 6101 et seq.) which prohibits discrimination on the basis of age; and
- 4) All applicable regulatory requirements to the end that no person in the United States shall, on the grounds of race, color, national origin, handicap or age, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity of the Contractor.

Company Name

By

Title

Date

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

Notary Public

My Commission Expires:

Execute and include with Contract.

----- END OF SECTION -----

DIVISION B - CONTRACT FORMS

INVOICE AFFIDAVIT

SECTION 00231

STATE OF _____)
COUNTY OF _____) ss.

P.O. No. _____

Invoice No. _____

Project: Kiowa County Election Board Office

Amount _____

The undersigned Contractor, of lawful age, being duly sworn, an oath affirms that this invoice is true and correct and that (s)he is authorized to submit the invoice pursuant to the approved Contract. Affiant further states that the Work as shown by the invoice has been completed in accordance with the Contract Documents. Affiant further states that (s)he has made no payment, given or donated or agreed to pay, give or donate, either directly or indirectly, to any elected or appointed government official or employee or representative, money or any other thing of value to obtain payment of the invoice or procure award of this Contract pursuant to which the invoice is submitted.

Company Name

By

Date

Title

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

Notary Public

My commission expires:

This form must be completed and submitted before any invoice can be processed for payment.

-----END OF SECTION-----

DIVISION B - CONTRACT FORMS REQUIREMENTS FOR BONDING MULTIPLE CONTRACTS

SECTION 00241

1.01 BONDING REQUIRED

The following Bonds are required for this Project. This Section is not applicable to Bidders who submit a Bid of less than \$50,000.

- A. Performance Bond shall be written in the amount required in the Supplements to the AIA General Conditions. The form of this bond shall be AIA Document A312, Performance Bond and Payment Bond, 2010 Edition. Submit three (3) fully executed copies.
- B. Defect Bond shall be written in the amount required in the Supplements to the AIA General Conditions. The form of this bond is attached to this Section. Submit three (3) fully executed copies.

1.02 POWER OF ATTORNEY

All bonds shall have an original copy of the Power of Attorney attached thereto upon submittal.

1.03 ADDRESSES REQUIRED

All Bonds shall clearly indicate the home office address of the Surety Company as well as the address of their Agent and their Attorney with Power of Attorney.

1.04 FINANCIAL STRENGTH OF SURETY COMPANY

- A. Surety Company shall be subject to the Owners approval for financial rating and resources. The minimum requirements for the Surety Company shall be:
 - 1) A.M. Best rating of A or better; or
 - 2) Listed in the Federal Registry, Department Circular 570 Current Edition.
- B. Submit evidence of compliance with Bonds.

-----END OF PAGE 1-----

DEFECT BOND

KNOW BY ALL MEN BY THESE PRESENTS:

That _____ as Principal, and
_____ a corporation organized under the laws of the State
of _____, and authorized to transact business in the State of Oklahoma, as Surety, are held
and firmly bound unto The Owner in the sum of _____ Dollars (\$ _____) in
lawful money of the United States of America, said sum being equal to One Hundred Percent (100%) of the Contract
Sum, for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors,
administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents.

This condition of this obligation is such that:

WHEREAS, said Principal entered into a written Contract with the Owner, dated _____, 20____, for

all in compliance with the Contract Documents therefore, made a part of said Contract and on file in the office of the
Owner.

NOW, THEREFORE, if said principal shall pay or cause to be paid to the Owner all damage, loss and expense which
may result by reason of defective materials and/or workmanship in connection with said Work, occurring within a period
of one (1) year from and after the date of Substantial Completion of said Project; then this obligation shall be null and
void, otherwise to be and remain in full force and effect.

The Surety further agrees that the terms of this Bond shall cover the payment of the prevailing hourly rate of wages as
determined by the Commissioner of Labor of the State of Oklahoma and in force at the date of Contract. The prevailing
wage rates are included in the Contract Documents which are a part of the Contract. Prevailing wage rates included in
the Contract Documents will not be altered as long as this Contract is in force.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and
no deviations from the plan or mode of procedure herein fixed shall have the effect or releasing the Sureties, or any
other party from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate
seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be
executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the
day and year set forth below.

DATED this _____ day of _____, 20____.

PRINCIPAL:

Title

ATTEST:

SURETY:

By: _____
Attorney-in-Fact

-----END OF SECTION-----

DIVISION ONE - GENERAL REQUIREMENTS

TESTING LABORATORY SERVICES SECTION 01405

PART I: GENERAL

1.01 DESCRIPTION

- A. A testing laboratory, approved by the Architect, shall be retained by the General Contractor to inspect and test the materials of construction as hereinafter specified for quality assurance of the project and to perform such other specialized technical services as may be required by the IBC 2018.
- B. The General Contractor will include in the initial laboratory services for testing of materials for compliance with the requirements of the Contract Documents. The Contractor will pay for initial testing and any retesting of materials that do not comply with the requirements of the Contract Documents.
- C. Tests and inspections shall be conducted in accordance with specified requirements, and if not specified, in accordance with the applicable standards of the American Society for Testing and Materials (ASTM) or other recognized and accepted authorities in the field.

1.02 QUALIFICATION OF LABORATORY

- A. Any independent testing laboratory hired by the Contractor for testing purposes shall meet the following requirements:
 - 1. The Material Testing Engineer should meet the basic requirements of ASTM E329 "Standard of Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction", shall be inspected and approved by the ELF, FC & PA Joint Technical Committee, Inc. or by an equivalent recognized national authority and shall submit a copy of the report of inspection of their facilities to the Architect.
 - 2. The Material Testing Engineer shall meet "Recommended Requirements for Independent Laboratory Qualification", latest edition, as published by the "American Council of Independent Laboratory Qualification".
 - 3. Testing machines shall be calibrated at intervals not exceeding twelve (12) months by devices of accuracy traceable to the National Bureau of Standards or accepted values of natural physical constants. The testing laboratory shall submit a copy of certificate of calibration made by an accredited calibration agency.
 - 4. The Material Testing Engineer is only required to have testing facilities for work included in this project
 - 5. The agent of the Material Testing Engineer performing field sampling and field testing of concrete shall be certified by the American Concrete Institute as a Concrete Field-Testing Technician – Grade 1, or by an equivalent recognized national authority for an equivalent level of competence, or shall be a Licensed Professional Engineer.

1.03 AUTHORITIES AND DUTIES OF TESTING LABORATORY

- A. Not used

- B. The Material Testing Engineer shall be responsible for outlining a written detailed quality assurance testing program. The testing program will contain an outline of inspections and tests to be performed with reference to applicable sections of the specifications or drawings and a list of personnel assigned to each portion of the work. Such testing program will be submitted to the Architect.
- C. The Material Testing Engineer will notify the Architect and Contractor first by telephone, and then in writing, of observed irregularities and deficiencies of the work and other conditions not in compliance with the requirements of the Contract Documents.
- D. All reports shall contain at least the following information:
 - 1. Project Name
 - 2. Date report issued.
 - 3. Testing Laboratory name and address.
 - 4. Name and signature of inspector.
 - 5. Date of inspection and sampling.
 - 6. Date of Test.
 - 7. Identification of product and Specification section.
 - 8. Location in the project.
 - 9. Identification of inspection or test.
 - 10. Record of weather conditions and temperature (if applicable).
 - 11. Results of test regarding compliance with Contract Documents.
- E. The Material Testing Engineer will send certified copies of test and inspection reports to the following parties:
 - 1. One (1) copy to the Owner's representative.
 - 2. Two (2) copies to the Contractor.
 - 3. One (1) copy to the Architect.
 - 4. One (1) copy to the Engineer of responsibility
 - 5. One copy to the Supplier of the material tested.

1.04 CONTRACTOR'S RESPONSIBILITY

- A. The Contractor shall have the following responsibilities:
 - 1. Cooperate with the Material Testing Engineer; provide access to the work, and to manufacturer's operations.
 - 2. Provide to the Testing Laboratory representative, samples of materials proposed for use in the work in quantities sufficient for accurate testing as specified.
 - 3. Furnish casual labor, equipment, and facilities as required for sampling and testing by the Testing Laboratory and otherwise facilitate all required inspections and tests.
 - 4. Be responsible for notifying the Testing Laboratory sufficiently in advance of operations to allow for assignment of personnel and scheduling of tests.
 - 5. Pay for any additional inspections, sampling, testing, and re-testing as required when initial tests indicate work does not comply with the requirements of the Contract Documents.
 - 6. Furnish and pay for the following items:
 - a. Soil survey of the location of borrow soil materials, samples of existing soil materials, and delivery to the Testing Laboratory.
 - b. Samples of concrete aggregates and delivery to the Testing Laboratory.
 - c. Concrete coring, tests of below-strength concrete, and load tests, if ordered by the Architect, and/or Engineer.
 - d. Certification of reinforcing steel mill order.
 - e. Certification of structural steel mill order.
 - f. Certification of Portland cement.

- g. Certification of welders.
 - h. Tests, samples, and mock-ups of substitute material where the substitution is requested by the Contractor, and the tests are necessary in the opinion of the Architect or Engineer to establish equality with specified items.
 - i. Any other tests when such costs are required by the Contract Documents to be paid by the Contractor.
7. Be responsible for notifying the Architect, the Engineer, and the Material Testing Engineer when the source of any material is changed after the original tests or inspections have been made.
- B. If in the opinion of the Architect or Engineer, any of the work of the Contractor is not satisfactory, the Contractor shall make all tests that the Architect or Engineer deem advisable to determine its proper construction.

1.05 JOB SITE INSPECTION BY THE TESTING LABORATORY

- A. The scope of the work to be performed by the inspector on the job site shall be as follows:
1. Verify that air temperatures at the point of placement in the structure are within acceptable limits defined prior to ordering of concrete by the Contractor.
 2. Inspect concrete upon arrival to verify that the proper concrete mix number, type of concrete, and concrete strength is being placed at the proper location.
 3. Inspect plastic concrete upon arrival at the job site to verify proper batching. The responsibility for adding water to trucks at the job site shall rest only with a duly appointed representative mutually agreeable to the Contractor and Architect, prior to the start of any concrete operations.
 4. Obtain concrete test cylinders as specified above.
 5. Perform slump tests and air entrainment tests as specified above.
 6. Record information for concrete test reports as specified above.
 7. Verify that all concrete being placed meets job specifications. Reject concrete not meeting the requirements and immediately notify the Contractor, Batch Plant Inspector and Architect.
 8. Pick up and transport to laboratory, cylinders cast the previous day.
 9. Check concrete placing techniques to determine that concrete deposited is uniform and that vertical drop does not exceed six feet.
 10. The job site inspector shall report any irregularities that occur in the concrete at the job site or test results to the Contractor and Architect.

1.06 CAUSES FOR REJECTION OF CONCRETE DELIVERED TO THE SITE

- A. A duly appointed representative agreeable to the Architect, the Program Consultant and Engineer, shall reject all concrete delivered to the site for any of the following reasons:
1. Wrong class of concrete (incorrect mix design number).
 2. Air Temperature: Air temperature limits shall be as follows:
 - a) Cold Weather: Air temperature must be 40°F and rising.
 - b) Hot Weather: Air temperature must be cooler than 100°F.
Concrete may be placed at other air temperature ranges only with approval to the duly appointed representative.
 3. Concrete with temperatures exceeding 95°F may not be placed in the structure without approval of the job inspector for the Testing Laboratory or other duly appointed representative.
 4. Air contents outside the limits specified in the mix designs.
 5. Slumps outside the limits specified above or the mix designs.
 6. Excessive Age: Concrete shall be discharged within ninety (90) minutes of plant

departure or before it begins to set if sooner than ninety (90) minutes unless approved by the Laboratory job inspector or other duly appointed representative.

1.07 EXTENT OF SERVICES FOR STRUCTURAL STEEL AND RELATED WORK

- A. Contract obligations:
1. The General Contractor shall include in base bid all initial shop and field inspections and tests required according to IBC 2018 during the fabrication and erection of the structural steel.
 2. Contractor Responsibility: The Contractor shall pay for and arrange with the Testing Laboratory for the certification of all shop and field welders. The costs of all re-testing of material or workmanship not in conformance with the Contract Documents shall be borne by the Contractor.
 3. The Fabricator and Erector shall provide: the laboratory inspector with access to all places where work is being done. A minimum of 24 hours notification shall be given prior to commencement of work.
 4. Material Testing Engineer responsibility: The inspection of shop work by the Testing Laboratory shall be performed in the Fabricator's shop to the fullest extent possible. Such inspections shall be in sequence, timely, and performed in such a manner as to minimize disruptions in operations and to permit the repair of all non-conforming work while the materials in process in the fabricating shop. Inspection of fieldwork shall be completed promptly so that corrections can be made without delaying the progress of the work. The Material Testing Engineer shall provide test reports of all shop and field inspections. Shop test reports shall include shop welders certifications.
 5. All test reports shall indicate types and locations of all defects found during inspection, the measures required and performed to correct such defects, statements of final approval of all welding and bolting of shop and field connections. In addition to the parties listed in above, the fabricator and erector shall receive copies of all test reports.
 6. The Architect, Engineer, and Testing Laboratory reserve the right to reject any material or workmanship not in conformance with the Contract Documents at any time during the progress of the work. However, this provision does not allow waiving the obligation for timely, in sequence inspection.
- B. Mill tests of structural steel:
1. Mill Order Steel: The Fabricator shall be required to furnish certified mill test reports and an affidavit stating that the structural steel furnished meets the requirements of the grade specified on the structural drawings for all mill order steel. In case of controversy, certified reports of tests, according to ASTM A6 or A568 as applicable, made by the Testing Laboratory, paid for by the Contractor, shall be made to verify conformity with ASTM standards.
 2. Local Stock Steel: Materials taken from stock by a Fabricator for use for structural purposes must be of a quality at least equal to that required by the ASTM specifications applicable to the classification covering the intended use.
 3. Certified mill test reports shall be accepted as sufficient record of the quality of materials carried in stock by the fabricator. In case of controversy, certified reports as specified for mill order steel shall be required.
 4. If tests are required, test specimens shall be taken by the Contractor under the direction of the Testing Laboratory and shall be machined by the Testing Laboratory to dimensions as required by the applicable ASTM standards.
- C. Shop inspections and tests:
1. The Material Testing Engineer will provide inspection at the designated fabrication shops for the designated periods of time to perform shop inspection and tests. The designated fabrication shops and time periods of inspections shall

be determined in consultation with the Architect prior to the start of fabrication in a timely manner so as not to delay the fabrication process. The following tests and inspections shall be performed:

- a. Review shop drawings and shop procedures with fabricator's supervisory personnel.
- b. Review welding procedures and obtain welder certificates.
- c. Verify welding electrodes to be used and other welding consumables as the job progresses.
- d. Provide inspection of surface preparation for coating and coating operations.

D. Field inspections and tests:

1. The Material Testing Engineer will provide inspection in the field for a period of time as determined in consultation with the Architect and in accordance to IBC 2018 prior to the start of erection in a timely manner so as to not delay the start of erection. The following tests and inspections shall be made:
 - a. Obtain the planned erection procedure, and review with the Erector's supervisory personnel.
 - b. Check the installation of base plates for proper leveling, grout type, and grout application.
 - c. Field welding procedures and obtain welder certificates. Welding inspection shall be in compliance with AWS D1.1. The basis for welding inspector qualifications shall be AWS D1.1.
 - (1) Check steel as received in the field for possible shipping damage, workmanship, and piece marking.
 - (2) Check plumbing and frame alignment as erection progresses.
 - (3) Check required camber of floor beams.
 - (4) Check joint preparation and fit up, backing strips, and run out plates for welded moment connections and column splices.
 - (5) Check pre-heating to assure proper temperature, uniformity, and thoroughness through the full material thickness.
 - (6) Review welding sequence.
 - (7) Visually inspect field welding for size, length, and quality.
 - (8) Perform non-destructive examination services for various elements of field erections determined in consultation with the Structural Engineer prior to the start of erection. The laboratory shall furnish a qualified technician with the necessary equipment to perform radiographic, ultrasonic, magnetic particle, or dye penetrated inspection as required for the item being tested and other duties as outlined for shop inspection herein.
 - (9) Check calibration of impact wrenches used in field bolted connections.
 - (10) Check high strength field bolted connections according to inspection procedures outlined in the "Specification for Structural Joints Using ASTM A325 or A490 Bolts" and in accordance with AISC specifications. Unless specified otherwise, test one (1) bolt in 10% of the bolted connections. If that bolt is found to be improperly tightened, test all bolts in the connection.
 - (11) Visually inspect the welding of metal deck to the structure.
 - (12) Perform field tests on 10% of completed shear connectors according to inspection procedures outlined in AWS D1.1.

-----END OF SECTION-----

DIVISION ONE - GENERAL REQUIREMENTS

ASBESTOS PROHIBITION **FOR PUBLIC WORKS PROJECTS** **SECTION 01800**

PART I: GENERAL

1.01 COMPLIANCE WITH APPLICABLE LAW

- A. The Contractor shall fully comply with the requirements of Public Law 99-519 the Asbestos Hazard Emergency Response Act of 1986 and the United States Environmental Protection Agency Regulations promulgated October 30, 1987, Federal Register Volume 52, No. 210.
- B. The Contractor shall enforce compliance with this law and these regulations to all Subcontractors, Sub-subcontractors and Material Suppliers on this project. Each subcontract, sub-subcontract and purchase order applicable to this project shall contain Subparagraph A directly above.

1.02 INTENT

- A. It is the specific intent of this Section of the Specification to prohibit the use or installation of any product, material, component of any product or material assembled from two or more separate products or materials, or any other item into the Work which contains more than one (1) percent asbestos by weight, and, thus, would be classified by Law as an Asbestos Containing Building Material.

1.03 STATEMENT

- A. The Contractor shall execute, and shall cause each and every Subcontractor, Sub-subcontractor and Material Supplier on this project to execute the Federal General Contractors Certification of Compliance with Asbestos Restrictions or the Federal Subcontractors or Material Suppliers Certification of Compliance with Asbestos Restrictions as applicable.
- B. The Contractor shall deliver the required certifications as defined above to the Owner before final payment will be made.
- C. Copies of the applicable certifications are attached to this Section.

----- END OF PAGE ONE -----

SUBCONTRACTORS OR MATERIAL SUPPLIERS CERTIFICATION OF COMPLIANCE WITH ASBESTOS RESTRICTIONS

DATE: _____

TO: _____ (NAME OF GENERAL CONTRACTOR)

RE: _____

Sirs:

As a Subcontractor or Material Supplier for the above referenced project, we do certify and attest that no building materials or products were knowingly incorporated or installed in this project that contained more than one percent (1%) asbestos by weight, within the meaning of Public Law 99-519 together with the United States Environmental Protection Agency Regulations, Section 763.83 promulgated October 30, 1987, Federal Register, Volume 52, No. 210 defining Asbestos Containing Building Material (ACBM).

We also certify and attest that this Certification of Compliance with Asbestos Restrictions was included in each and every Sub-Subcontract and purchase order connected with the performance of Work for this Project, with a copy signed by the Sub-Subcontractor or Material Supplier remaining in our Project File for inspection.

Respectfully,

(NAME OF SUBCONTRACTOR)

(ADDRESS OF SUBCONTRACTOR)

BY: _____

TITLE: _____

DATE: _____

Attest and Seal: _____

Subscribed and Sworn to Before Me This ____ day of _____, 20__.

Notary Public

My Commission Expires _____.

GENERAL CONTRACTORS CERTIFICATION OF COMPLIANCE WITH ASBESTOS RESTRICTIONS

DATE: _____

TO: _____

RE: _____

Sirs:

As a General Contractor for the above referenced project, we do certify and attest that no building materials or products were knowingly incorporated or installed in this Project that contained more than one percent (1%) asbestos by weight, within the meaning of Public Law 99-519 together with the United States Environmental Protection Agency Regulations, Section 763.83 promulgated October 30, 1987, Federal Register, Volume 52, No. 210 defining Asbestos Containing Building Material (ACBM).

We also certify and attest that this Certification of Compliance with Asbestos Restrictions was included in each and every Subcontract and purchase order connected with the performance of Work for this project, with a copy signed by the Subcontractor or Material Supplier remaining in our Project File for inspection.

Respectfully,

_____(NAME OF CONTRACTOR)

_____(ADDRESS OF CONTRACTOR)

BY: _____

TITLE: _____

DATE: _____

Attest and Seal: _____

Subscribed and Sworn to Before Me This ____ day of _____, 20__.

Notary Public

My Commission Expires _____.

----- END OF SECTION -----

DIVISION ONE - GENERAL REQUIREMENTS

LEAD CONTAMINATION CONTROL ACT

SECTION 01810

PART I: GENERAL

1.01 COMPLIANCE WITH APPLICABLE LAW AND REGULATION

- A. Fully comply with the requirements of The Lead Contamination Control Act, and other applicable regulations and laws controlling the use of lead in buildings.
- B. The Contractor shall enforce compliance with applicable laws and regulations to all Subcontractors, Sub-subcontractors and Material Suppliers on this Project. Each subcontract, sub-subcontract and purchase order applicable to this Project shall contain Subparagraph A directly above.

1.02 INTENT

- A. It is the specific intent of this Section of the Specification to require the use of lead-free solder for all water distribution systems, to include the internal plumbing of all factory assembled products such as water heaters, drinking fountains, electric water coolers and faucets.

----- END OF SECTION -----

DIVISION ONE - GENERAL REQUIREMENTS

AMERICANS WITH DISABILITIES ACT (ADA)

SECTION 01820

PART I: GENERAL

1.01 INTENT

It is the specific intent of this Section of the Specifications to require all materials systems, products and other items to be in full and complete compliance with the ADA.

PART II: PRODUCTS

2.01 PRODUCTS, SYSTEMS, MATERIALS, ITEMS

All Products, Systems, Materials or others items incorporated into the Work, to include job-built items, shall be in full and complete compliance with the ADA requirements. This requirement shall not be waived even though any Product, System, Material or other item is not specifically required to comply with ADA requirements in other Sections of these Specifications.

PART III: EXECUTION

3.01 INSTALLATION

Install all Products, Systems, Materials and other items in full and complete compliance with ADA requirements.

-----END OF SECTION-----

DIVISION ONE - GENERAL REQUIREMENTS

LEAD-BASED PAINT POISONING PREVENTION ACT

SECTION 01830

PART I: GENERAL

1.01 COMPLIANCE WITH APPLICABLE LAW AND REGULATION

- A. Fully comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4801 et. seq.) and other applicable regulations and laws controlling the use of lead based paint in buildings.
- B. The Contractor shall enforce compliance with applicable laws and regulations to all Subcontractors, Sub-subcontractors and Material Suppliers on this Project. Each subcontract, sub-subcontract and purchase order applicable to this project shall contain Subparagraph A directly above.

1.02 INTENT

- A. It is the specific intent of this Section of the Specification to prohibit the use of lead-based paint, to include products shipped to the Project Site pre-painted, on this Project.

----- END OF SECTION -----

DIVISION TWO - SITEWORK

EXCAVATION, FILLING AND BACKFILLING

SECTION 02050

PART I: GENERAL

1.01 SCOPE

Provide all labor, materials, tools, accessories, equipment, and incidentals necessary to complete all excavation, grading, filling, backfilling, and miscellaneous earthwork.

1.02 TESTING

- A. Testing shall be the responsibility of the Contractor. Tests shall be performed by a commercial testing laboratory, approved by the Architect. Field in-place density shall be determined in accordance with the most recent site standards of ASTM, ASTM Tentative Specifications, or ASSHO T-238, which are current on the Bid Date. Within twenty-four (24) hours of conclusion of physical test, copies of test results shall be furnished to the Architect.
- B. It is the responsibility of the Contractor to notify the Architect and testing laboratory when lifts will be ready for testing. Work on subsequent layers of fill material shall not be started until testing on each layer is completed and authorization is given to proceed. Any unapproved fill material will be removed. When test results are not as specified, the material shall be removed, replaced and re-compacted to meet specification requirement at no additional expense to the Owner. Test on re-compacted areas shall be performed to determine conformance with specification requirements.
- C. Inspections and test results shall be certified by a professional engineer who holds a current registration in the state in which the building project is to be constructed. These certifications shall state that the tests and observations were performed by or under the direct supervision of the engineer and that the results are representative of the materials or conditions being certified by the tests.
- D. Frequency of Testing:
 - 1) In-Place Moisture Density Tests: One per 2,000 square feet per eight inch maximum lift of compacted material or fraction thereof, but not less than three tests per lift.
 - 2) Compaction Test of Native Subgrade and Fill Material: Make at least one density test of subgrade for every 2,000 square feet of building slab, but in no case less than three tests.
 - 3) Compaction Test over Backfill Layers: Make at least one (1) density test in each compacted backfill lift for every 2,500 square feet of surface area overlaid by building slab but in no case less than two (2) tests per lift.
 - 4) Random fill (non-load bearing): One (1) per 3,000 cubic yards of fill but in no case less than three (3). Minimum dry density shall be ninety percent (90%), moisture range shall be -2% to +2%.
 - 5) Utility trench backfill: One (1) per 200 cubic yards of fill, but in no case less than three (3). Minimum dry density shall be ninety-five percent (95%), moisture range shall be -1% to +2%.

1.03 BLASTING

Blasting will not be permitted on this Project.

1.04 UTILIZATION OF EXCAVATED MATERIALS

Excavated materials may be used for the construction of fills, sub-grades, backfill or other purposes if, and only if, they fully comply with all requirements as specified herein, for fill material.

1.05 DISPOSAL OF DEBRIS AND EXCAVATED MATERIAL

Debris and excavated material not to be reused shall be disposed of off-site at a location secured by the General Contractor. Burning of debris on site is not permitted.

1.06 PROTECTION OF ADJACENT PROPERTY

- A. Take all precautions necessary to prevent damage to adjacent property, both public and private. Comply with all local codes, laws and ordinances. Where required, provide and maintain warning signs, barricades or other protection devices.
- B. Keep adjacent pavements clean and free of debris, soil or other items or material.

1.07 SUBMITTALS

Submit certified Test reports on the proposed fill material from an approved testing laboratory showing, at a minimum, soil classification, liquid limit and plasticity. Samples for testing shall be taken from a minimum of three (3) separate areas of the borrow pit from borrow that will actually be delivered to Project Site.

PART II: PRODUCTS

2.01 CLASSIFICATION OF EXCAVATION

No consideration will be given to the nature of the materials, and all excavation will be designated as unclassified excavation. Unclassified excavation shall include the satisfactory removal and disposition of all material without regard to the materials classification.

2.02 BORROW

Material required for fill within the grading limits shall be secured by the Contractor at an off-site location. No borrow material will be available on site.

2.03 TOPSOIL

Topsoil for site shall be fertile, friable, natural surface soil capable of producing satisfactory agricultural crops and shall be free of roots, rocks, gravel, coarse sand, heavy clay or other foreign matter.

2.04 SAND CUSHION

Unwashed sand having clean, hard, durable grains free from clay, dirt, debris, and organic matter.

2.05 GRAVEL FILL

Crushed limestone, gradation between 1½ inches and ¾ inch with less than 10% fines passing the No. 200 sieve.

2.06 FILL UNDER BUILDING

All fill placed within the building area shall consist of a low volume change material, having a Plasticity Index of less than twelve (12) and shall contain a minimum of twenty (20%) percent fines (material passing the number 200 sieve), and be free of organic matter and debris. Submit test reports to the Architect for approval before placing any fill materials.

2.07 OTHER FILL MATERIALS

Fill materials for usage in other areas shall be free of trash, debris, vegetation, rocks with any dimension greater than two (2") inches or other obnoxious materials and shall be similar to the existing site material at the location of the fill.

PART III: EXECUTION

3.01 PROTECTION AND SAFETY

Adequate protective measures of shoring, bracing, piling, planking and cribbing shall be provided where required. Comply with all applicable laws and regulations with regard to the safety of Workmen.

3.02 SURFACE DRAINAGE

Provide for surface drainage during the construction period in a manner to avoid creating a nuisance on adjacent areas. Keep excavations free of water during the entire progress of the work. Do not allow water to collect near foundation or floor slab areas during construction. Pump any collected water out of excavations.

3.03 NOTIFICATION OF UTILITY COMPANIES

Notify utility companies when working in areas where utility lines might be encountered.

3.04 UNKNOWN UTILITIES OR SUB-SURFACE STRUCTURES

If any unknown or uncharted utilities or sub-surface structures are encountered during excavation, promptly notify the Architect and wait for his instructions before proceeding. If such unknown utilities are encountered and work proceeds without contacting the Architect for instructions, and damage is caused to said utilities, the Contractor will repair at his own expense such damage to the satisfaction of all parties concerned.

3.05 EXCAVATION

Perform excavation of every type of material encountered within the limits of the project, to the lines, grades, and elevation indicated and as specified herein. Grading shall be in conformity with the typical sections shown and the tolerances specified in paragraph "Finishing". Approved satisfactory excavated materials shall be transported to and placed in fill within the limits of the Work. Unsatisfactory materials encountered within the limits of the Work shall be excavated below grade and replaced with satisfactory materials as directed. Surplus satisfactorily excavated material not required for fill shall be disposed of in areas approved for surplus material storage or designated waste areas if allowed on the Drawings or shall be disposed of off site. Unsatisfactory excavated material shall be disposed of off site at a location secured by the Contractor. During construction, excavation and fill shall be performed in a manner and sequence that will provide proper drainage at all times. Material required for fill in excess of that produced by excavation within the grading limits shall be secured by the Contractor at an off-site location and shall be submitted to Architect, with

proper documentation, for approval.

3.06 OVEREXCAVATION

Not used.

3.07 PROOF - ROLLING

Proof roll the entire building area with a moderately heavy loaded pneumatic-tired vehicle such as a 20 to 25 ton dump truck or scraper. Soils which rut or deflect under the moving load shall be undercut and replaced with compacted fill.

3.08 EXCAVATION FOR FOUNDATIONS

- A. Drilled Piers: Drill cylindrical piers and belled bottom footings as indicated on the Drawings. Drill shafts plumb and make bottoms level and free of loose dirt. Do not drill or under ream piers for bell bottom footings unless concrete can be placed the same day. Do not place concrete if water is in the pier shaft.
- B. Grade Beams and Continuous Footings: Excavate for grade beams or continuous footings to the width and depth required. Increase depth of grade beam to allow for installation of carton forms if required by the Drawings. Trench excavations may serve as forms for grade beams or continuous footings below finish grade, provided they are neat and carefully cut to dimensions shown. Double forming may be required for all footings if excavations are not neat and accurate.
- C. Spot Footings: Excavate for spot footings to the width and depth required. Trench excavations may serve as forms, provided they are neat and carefully cut to dimension shown.

3.09 PREPARATION OF GROUND SURFACE FOR FILLS IN BUILDING AREAS

Subgrade shall be shaped to line, grade and cross section as indicated on the Drawings and/or specified herein. The exposed subgrade shall be scarified to a depth of nine (9") inches, wetted or dried to develop the required moisture content and be compacted to required percent of the materials Standard Proctor Density (ASTM D-698). Soft or otherwise unsatisfactory material shall be removed and replaced with approved material. In no case shall fill be placed on a muddy, spongy or frozen subgrade.

- A. Moisture Content: 1% below to 3% above optimum
- B. Compaction: 98% standard proctor density

3.10 EARTH FILLS

- A. The proposed ground surface shall be scarified and maintained as required just prior to fill placement to insure adequate bond between the fill material and subgrade.
- B. Fill material shall be placed in successive horizontal layers of loose material not more than eight inches in depth. Each layer shall be spread uniformly on prepared subgrade. After spreading, each layer shall be plowed, disked, or otherwise broken up, moistened or aerated as necessary, thoroughly mixed, and compacted.
- C. Fill (or excavate if required) under items of construction as follows:
 - 1) In planting and grassing areas, subgrade shall be to within four (4") inches of finish grades with four (4") inches of topsoil applied over subgrade.

- 2) Under concrete sidewalks, patios and pads subgrade shall be to bottom of sand cushion with two (2") inches of sand applied over subgrade (unless otherwise noted on the Drawings).
- D. The moisture content of the top layer of fill material will be maintained until such time as the subsequent material is placed.

3.11 EARTH FILLS IN BUILDING AREA

Fill material shall be placed in eight (8") inch thick lifts of loose material, wetted or dried to the required moisture content and be compacted to the required percentage of the fill material Standard Proctor Density (ASTM D-698). Soft or otherwise unsatisfactory material shall be removed and replaced with approved material. If water must be added, apply uniformly and mix into soil by scarifying. Test results shall be in-hand prior to adding subsequent lifts to the fill.

- A. Moisture content: 1% below to 3% above optimum
- B. Compaction: 98% standard proctor density

3.12 BACKFILLING

- A. Shall not begin until construction below finish grade has been approved, underground utilities have been inspected, tested and approved, forms removed, and the excavations cleaned of trash and debris. Backfill shall not be placed in wet or frozen areas. Heavy power equipment for spreading and compacting backfill shall not be operated closer to existing foundations, curbs, or walls than a distance equal to the height of backfill above the top of structural members; the area remaining shall be compacted by a power-driven hand tamper suitable for the material being compacted. Backfills shall not be placed against concrete walls prior to fourteen (14) days after completion of the walls, and not then unless walls have been adequately braced or permanent interior floor construction is completed and permission from the Architect has been obtained.
- B. Backfills shall be constructed in horizontal layers not exceeding eight (8") inches (loose depth) and shall be uniformly compacted to the required percentage of the materials Standard Proctor Density at the required moisture content.
 1. Moisture content: 1% below to 3% above optimum
 2. Compaction: 98% standard proctor density

3.13 SUBGRADE AND FILL PROTECTION

During construction, fills and excavations shall be kept shaped and drained. Ditches and drains along subgrade shall be maintained in such manner as to drain effectively at all times. The finished grade or fill shall not be disturbed by traffic or other operation and shall be protected and maintained by the Contractor in a satisfactory condition until subsequent work is placed. The storage or stockpiling of materials on the finished grade will not be permitted.

3.14 COMPACTION

Compaction shall be accomplished by sheep foot rollers, pneumatic-tired rollers, steel wheeled rollers, vibratory compactors, or other equipment well suited to the type of material being compacted. Fill shall be compacted to the density requirements specified or shown on the Drawings. Tests to assure compaction shall be conducted as specified in this Section.

3.15 SAND CUSHION OR GRAVEL FILL UNDER CONCRETE SLABS

Fill in one (1) layer to the depth show on the Drawing rake smooth and lightly rolled two (2") inch thick layer under sidewalks, patios and pads.

3.16 TOPSOIL

Topsoil shall be installed in a four (4") thick layer lightly rolled, bladed and hand raked. The limits of topsoil application shall be the limits of grading for building and paving areas. Finish surface shall be free of all rocks, trash and debris. Topsoil shall be first used from topsoil previously stripped and stored. If the stored topsoil is inadequate to meet the required quantity or quality, additional acceptable topsoil material shall be brought in from an off-site location.

3.17 FINISHING

The surface of all excavations, fills, and sub grades shall be finished to a smooth and compact surface in accordance with the lines, grades, and cross sections or elevations shown. The degree of finish for all graded areas shall be within 0.10 foot of the grades and elevations indicated. Gutters and ditches shall be finished in a manner that will result in effective drainage. The surface or areas to be covered with turf shall be finished to smoothness suitable for the application of turf materials.

3.18 PAVEMENTS

Repair all paved areas in existing streets, curbs, etc., that may be opened or damaged in performance of the Work. Pavement work shall match existing and shall comply with the current requirements of the Oklahoma State Highway Department.

3.19 CLEANUP

The entire project area shall be thoroughly cleaned of all trash and other debris. Materials shall be hauled away and disposed of at a location secured by the Contractor.

3.20 SPECIAL CONSIDERATIONS

Soils in the area of the Project Site are expected to be sensitive to disturbances caused by construction traffic and changes in moisture content. Wet soils may lose strength and support capability. Soils which become wet may be slow to dry.

----- END OF SECTION -----

DIVISION TWO - SITEWORK

SOIL TREATMENT

SECTION 02280

PART I: GENERAL

1.01 SCOPE

Furnish all equipment, labor, materials and incidentals necessary for the application of a water-based emulsion that provides a barrier of chemically treated soil for termite control under concrete floor slabs-on-grade.

1.02 QUALIFICATIONS

The applicator shall be licensed in accordance with the regulations of the state and/or municipality in which the building project is located.

1.03 GUARANTEE

Guarantee: Furnish a written guarantee, to the owner, guaranteeing the effectiveness of the soil treatment for a period of not less than five (5) years.

1.04 SAFETY

Fully comply with the requirements of all applicable laws, regulations, codes and manufacturer directions and instructions with respect to, but not limited to, the following:

- A. Transport, storage, handling and application of chemicals.
- B. Safety of workmen and other persons on the Project Site both before and after Substantial Completion.
- C. Environmental Safety.
- D. Disposal of materials.

1.05 SUBMITTALS

Submit manufacturer literature fully describing the products to be used.

1.06 COMPLIANCE WITH LOCAL, STATE AND FEDERAL LAW

- A. Contractor shall thoroughly research and become knowledgeable of all applicable local, state and Federal laws and regulations, to include antipollution laws, applicable to termite control, as amended on the Bid Date.
- B. All materials, application techniques and procedures and all other aspects of termite control shall fully comply with all applicable laws, regulations and standards.

1.07 INSPECTION

The Owner reserves the right to have the completed treatment inspected by the Oklahoma Department of Agriculture. Should this inspection indicate inadequate application of materials, the entire treatment area shall be retreated.

PART II: PRODUCTS

2.01 CHEMICALS

- A. Chemicals used for termite control shall be labeled for control of subterranean termite control.
- B. Contact the Oklahoma Department of Agriculture, Pest Management Section at (405) 521-3864 with questions about chemical labeling as of the Bid Date.
- C. Approved chemicals may include:
 - 1) Imidacloprid
 - 2) Fipronil

2.02 PRODUCTS

Termiticide shall be equal to the following products:

- A. Termidor by Aventis
- B. Premise by Bayer

TOXICANT: Shall bear Federal registration number of the U. S. Environmental Protection Agency. Shall be acceptable to U. S. Department of Agriculture for use in controlling termites without being injurious to plant life. Only manufacturer pre-mixes permitted; no job mixing of chemicals.

2.03 PRODUCT APPROVAL

It is the Contractors specific responsibility to ensure that the product used fully complies with all applicable laws, standards and regulations applicable to this specific application of termiticide.

PART III: EXECUTION

3.01 PRACTICES, TECHNIQUES AND PROCEDURES

- A. Application technicians shall be familiar with current control practices to include:
 - 1) Soil trenching
 - 2) Rodding
 - 3) Sub-slab injection
 - 4) Low pressure spray application to soil
 - 5) Crack and crevice (void) injection
 - 6) Brushing
- B. Utilize effective and efficient practices techniques and procedures to prevent and control subterranean infestations by termite species of:
 - 1) Reticulitermes
 - 2) Zootermopsis
 - 3) Heterotermes
 - 4) Coptotermes

- C. Utilize effective and efficient practices, techniques and procedures to establish a termite lethal barrier between the structure and any termite colonies in the soil.
- D. Contractor shall choose effective and efficient practices, techniques and procedures after giving full and thorough consideration to the design of the structure, water table, soil type and compaction grade conditions and the location and type of domestic water supplies.
- E. Consideration shall also be given to the biology and behavior of termite species known to inhabit the area of the Project.

3.02 COMPLIANCE WITH LABEL DIRECTIONS

- A. **WARNING:** It is a violation of federal law to use the specified products in a manner inconsistent with their labeling.
- B. Fully and completely complies with all label directions and all manufacturers written directions for use for all specified products.

3.03 APPLICATIONS

- A. Notify Architect at least forty-eight (48) hours prior to application
- B. Slabs: Apply an overall treatment under entire surface of all floor slab-on-grade and entrance slabs. Apply at a rate in accordance with the manufacturer's written instructions.
- C. Foundation: Apply to both sides of formed-in-earth concrete foundation walls, interior foundation walls and around plumbing and other penetrations at a rate in accordance with manufacturer's written instructions.
- D. Soil Conditions: Application shall be made when soil is dry and immediately before soil is to be covered. Treatment shall not be made when soil is frozen.
- E. Observe established minimum acceptable distances between wells and sources of water located on the project site and/or adjoining property. The distances shall be as established by the Health Authority having Jurisdiction.
- F. Post signs in areas of applications, warning that poison has been applied; leave signs in place for minimum of two (2) weeks following application.

----- **END OF SECTION** -----

DIVISION TWO - SITEWORK

JOINT SEALING IN CONCRETE PAVEMENT AND WALKS

SECTION 02518

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, equipment and incidentals necessary for the complete installation of the joint sealant in the concrete paving, curbs, gutters, and concrete walks, patios and pads.

1.02 DELIVERY AND STORAGE OF MATERIALS

Materials delivered to the site shall be inspected for damage, unloaded and stored with a minimum of handling. Materials shall be handled in such a manner as to insure installation in the joint in the prescribed manner. Storage facilities shall be provided at the jobsite for storing materials at temperatures recommended by the manufacturer.

1.03 SUBMITTALS

Submit complete manufacturers literature on all sealant materials to be used.

1.04 COMPLIANCES

ASTM C 920, Type S, Grade P, Class 25, Use T, M
Federal Specification TTS- 00230C, Type 1, Class A
Corps of Engineers CRD-C-541
Canadian Specification CAN/CGSB 19.13-M87, Classification C-1-40-B-N and C-1-25-B-N, No. 81028
Canadian approval for use in areas that handle food
USDA compliant for use in areas that handle meat and poultry

PART II: PRODUCTS

2.01 SEALANT

Sonolastic SL 1 by Sonneborn is a one-component nonpriming, self-leveling elastomeric polyurethane designed for expansion joints in concrete floors and decks.

PART III: EXECUTION

3.01 PREPARATION OF JOINTS

It is essential that joints be clean and dry. Joint surfaces must be structurally sound, fully cured, and free of all loose aggregate, paint, oil, grease, asphalt, wax, mastic compounds, waterproofing compounds, form-release materials, curing compounds or any other contaminants.

- a. NEW CONCRETE: Remove all loose material from joints by wire brushing. Sandblast surfaces in contact with form release agents. Fresh concrete must be fully cured. Laitance must be removed by abrading.
- b. OLD CONCRETE: For previously sealed joints, remove all old material by mechanical means. If joint surfaces have absorbed oils, remove sufficient concrete to ensure a clean surface.

3.02 PRIMING

1. For most applications, priming is not required; joints subject to periodic water immersion, however, must be primed with Primer 733 (see Form No. 1017903). On surfaces other than concrete, conduct a test application to verify adhesion.

2. Apply primer in a thin, uniform film. Avoid build-up of excess primer.
3. Avoid applying primer beyond joint faces. To minimize the contamination of adjacent surfaces, apply masking tape before priming and remove before the sealant has begun to thicken and set.
4. Allow approximately 15 – 30 minutes drying time before applying sealant (primer should be tack free). Priming and sealing must be done on the same work day.

3.03 APPLICATION

1. Fill joints by pouring the sealant from a spouted container or flowing the sealant from a bulk-loading gun or from the cartridge or ProPak.
2. Fill joints from the bottom; avoid bridging of the joint, which may form air voids. Sealant will self level to form a clean joint surface.
3. The maximum depth of SL 1™ should be 3/8" (10 mm).

3.04 CURING TIME

1. Protect joint from dirt and traffic until cured.
2. Curing of SL 1™ will vary with temperature and humidity. Curing times assume a typical joint of 1/2" (13 mm) width by 1/4" (6 mm) depth at 75° F (24° C) and 50% relative humidity. Lower temperatures will extend curing time. Skins over: within 24 hours Foot traffic: 3 days Full cure: 1 week

----- END OF SECTION -----

DIVISION TWO - SITEWORK

CONCRETE SIDEWALKS AND PADS SECTION 02530

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, equipment and incidentals necessary for the complete installation of concrete sidewalks and miscellaneous pads.

1.02 FIELD TESTING

- A. Compression tests shall be taken and analyzed as specified in Cast-In-Place Concrete, Section 03300.
- B. Test for determination of air content shall be made for every other set of cylinders in compliance with ASTM C-231 or ASTM C-173.

PART II: PRODUCTS

2.01 CONCRETE INGREDIENTS

The Portland cement, fine aggregate, coarse aggregate, water and air entraining admixture shall be as specified in the Cast-In-Place Concrete, Section 03300.

2.02 CONCRETE MIX DESIGN

Concrete shall have a minimum compressive strength of 3,500 PSI at twenty-eight (28) days. Use Air-Entraining Admixture to provide not less than four (4%) percent, nor more than six (6%) percent entrained air.

2.03 JOINT MATERIALS

Expansion Joint Fillers shall be a non-extruding cane fiber material uniformly saturated with a bituminous binder conforming to ASTM D-1751, unless otherwise noted on the Drawings.

2.04 FORM MATERIALS

Sidewalk and pad forms shall be a wood, straight, of sufficient strength to resist springing during depositing and consolidating concrete, and of a height equal to the full depth of the finished sidewalk or pad.

PART III: EXECUTION

3.01 PREPARATION OF SUBGRADE

- A. The subgrade shall be uniform in composition and compaction of material.
- B. The sand cushion material shall be placed on the subgrade in sufficient quantities and uniformly spread to form a two (2") inch thickness, unless otherwise noted on the Drawings.

3.02 FORM SETTING

- A. Forms for sidewalks and pads shall be set with the upper edge true to line and grade and shall be held rigidly in place by stakes placed at intervals not to exceed four (4') feet.
- B. Forms shall be set in such a manner and grade as to insure smooth surface water flow over the finished work. The finished work shall not create ponding either on or behind the finished sidewalk or pad.

3.03 REINFORCING

Install reinforcing in the forms only if shown on Drawings.

3.04 CONCRETE PLACEMENT

Concrete shall be deposited as nearly as practical to its final position to avoid segregation due to re-handling or flowing. After concrete has been placed in the forms, a strike-off guided by side forms shall be used to bring the surface to proper section to be consolidated. Irregularities shall be satisfactorily corrected.

3.05 JOINTS

- A. The surface shall be divided into square areas by means of contraction joints spaced at not more than the width of the walk, but in no case greater than eight feet (8'-0") on center, unless shown otherwise on the Drawings.
- B. Expansion joints or isolation joints shall be used to isolate fixed objects abutting or within the sidewalk and be placed at a preferable spacing of thirty (30') feet, but in no instance greater than forty (40') feet on center, unless otherwise indicated on the Drawings. Joint filler materials shall be held down 1/2" unless otherwise detailed on the drawings and the void filled with sealant.
- C. Construction joints shall be constructed when there is an interruption in the concrete placing operation. Construction joints shall not contain premolded "expansion joint" filler. Construction joints shall be a "keyed" type joint.

3.06 CONCRETE FINISHING

- A. Light Broom Finish: After floating, when most of the water sheen has disappeared, and just before the concrete hardens, the surface shall be troweled to a smooth and uniformly fine granular or sandy texture free of waves, irregularities, or tool marks. A light broom finish surface shall be produced by brooming with a fiber-bristle brush in a direction transverse to that of the traffic.
- B. All sidewalks, and pads including those at formed joints, shall be finished carefully with an edger having a radius of one quarter (1/4") inch. Transverse joints shall be edged before brooming.

----- END OF SECTION -----

DIVISION THREE - CONCRETE

CONCRETE FORMWORK SECTION 03100

PART I: GENERAL

1.01 SCOPE

Furnish all plans, labor, materials, equipment, and incidentals necessary to fabricate and install the formwork required.

1.02 QUALITY ASSURANCE

Secure a copy and fully comply with American Concrete Institute Publication ACI-347, "Recommended Practices for Concrete Formwork", latest edition.

1.03 STRUCTURAL NOTES

Notes on the Structural Drawings may seriously impact the work required by this Section. Where conflicts occur between this Section and the Structural Notes, the Structural Notes shall govern.

PART II: PRODUCTS

2.01 MATERIALS

- A. Forms: Wood, fiber or metal. Wood forms for exposed concrete surfaces shall be constructed of three quarter inch ($\frac{3}{4}$ ") plywood conforming to U.S. Product Standard PS-1 B-B Concrete Form, Class 1, and exterior grade. Forms for footings and foundations not exposed to view may be undressed lumber or stabilized earth forms.
- B. Shores: Shores temporarily supporting concrete during construction may be patented shores, or may be job built. Shores shall be of adequate strength and properly braced to safely support all imposed loads.
- C. Form Oil: Non-staining, paraffin-base oil having a specific gravity of between 0.8 and 0.9.
- D. Form Ties: Bolts, rods, or patented devices having a minimum tensile strength of three thousand (3,000) pounds, adjustable in length, free of lugs which would leave a hole larger than seven eighths inch ($\frac{7}{8}$ ") in diameter depressed back of exposed surface. Ties shall be constructed so that when forms are removed there will be no metal remaining within one inch of finished concrete surface.
- E. Expansion Joint Fillers: Premolded mastic strips of fibrous cellular nature, asphalt impregnated, conforming to ASTM D1751.
- F. Carton Forms: Fiberboard "void boxes" as made by Savway Carton Forms, Inc. Forms shall support a minimum load of 350 lbs. /s.f. thickness as detailed. (Carton forms shall be used only if shown on the Drawings.)

PART III: EXECUTION

3.01 CONSTRUCTION AND ERECTION

- A. Build forms to conform to shapes, lines, and dimensions of detailed members of concrete construction. Set forms to line and grade, and brace and secure so as to withstand placing of concrete and maintain shape and position. Forms shall be sufficiently tight, and substantially assembled so as to facilitate their removal without damage to concrete.

- B. Construct forms with care to produce concrete surfaces without unsightly or objectionable form marks in exposed concrete surfaces.
- C. Thoroughly clean surfaces of form lumber and remove nails before reuse. Coat contact surfaces of forms, prior to placing metal reinforcement, with non-staining form oil.
- D. Immediately before placing concrete, clean forms of debris. Leave forms in place until concrete has sufficient strength to safely carry its own load and such additional loads as may be placed on it during construction. Immediately after removal of forms, remove form ties, wires and other defects, and immediately patch as required.
- E. An experienced workman shall be available during concrete placing to inspect formwork and support of it and to strengthen or rebuild any portions that show signs of distress.
- F. Inserts and Accessories: Make provisions for required installation of accessories, bolts, hangers, sleeves and inserts cast in concrete, as required by Drawings and other trades. Place expansion joints where detailed and required.

3.02 REMOVAL OF FORMS AND SHORING

- A. Do not disturb forms until concrete has hardened sufficiently to permit removal with safety. Do not remove shoring until members have acquired sufficient strength to support their own weight and any additional loads as indicated by concrete testing. All shoring removal dates shall be recorded by the Contractor and reported to Architect.
- B. Members subject to additional loads during construction shall be adequately shored to support both member and construction loads in a manner that will protect member from damage. Forms and shores for beam bottoms and slabs may be removed whenever cylinder tests indicate concrete has attained eighty percent (80%) of its required compressive strength. Side forms may be removed after thirty-six (36) hours.
- C. The Contractor shall assume all responsibility for any damage to the structure due to premature removal of forms.

----- END OF SECTION -----

DIVISION THREE - CONCRETE

CONCRETE REINFORCEMENT

SECTION 03250

PART I: GENERAL

1.01 SCOPE

Furnish all plant, labor, materials, equipment and incidentals necessary for fabrication and installation of reinforcing steel.

1.02 SUBMITTALS

Submit Shop Drawings showing complete reinforcing for each concrete member including, but not limited to, materials, sizes, bends, dimensions, placing details and support details.

1.03 QUALITY ASSURANCE

Secure a copy and comply with the following Reference Specifications, Edition in effect on Bid Date.

- A. "Welded Steel Wire Fabric for Concrete Reinforcement", ASTM A-185, of the American Society of Testing and Materials.
- B. "Deformed Billet - Steel Bar for Concrete Reinforcement", ASTM A-615, of the American Society of Testing and Materials.
- C. "Standard Practices for Detailing Reinforced Concrete Structures", ACI-315, of the American Concrete Institute.
- D. "Building Code Requirements for Reinforced Concrete", ACI-318.
- E. "CRSI Recommended Practice for Placing Reinforcing Bars", CRSI 63, of the Concrete Reinforcing Steel Institute.

1.04 DELIVERY AND STORAGE

- A. Stack reinforcing steel in tiers and mark so that each length, size, shape and location can be readily determined. Exercise care to maintain reinforcement free of dirt, mud, paint or rust.
- B. Store materials and accessories on dunnage and undercover with protective sheeting.

1.05 STRUCTURAL NOTES

Notes on the Structural Drawings may seriously impact the work required by this Section. Where conflicts occur between this Section and the Structural Notes, the Structural Notes shall govern.

PART II: PRODUCTS

2.01 REINFORCING MATERIALS

- A. Metal Reinforcement: reinforcement shall meet requirements of ASTM A-615 for new billet steel, Grade 60, unless otherwise noted on the Drawings. Ties and stirrups shall be grade 40.
- B. Welded Wire Fabric: ASTM A-185. Yield strength (fy) equal to 60,000 psi.
- C. Dowels shall be plain steel bars conforming to ASTM A-675, grade 80.
- D. Miscellaneous Accessories: Provide spacers, chairs, ties and other devices necessary for properly placing, spacing, supporting and fastening reinforcement in place, as specified in

ACI 315 for reinforcement of Cast-In-Place structural members.

- E. Hot-dipped galvanized materials for all pre-cast concrete items.
- F. Vinyl-coated or plastic-tipped chair supports for all framed slabs.

PART III: EXECUTION

3.01 REINFORCING INSTALLATION

- A. Place reinforcing steel of sizes, shapes, lengths, spacing and other dimensions shown in accordance with approved shop drawings. Before placing, thoroughly clean reinforcement of any coatings which might reduce bonding. Heating of reinforcement shall not be permitted. Bars with kinks or bends not shown on approved drawings shall not be used. Reinforcement shall not be spliced at points of maximum stress. Splices in adjacent bars shall be staggered, and splices shall provide a minimum overlap of 32-bar diameters unless specifically noted otherwise on Drawings.
- B. Accurately place reinforcement and securely saddle tie at intersections with No. 16 gauge black annealed wire, or suitable clips. Rigidly secure reinforcement in place during concrete placing by means of spacers, chairs or other suitable supports of adequate strength. Concrete coverage for reinforcing steel shall be as specified in ACI 318 Section 7.7, unless otherwise shown on the Drawings.
- C. The lapping of wire fabric shall be end laps and edge laps of one full mesh and shall be held in place by wiring all laps securely together, unless specifically noted otherwise on the Drawings.

----- END OF SECTION -----

DIVISION THREE - CONCRETE

CAST IN PLACE CONCRETE

SECTION 03300

PART I: GENERAL

1.01 SCOPE

- A. Furnish all materials, labor and incidentals necessary for the completion of all cast-in place concrete work, both plain and reinforced, and the building-in of all inserts, anchor bolts, conduits, pipes and other items required to accommodate other trades. Coordinate work under this Section with that called for under other Sections.
- B. CAUTION: Items such as inserts, pipe sleeves, weld plates, anchor bolts, as well as other items may be specified elsewhere in the Specifications. Review carefully to ensure that all required items are installed in concrete.

1.02 APPLICABLE STANDARDS

The following Reference Specifications are a part of this Specification. All material and workmanship shall rigidly conform to these Specifications:

- A. "Specifications for Structural Concrete for Building", AC1 301, American Concrete Institute.
- B. "Building Code Requirements for Reinforced Concrete", ACI 318, American Concrete Institute.
- C. "Standard Specification for Ready-Mixed Concrete", ASTM C94 American Society of Testing and Materials.

1.03 SUPERINTENDENCE AND COMPETENCE

Contractor shall be thoroughly experienced in this class of work, and must have carried through successfully building operations of similar size. All labor must be under the direction of an experienced foreman. Should he at any time prove incompetent, he is to be removed from the Work at once and replaced.

1.04 SUBMITTALS

- A. Concrete Mix Design: The concrete materials supplier shall submit design mixes for each of the types of concrete based on specified strengths and additives. Design methods shall be in accordance with "Building Code Requirements of Reinforced Concrete "ACI 318.
- B. Submit manufacturer data on admixtures, curing compounds, hardeners and accessories.

1.05 TESTING

- A. All testing performed by an independent testing laboratory approved and retained by the Owner. Give at least twenty-four (24) hours notice to lab prior to placing concrete.
- B. Test reports shall indicate numerical values for the compressive yield strength, the slump and air content, if applicable, of the samples taken. The reports shall also include all pertinent data concerning dates of samples taken, notes concerning location of concrete within the Project, dates of tests performed, etc.
- C. Test Cylinders: Provide a minimum of one (1) set of 3 cylinders on each day fresh concrete is placed and for each different mix placed in any one day. If any one (1) pour exceeds fifty (50) cubic yards, provide an additional set of three (3) cylinders for each twenty-five (25) additional cubic yards, or any portion thereof placed, in any one (1) day. Cylinders shall be clearly marked with the exact position of the concrete on the project represented by the sample. Test reports will include this location.

- D. Test cylinders shall be made in conformity with ASTM C-31, "Making and Curing Concrete Test Specimens in the Field". They shall be six inches (6") diameter by twelve inches (12") long. Use rigid waxed cardboard forms with metal bottom or acceptable plastic form. Place concrete in the form mold; in three (3) equal layers; rodding each layer twenty-five (25) strokes with a five eighths inch (5/8") round steel rod twenty-four (24") inches long and having rounded tip. Rod each layer uniformly penetrating the surface of the preceding layer. Rod bottom layer to full depth. Immediately after rodding top layer, strike surface of concrete off smooth and cover with a glass, plastic or metal plate to prevent evaporation.
- E. Immediately after forming, place cylinders in a protected location where they will not be subjected to accidental damage.
- F. Test to failure one cylinder of each set at seven (7) days and two (2) at twenty-eight (28) days. Should the seven (7) day break so indicate, test one (1) cylinder at fourteen (14) days. Perform compression tests in conformity with ASTM C39, "Test for Compressive Strength of Cylindrical Concrete Specimens".
- G. Should strength of any one test fall below strength specified, the Architect may request that any or all of the following corrective measures, be performed, at the Contractor's expense.
 - 1) Require changes in concrete mix.
 - 2) Require core testing as per ASTM C42.
 - 3) Require load tests to be performed on portion or portions of structure where test cylinders indicate improper strength. Test loading shall conform to requirements of Section 202 of ACI Building Code Requirements.
 - 4) Removal and replacement of all substandard concrete.
- H. Conduct test for entrained air at a rate of one (1) test for each three (3) cylinders for each class of concrete.
- I. Lab Duties: Provide written report to the Architect and the Contractor. Immediately after testing, notify all parties of any low break results by fax transmittal.
- J. Lab Invoicing: Lab to send invoice with required back-up to Architect for endorsement.

1.06 QUALITY OF CONCRETE

- A. Concrete shall be the product of a Ready-Mix Plant and shall be composed of cement, aggregate and water with dispersion and air-entraining additive in proportions to develop the designated strengths and to satisfy the requirements of durability and other specified qualities. The Ready-Mix Concrete shall conform to the specifications set forth in ASTM C94.
- B. Cast-in-Place concrete shall have the following minimum compressive strength at the end of twenty-eight (28) days:
 - 1) 3,500 psi - foundation and slabs-on-grade.
 - 2) 3,500 psi - curbs and gutters.
 - 3) 3,500 psi - sidewalks and pads.
 - 4) 4,000 psi - concrete pavement.
 - 5) 4,000 psi - precast splash blocks.
 - 6) 5,000 psi - all other precast items.

1.07 STRUCTURAL NOTES

Notes on the Structural Drawings may seriously impact the work required by this Section. Where conflicts occur between this Section and the Structural Notes, the Structural Notes shall govern.

1.08 POURING SCHEDULE

- A. One (1) Week prior to the start of each of the following items of concrete works, submit a planned schedule of concrete pours to Architect.
 - 1) Foundation and slabs-on-grade
 - 2) Curbs and gutters

- 3) Sidewalks and pads
 - 4) Concrete pavement
- B. Notify Architect by telephone of any necessary changes to the pouring schedule and confirm all planned pours twenty-four (24) hours prior to beginning any concrete pour.

PART II: MATERIALS

2.01 MATERIALS

- A. Cement: Shall be Type I Portland Cement, in conformance with ASTM C150 latest revision. Type III Portland Cement may be used when approved by the Architect.
- B. Fine aggregate shall be clean, hard, durable, uncoated natural sand free from silt loam, clay and iron particles, meeting the requirements of ASTM C33, "Standard Specifications for Concrete Aggregates".
- C. Course aggregate shall be clean, hard, durable uncoated crushed stone or natural gravel meeting the requirements of ASTM C33.
- D. Water shall be clean, potable, fresh and free of oil, acid, salt, alkali, sewage, organic matter and other deleterious substances.
- E. Expansion Joint Material: Shall be premolded bituminous joint material in conformance with ASTM specification D-994, "Performed Expansion Joint Filler for Concrete".
- F. Floor Slab Construction Joints: Shall be twenty-four (24) gauge galvanized steel keyed control joints with stake pins. Construction joints shall be spaced as indicated on the Drawings.
- G. Floor Slab Control Joints or Contraction Joints: Shall be formed by one or the following methods; sawed, hand formed, or formed by pre-molded filler. Joint depth shall be equal to one quarter (1/4) of the thickness of the floor slab.
- H. Air Entraining Agent: "Darex" by Dewey and Almy Chemical Corporation, or equivalent products by L. Sonneborn and Sons, Inc., or Master Builders Co., or approved equal. Comply with ASTM C 260.
 - 1) Air entraining agent and water reducing agent shall be compatible, and by single manufacturer.
 - 2) Air entraining agent shall be added as a part of the computed mixing water requirement, and be used strictly in accordance with manufacturer's directions and these specifications to produce total air entrained content by volume, in accordance with the procedure given in ASTM C173.
- I. Water Reducing Agent: "WRDA" by Dewey and Almy Chemical Corporation, equivalent products by Sonneborn and Sons, Inc., Master Builders, or approved equal. Comply with ASTM C-494.
- J. Curing Compound: Clear Bond as manufactured by Guardian Chemical Co., or approved equal. Curing Compound shall be in conformance with ASTM C-309, "Liquid Membrane - Forming Compounds for Curing Concrete."
 - 1) Compound Type: Curing compound shall be the type over which vinyl floor tile and direct glue down carpet may be laid. (NO CURING COMPOUND OR SEALERS SHALL BE USED ON FLOOR SLABS THAT SHALL RECEIVE ANY SPECIAL FLOOR COVERING THAT DOES NOT ALLOW SUCH SEALERS.)
- K. Sealer: Clear bond as manufactured by Guardian Chemical Company. Sealer shall be by same manufacturer as curing compound. Minimum two (2) coat application, non-slip type. Five (5) year warranty against dusting and chalking.
- L. Integral Waterproofing: "Super-Mix" by Concrete Services Materials Company or approved equal.
- M. Calcium chloride or other chloride containing materials shall not be used in concrete.

- N. All domestic materials; all cement same type and manufacturer.
- O. No fly ash allowed in mix designs where concrete is exposed to view.
- P. No calcium chloride admixture.
- Q. All exterior concrete shall be air entrained.

2.02 MIXING OF CONCRETE

- A. Job Mixed Concrete:
 - 1) Job mixed concrete shall be mixed in approved batch mixers which will insure a uniform distribution of materials and be operated at the manufacturers recommended speed. Provide a sufficient number of mixers to rapidly carry on the work.
 - 2) Dry ingredients will be thoroughly mixed together and after adding water, concrete will be mixed to a uniform consistency and color. Mixing to continue for a minimum of one and one-half (1½) minutes after all materials are in the drum.
 - 3) No materials will be placed into the mixer until the preceding batch has been removed. The mixer will be thoroughly cleaned at regular intervals throughout the course of the job. Re-tempering of concrete with the addition of water or remixing of partially hardened concrete will not be allowed.
- B. Ready-Mixed Concrete: Concrete may be purchased from a ready-mix company. Ready-Mix concrete shall be mixed and delivered in accordance with ASTM Specification C 94, except:
 1. Delete references for adding water to batch for material with insufficient slump.
 2. Reduce mixing and delivery time from 90 minutes to 75 minutes when temp is between 85°F and 90°F.
 3. Place no concrete with temperature in excess of 90° degrees F.
- C. Concrete shall be mixed to have a maximum slump of 4 inches if consolidated by vibrator and five inches (5") if consolidated by other means. A one (1") inch tolerance is allowed for any one (1) batch but average of all batches may not exceed the specified values by more than one half inch (½").

PART III: EXECUTION

3.01 PLACING CONCRETE

- A. Placing: Before placing concrete, clean all equipment, remove debris within forms, wet forms thoroughly clean reinforcement and check reinforcement for proper position. Concrete shall be conveyed from the mixer to the place of final deposit by methods to prevent separation of materials.
- B. Depositing: Once concreting has started, it shall be carried on as a continuous operation until the placing of the panel or section is completed. All concrete shall be thoroughly consolidated by a suitable means, and thoroughly worked around all reinforcement and into all corners.
- C. Wet Curing: Provision shall be made for maintaining concrete in a moist condition for at least five (5) days after placement.
- D. Curing Compound: Apply at the manufacturers recommended rate in compliance with manufacturer's directions with applicator or spray as soon as concrete reaches initial set and after the surface is free of excess water. Apply to formed concrete as soon as forms are removed and concrete rubbed. Do not use under quarry or ceramic tile, brick pavers or hardener.
- E. Expansion Joints or Isolation Joints: Use to isolate fixed objects abutting or within the slab area and placed at locations indicated on the Drawings. The filler material shall be held down one half inch (½"), unless otherwise detailed on the Drawings, and the void shall be

filled with sealant.

- F. Control Joints or Contraction Joints: Lay out as shown on Drawings. Sawing of joints shall begin as soon as the concrete has hardened sufficiently to permit sawing without raveling.
- G. Construction joints shall be constructed when there is an interruption in the concrete placing operation. Construction joints shall be a "keyed" type joint or a "doweled" joint. Construction joint shall not contain premolded expansion joint filler.
- H. Weather Conditions:
- 1) Cold weather: Temperature of concrete delivered at the jobsite shall conform to the following minimum:

<u>Air Temperature</u>	<u>Concrete Temperature</u>
30° to 45°F	55° to 90°F
0° to 30°F	60° to 90°F
Below 0°F	65° to 90°F
 - 2) Water heated to 100°F (minimum) shall be combined with the aggregates before the cement is added. Cement shall not be added to water and aggregates having a temperature greater than 100°F.
 - a) Comply with ACI 306, "Cold Weather Concreting"
 1. When the outdoor temperature is less than 40°F, temperature of concrete shall be maintained at not less than 50°F for the required curing time.
 2. Arrangements shall be made before placement to maintain required temperature without injury from excessive heat.
 3. Combustion heaters shall not be used during the first forty-eight (48) hours without precautions to prevent exposure of concrete and workmen to exhaust gases containing carbon dioxide and carbon monoxide.
- I. Hot Weather: Temperature of concrete delivered to the jobsite shall not exceed 95°F. Ingredients shall be cooled before mixing to prevent concrete temperature in excess of 95°F.
 - 1) Comply with ACI 305, "Hot Weather Concreting"
 - 2) Provisions shall be made for windbreaks, shading, fog spraying, sprinkling, or wet cover when necessary.
 - 3) Use specified evaporation retarder to prevent rapid drying of surface during finishing.
- J. Concrete exposed to freeze/thaw cycles shall contain between four and six (4% and 6%) percent entrained air.
- K. Sealer: Apply at the manufacturers recommended rate in compliance with manufacturers directions after concrete curing is complete. Thoroughly clean concrete surface prior to sealing.
- L. Abrupt surface changes and undulations in finished work will be unacceptable.
- M. Apply release agent just prior to placement.
- N. Locate expansion and control joints per approved submittals.
- O. Reinforcing shall be secured to required clearances from earth and formwork.
- P. Consolidate concrete with vibrators and other methods. Contractor shall maintain spare vibrator on-site during all placements.
- Q. Do not "drop" concrete over four feet (4') height; specify use of "elephant trunk" tremie devices.

- R. Accomplish patchwork immediately after form removal by working-in slurry from adjacent concrete to maintain homogenous mix and uniform coloration.
- S. High-pressure power wash all exposed to view concrete surfaces and walks to fully remove all stains just prior to final completion.

3.02 FINISHES

Smooth Trowel Finish (Floor Slabs): On all concrete slabs the concrete shall be thoroughly tamped, accurately screened to proper levels, and then floated to a dense level surface. Interior concrete slabs shall be finished to a hard, smooth, level surface with three steel trowelings. Trowelings shall be done when surface is so hard that no cement accumulates, and a ringing sound is produced by the trowel. Finish floors shall be level with a maximum variance of one eighth inch ($\frac{1}{8}$ ") when tested with a ten foot (10') straight edge.

-----END OF SECTION-----

DIVISION SEVEN - THERMAL AND MOISTURE PROTECTION

ASPHALT MASTIC PROTECTION

SECTION 07101

PART I: GENERAL

1.01 GENERAL

Work of this Section generally includes asphalt-mastic protection of below-grade metal materials.

PART II: PRODUCTS

2.01 MATERIALS

Deliver, store and handle materials, packaging and products in manner to prevent damage, deterioration and intrusion. Approved products are:

- A. ASPHALT-MASTIC - Trowel grade mastic; J&P Petroleum Products TEX-MASTIC NO. 712.
- B. Metropolitan Roofing Supplies DUREX DAMP-PROOFING MASTIC.
- C. HLM 5000 as manufactured by Sonoshield.

PART III: EXECUTION

3.01 INSTALLATION

- A. PRIOR TO APPLICATION surfaces to be treated shall be thoroughly cleaned free of dirt, oil, grease, excess mortar and any other foreign matter that could prevent adhesion or penetration of the surface coating.
- B. Mop, brush or spray apply materials to produce an unbroken film. Provide additional coats to thin spots as necessary to accomplish proper coverage.
- C. ASPHALT-MASTIC COATING - After bolting or welding and prior to backfilling operations by others and damp proofing by this contractor, this contractor shall provide a minimum 30-mil (.030") asphalt-mastic or damp proofing bitumen coating on that portion of exposed to earth steel columns and miscellaneous steel anchorage items (angles, plates, bolts, etc.).

3.02 CLEANING

Installer shall clean or replace materials defaced by his construction work at his expense.

----- END OF SECTION -----

DIVISION SEVEN - THERMAL AND MOISTURE PROTECTION

UNDER SLAB VAPOR RETARDER SECTION 07160

PART I: GENERAL

1.01 SCOPE

Furnish all labor, materials, equipment and incidentals required for the installation of a continuous vapor barrier below all floor slabs on grade.

1.02 SUBMITTALS

Submit manufacturer's literature, fully describing the product, manufacturer's installation instructions and requirements.

1.03 RELATED SECTIONS

Section 03300 - Concrete

1.04 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM E1745 Class AA@ - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil Or Granular Fill Under Concrete Slabs.
 - 2. ASTM E154 - Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs.
 - 3. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
 - 4. ASTM E1643 - Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.
 - 5. ASTM F1249-01 Standard Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor.

- B. American Concrete Institute (ACI)
 - 1. ACI 302.1R-96 Vapor Barrier Component (plastic membrane) is not less than 10 mils thick.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in a clean dry area in accordance with manufacturer's instructions.
- C. Stack membrane on smooth ground or wood platform to eliminate warping.
- D. Protect materials during handling and application to prevent damage or contamination.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Product not intended for uses subject to abuse or permanent exposure to the elements.
- B. Do not apply on frozen ground.

PART II: PRODUCTS

2.01 MATERIALS

- A. Plastic Vapor Retarder
 - 1. Performance Based Specification: Vapor Retarder membrane must meet or exceed all requirements of ASTM E1745 Classes A, B, & C.
 - a. Minimum Permeance ASTM E96: 0.036 Perms
 - b. Water Vapor Transmission Rate ASTM F1249 calibrated to ASTM E96 (water method): 0.036 Perms
 - c. Resistance to Organisms and Substrates in Contact with Soil ASTM E154, Section 13: 0.051 Perms
 - d. Tensile Strength ASTM E154, Section 9: 52 LBS. Force/Inch
 - e. Puncture Resistance ASTM D1709, Method B: 3,770 Grams
 - f. Water Vapor Retarder ASTM E1745: Meets or exceeds Class A, B & C
 - g. Thickness of Retarder (plastic) ACI 302.1R-96: Not less than 10 mils
 - 2. Approved manufacturers
 - a. Perminator 15 mil Class A@ by W.R. Meadows, Inc., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax (847) 683-4544. Web Site www.wrmeadows.com.
 - b. Stego-Wrap 15 mil Class A@ by Stego Industries, (877) 464-7834, www.stegoindustries.com.

2.02 ACCESSORIES

- A. Seam Tape
 - 1. High Density Polyethylene Tape with pressure sensitive adhesive. Minimum width four inches (4").
- B. Pipe Boots
 - 1. Construct pipe boots from vapor barrier material and manufacturer recommended mastic per manufacturer's instructions.
- C. Mastic - medium - viscosity, water based, polymer modified anionic bituminous/asphalt emulsion which exhibits bonding, elongation, and water proofing characteristics.

PART III: EXECUTION

3.01 INSTALLATION VAPOR BARRIER

The Vapor Barrier shall be installed under all floor slabs prior to the placing of the steel reinforcing and concrete, on the leveled and tamped sand cushion. The material shall be rolled down in the widest practical width, parallel with the direction of the concrete floor, lapping all joints a minimum of six inches (6") and sealing them with a solidly troweled application of flashing cement. All penetration or punctures shall also be sealed with a solidly troweled application of flashing cement as per manufacturer's instructions.

3.02 EXAMINATION

- A. Examine surfaces to receive membrane. Notify Architect if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.

3.03 SURFACE PREPARATION

- A. Prepare surfaces in accordance with manufacturers instructions.

3.04 APPLICATION

- A. Installation shall be in accordance with manufacturers instructions and ASTM E 1643-98.
- B. Unroll vapor barrier with the longest dimension parallel with the direction of the pour.
- C. Lap vapor barrier over footings and seal to foundation walls.
- D. Overlap joints six inches (6") and seal with manufacturer=s tape.
- E. Seal all penetrations (including pipes) with manufacturer=s pipe boot.
- F. No penetration of the vapor barrier is allowed except for reinforcing steel and permanent utilities. Any holes from stakes shall be repaired per manufacturer=s recommendations.
- G. Repair damaged areas by cutting patches of vapor barrier, overlapping damaged area 6inches and taping all four sides with tape.

-----END OF SECTION-----

DIVISION SEVEN - THERMAL AND MOISTURE PROTECTION

BUILDING INSULATION

SECTION 07200

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, equipment and incidentals necessary to install general building insulation in the exterior walls and the attic space and sound batts in the interior partitions, as shown on the Drawings and/or specified herein. Other Sections of these Specifications may require additional insulation for specific products or materials.

1.02 SUBMITTALS

Submit manufacturer's literature, fully describing the product and necessary installation data.

1.03 DELIVERY AND STORAGE

- A. Deliver materials to job site in original unopened packages, clearly marked with product brand name and manufacturer's labels.
- B. Store materials under cover and protected from moisture, weather and construction activities.

1.04 QUALITY/TESTING STANDARDS

- A. ASTM E-84, "Standard Test Method for Surface Burning Characteristics of Building Materials."
- B. ASTM E136, "Standard Test method for Behavior of Materials in a Vertical Tube Furnace at 750 degree Centigrade."
- C. ASTM E-96, "Standard Test Methods for Water Vapor Transmission of Materials."
- D. ASTM E-90, "Standard Method for Laboratory Measurement of Sound Transmission Loss of Building Partitions."
- E. ASTM E-518, "Standard Test Method for Steady - State Thermal Transmission Properties by Means of Heat Flow Meter."
- F. ASTM C-177, "Standard Test Method for Steady - State Thermal Transmission Properties by means of Guarded Hot Plate."

PART II: PRODUCTS

2.01 ATTIC/UNDER ROOF INSULATION

- A. See Section 13131.

2.02 EXTERIOR WALL INSULATION

- A. Glass-fiber batt wall insulation shall have a thermal resistance of R-19, unless otherwise noted on the Drawings, and faced with a kraft facing.
- B. The kraft facing shall have a maximum of 1.0 perms when tested in accordance with ASTM E-96.
- C. Kraft Faced Fiberglass Insulation as manufactured by Owens/Corning Fiberglass Corp.; Kraft

Faced Building Insulation as manufactured by Certainteed; Fiber Glass Commercial Wall Insulation, as manufactured by Manville Corp., or approved equal.

2.03 SOUND BATT WALL INSULATION

- A. Un-faced glass-fiber batt sound insulation shall have a thermal resistance of R-11, a minimum thickness of 3 ½" and develop a minimum STC rating of 48 when placed in a three and five eighths inch (3⁵/₈") steel stud wall with five eighths inch (⁵/₈") gypsum wall board each side.
- B. This product shall have a flame spread of not greater than 25 and a smoke development of not greater than 50 when tested in accordance with ASTM E-84. This product shall be classified as non-combustible by passing the requirements of ASTM E-136.
- C. Noise Barrier Batt Insulation by Owens/Corning Fiberglass Corp.; Pyro-Fiber Sound Control Blankets, by Manville; Sound Control Batts, by CertainTeed; or approved equal.

PART III: EXECUTION

3.01 GENERAL

- A. Install insulation full thickness all areas to be insulated. Leave no gaps.
- B. Cut and fit tightly around obstructions and fill all voids to include double and nested studs and headers.
- C. Install insulation in conformance with manufacturer's printed instructions.
- D. Fit insulation behind electrical receptacles, piping, etc., to form a completely insulated area.
- E. Insulations with facings shall have facing installed to the warm in winter side.

3.02 EXTERIOR WALL AND SOUND BATT INSULATION

Friction-fit in place between metal studs as support until interior finish is applied. Wall stud spaces greater than eight feet (8') in height shall have supplementary support to hold the material in place, as per manufacturer's recommendations.

-----END OF SECTION-----

DIVISION SEVEN - THERMAL AND MOISTURE PROTECTION

PERIMETER INSULATION SECTION 07205

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, and incidentals required to install all perimeter foundation insulation.

1.02 SUBMITTALS

Submit manufacturer's literature.

PART II: PRODUCTS

2.01 MATERIALS

Perimeter Insulation: Shall be extruded cellular foam polystyrene one inch (2") thickness insulation board, four feet (4') wide, pre-scored. Cut into two feet zero inch (2'-0") wide sections or pre-scored for breaking into two feet zero inches (2'-0") wide sections.

2.02 PRODUCTS/MANUFACTURERS

- A. Styrofoam SM Insulation Board, as manufactured by Dow Chemical Co.
- B. Amfoam Extruded Polystyrene Insulation, Amco Foam Products Co.
- C. Foamular 150, as manufactured by UC Industries, Inc.

PART III: EXECUTION

3.01 INSTALLATION

- A. All installation to be according to latest instructions of Manufacturer.
- B. Install with joints tightly butted together without voids. Anchor in place to avoid shifting during concreting operations. Set insulation in adhesive as recommended by the manufacturer of insulation on vertical services.

----- **END OF SECTION** -----

DIVISION SEVEN - THERMAL AND MOISTURE PROTECTION

GUTTERS AND DOWNSPOUTS

PRE-FINISHED

SECTION 07711

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, equipment and incidentals for the installation of all pre-finished guttering and downspout Work.

1.02 SUBMITTALS

Submit manufacturer's literature fully describing, listing and graphically illustrating all material required.

1.03 APPLICATOR'S WARRANTY

- A. The roofing Subcontractor shall furnish a two (2) year written Warranty for all gutter and downspout Work as specified herein in a form acceptable to Owner, in conjunction with the Roofing Warranty.
- B. Provide a twenty (20) year warranty against color fade, chalking and film integrity of the product finish.

PART II: PRODUCTS

2.01 MATERIALS

Material shall be 24 ga. galvanized steel.

2.02 PRODUCTS

- A. Gutters shall be configured as per SMACNA Architectural Manual minimum size 6"widex6" deep style as shown on Drawings.
- B. Downspouts shall be configured in a rectangular corrugated shape, size 4"x6" (minimum), unless shown otherwise on the Drawings. Coordinate with collector head dimensions.
- C. Bracing straps for gutter shall be 1/8"x1" galvanized steel.
- D. Color shall be selected by Owner from Standard KYNAR 500 colors submitted by Contractor.

PART III: EXECUTION

3.01 INSTALLATION

- A. Form, fabricate and install all gutters and downspouts as shown on the Drawings and/or specified herein. Work shall be accurately formed to sizes, shapes and dimensions shown and installed accurately, true to line and completely weather-tight. All items are to be fabricated in maximum practical lengths with a minimum of joints.
- B. Furnish and install strap type bracing at 3'-0" o.c. unless noted otherwise on the Drawings.
- C. All joints to be sealed, with sealant using the best technology for the material being jointed.

----- END OF SECTION -----

DIVISION SEVEN - THERMAL AND MOISTURE PROTECTION

SEALANTS

SECTION 07920

PART I: GENERAL

1.01 SCOPE

Furnish all labor, materials, equipment and incidentals necessary for the application/installation of sealants to protect joints against the intrusion of foreign matter, passage of water or air.

1.02 QUALITY ASSURANCE

- A. Qualifications of Installers: Installation of sealants shall be performed only by workmen thoroughly trained in sealant technique.
- B. Rejection of Installed Sealants: Indication of a lack of skill on the part of installers shall be sufficient grounds for the Architect to reject the installed sealant and to require its immediate removal and complete replacement at no additional cost to the Owner.

1.03 SUBMITTALS

Submit manufacturer's literature and color samples.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in original, tightly sealed containers or unopened packages with manufacturer's name, labels, product identification and lot numbers where appropriate.
- B. Store materials out of weather in original containers or unopened packages as recommended by the manufacturer.

PART II: PRODUCTS

2.01 PRODUCTS

- A. Sealant: (All uses may not be in Project)
 - 1) For exterior vertical control and expansion joints:
Multi-component Urethane Sealant equal to ASTM 920, Class 25 and Federal Specification TT-S-00230C, Type II, Class A, non-sag type.
 - 2) For exterior horizontal control and expansion joints:
Multi-component Urethane Sealant, non-modified, equal to ASTM 920-79, Type M, Grade SL, Class 25 and Federal Specification TT-S-00227e, Type I, Class B.
Acceptable Manufacturers: Pecora NR-200; Vulkem 245; Tremco THC-900
 - 3) For perimeter glazing (for use with multi-component silicone):
Single-component Silicone Sealant meeting ASTM- 920-79, Grade NS, Class 25 and Federal Specification TT-S-00230e, Type II, Class A and Federal Specification TT-S-001543C. Acceptable Manufacturer: Dow Corning 795; Tremco Spectrem 2
 - 4) For perimeter glazing (for use with multi-component urethane):
Single or multi-component Urethane Sealant meeting Federal Specification TT-S-0023, Type II or TT-S-00227e, Type I.
 - 5) For interior usage:
One component polyurethane sealant.
- 6) For plumbing fixtures (for use between fixture and floor or wall):

Silicone rubber based, one-port non-sag elastomeric sealant, mildew resistant complying with FDA 21CFR 177.2600, type as recommended by manufacturer for the fixture porosity.

- B. Primer: Primer shall be as recommended by the manufacturer of sealant.
- C. Back-up Material: Foamed, closed-cell polyethylene or open-cell polyurethane rod stock or material as specifically recommended by the manufacturer of sealant.
- D. Bond Breaker Tape: Polyethylene or other plastic tape as recommended by sealant manufacturer.

2.02 SEALANT COLORS

Colors shall be selected by Architect from manufacturer's range of standard colors. More than one color may be chosen.

PART III: EXECUTION

3.01 INSPECTION

- A. Examine joints to be sealed for construction defects which would adversely affect execution of work.
- B. Ensure that masonry and concrete have cured twenty-eight (28) days minimum.
- C. Do not start work until conditions are satisfactory.

3.02 PREPARATION

- A. Cleaning: Clean joint surfaces, using joint cleaner or other methods as recommended by sealant manufacturer, to be free of dust, dirt, oil, grease, rust, lacquers, laitance, release agents, moisture or other matter which might adversely affect adhesion of sealant.
- B. Masking: Mask areas adjacent to joints.
- C. Priming: Apply primer, following manufacturer's instructions.

3.03 APPLICATION

- A. Install backing material in joints using blunt instrument to avoid puncturing. Do not twist rod while installing. Install backing so that joint depth is 50% of joint width, but a minimum of one quarter inch (1/4") deep.
- B. Bond breaker tape shall be applied to sealant contact surfaces where bond to substrate or joint filler must be avoided for proper performance of sealant.
- C. Apply sealant in joints using pressure gun with nozzle cut to fit joint width. Make sure sealant is deposited in uniform, continuous beads without gaps or air pockets.
- D. Tool joints to required configuration within ten (10) minutes of sealant application. If masking materials are used, remove immediately after tooling. (Note: Soap and water will not be permitted in joint tooling process.)

3.04 CLEANING

- A. Remove excess materials adjacent to joints by mechanical means or with xylol (xylene) or mineral spirits as work progresses to eliminate evidence of spillage or damage to adjacent surfaces. NOTE: When using flammable solvents, avoid heat, sparks and open flames. Always provide adequate ventilation and follow all precautions listed on solvent container label.
- B. Leave finished work in neat, clean condition with no spillovers onto adjacent surfaces.

----- END OF SECTION -----

DIVISION EIGHT - DOORS AND WINDOWS

FLUSH HOLLOW METAL DOORS SECTION 08110

PART I: GENERAL

1.01 GENERAL

- A. Furnish all labor, materials, equipment and incidentals necessary for the installation of all hollow metal doors.
- B. Hollow metal requirements for this project are for standard manufacturer of the best quality. The company shall be represented by competent agents or representatives in the State of Oklahoma.

1.02 SHOP DRAWINGS

Submit shop drawings showing doors and hollow metal work, schedules and details.

1.03 AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE

- A. It is the specific intent of this Specification to require full and complete compliance with the requirements of the ADA. Flush Hollow Metal Doors shall be designed for full compliance to include Finish Hardware mounting heights.
- B. The following requirements are applicable to this Project:
 - 1) The lowest twelve inches (12") of the door shall be free to obstructions. Full glazed doors shall have a twelve inch (12") bottom rail.
 - 2) Maximum mounting height for operable hardware shall be forty-eight inches (48") to include deadbolts.
 - 3) Doors shall be designed for a one half inch (½") maximum threshold height.

1.04 TEST

Underwriters Laboratories labeled doors: All labeled doors shall be of type which has been investigated and tested in accordance with UL-10(B), ASTM E-152, NFPA 252, ANSI A2-2 and when required, UL-305.

1.05 STORAGE AND HANDLING

Doors shall be received at the job site and handled in a manner so as not to be damaged, stored in a protected area on wood runners or skids and shall be covered with vented tarpaulins or vented plastic.

1.06 APPROVED MANUFACTURERS

- 1) Steelcraft
- 2) Aubertin
- 3) Dittco
- 4) The Ceco Corporation
- 5) Republic Builders Products
- 6) Elco Metal Products, Burns Flat, Oklahoma
- 7) Curries Manufacturing, Inc.
- 8) Kewanee
- 9) Pioneer

PART II: PRODUCTS

2.01 MATERIALS

- A. Flush interior doors, shall be constructed of sixteen (16) gauge and fourteen (14) gauge cold rolled, stretcher leveled sheet steel in compliance with ASTM A 366 and ASTM A 568. Exterior doors shall be constructed of fourteen (14) gauge galvanized sheets in compliance with ASTM A 525 and ASTM A 526. Reinforcing shall be of manufacturer's best standard, and shall be spot welded to both faces of the door so that they will form a rigid, flat surface. Doors shall be insulated with rock wool, fiberglass, or urethane, full length and width of doors for a minimum U-factor of 0.24 BTU/HR/Sq. Ft./Deg F.
- B. Exterior Doors: SDI-100 Grade III, Model 3. Full glazed doors shall be wide stile.
- C. Interior Doors: SDI-100 Grade II, Model 3
- D. Where fire doors are called for on Drawings as labeled, their construction shall conform to all requirements of the National Board of Fire Underwriters.
- E. Doors shall be mortised, reinforced, drilled and tapped for all mortise hardware, in accordance with Hardware Schedule, and templates furnished by the hardware supplier; except that drilling and tapping for surface door closers, door closer brackets, surface panic devices and/or other surface applied hardware shall be done in the field. Comply with ANSI A115 "Specification for door and frame preparation for hardware".
- F. Reinforcements for locks shall be three-sixteenths inch (3/16") for fronts, with fourteen (14) gauge for roses and escutcheons. Hinge reinforcements shall be at least ten (10) gauge x 1½"x9". All mortising and reinforcements shall be accurate and done in a neat, workmanlike manner.
- G. Locate finish hardware in accordance with Door and Hardware Institute's "Recommended locations for Builders Hardware" and ADA requirements.
- H. Finish: After fabrication, thoroughly clean, chemically treat (to assure maximum paint adhesion) and dip or spray all surfaces of the door exposed to view with a coat of rust inhibiting primer, either air dried or baked on. All materials shall be protected for shipping so that they may arrive at job site without undue damage from shipping. Replace any damaged or dented doors.

PART III: EXECUTION

3.01 INSTALLATION

Installation of doors: All metal doors specified herein shall be installed under the requirements of this Section. Hang doors accurately, with clearances shown and adjust for tolerances as specified in SD1-100.

----- END OF SECTION -----

DIVISION EIGHT - DOORS AND WINDOWS

PRESSED STEEL FRAMES

SECTION 08115

PART I: GENERAL

1.01 GENERAL

- A. Furnish all labor, materials, equipment and incidentals necessary for all hollow metal work such as door frames, sidelights, borrowed lights, exterior frames and transom frames. Material and installation shall conform to HMMA.
- B. Hollow metal requirements for this project are for standard manufacture of the best quality. The company shall be represented by competent agents or representatives, who are experienced in the handling of such products.

1.02 SHOP DRAWINGS

Submit shop drawings showing hollow metal work, schedules and details.

1.03 AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE

It is the specific intent of this Specification to require full and complete compliance with the requirements of the ADA, to include the forty-eight inch (48") maximum mounting height for operable Finish Hardware.

1.04 TEST

Underwriters Laboratories labeled frames: All labeled frames shall be of type which has been investigated and tested in accordance with UL-10(B), ASTM E-152, NFPA 252, ANSI A2-2 and when required, UL-305. Labeled frames shall have the same rating as the scheduled door.

1.05 STORAGE AND HANDLING

Frames shall be received by the Contractor at the job site and handled in a manner so as not to be damaged. They shall be stored in a protected area on wood runners or skids and shall be covered with vented tarpaulins or vented plastic.

1.06 APPROVED MANUFACTURERS

- 1) Steelcraft
- 2) Tex Steel
- 3) Dittco
- 4) The Ceco Corporation
- 5) Republic Builders Products
- 6) Elco Metal Products, Burns Flat, Oklahoma

PART II: PRODUCTS

2.01 MATERIALS

- A. Hollow metal frames shall be of sixteen (16) gauge for interior frames and fourteen (14) gauge for exterior frames, commercial quality cold rolled steel in compliance with ASTM A 366 and ASTM A 568. Exterior frames shall be hot dipped galvanized in compliance with

ASTM A 653. Frames shall be neatly mitered and the corners welded and ground smooth for an invisible joint. Provide temporary spreader bars on welded frames. Anchors shall be furnished for at least each twenty-four inch (24") centers of jamb height to coordinate with wall and/or stud condition.

- B. Frames shall be mortised, reinforced, drilled and tapped for all mortise hardware, in accordance with Hardware Schedule, and templates furnished by the hardware supplier; except that drilling and tapping for surface door closer brackets, and/or other surface applied hardware shall be done in the field. Frames shall be punched for rubber door silencers as specified under Builder's Hardware. Comply with ANSI A II5 "Specification for Door and Frame Preparation for Hardware".
- C. All mortising and reinforcements shall be accurate and done in a neat, workmanlike manner. Provide steel strike and hinge reinforcement covers for frames.
- D. Locate finish hardware in accordance with Door and Hardware Institute's "Recommended Locations for Builders Hardware" and ADA requirements.
- E. Provide 26 ga. steel plaster guards or mortar boxes welded to frame at back of hardware cutouts on all grouted frames. Frames to be grouted shall have inside of frame coated with a rust inhibitive primer which meets or exceeds ASTM B117 and ASTM D1735 for 200 hours, and for 150 hours shall be fully cured prior to shipping. Provide and weld 16 gauge steel stiffener plates at inside of frame head for closer attachment.
- F. Finish: After fabrication, thoroughly clean, chemically treat (to assure maximum paint adhesion) and dip or spray all surfaces of the frame exposed to view with a coat of rust inhibiting primer, either air dried or baked on. All materials shall be protected for shipping so that they may arrive at job site without undue damage from shipping. Replace any damaged or dented frames.

PART III: EXECUTION

3.01 INSTALLATION

Installation of frames: Frames shall be set so that the finished installation is at correct elevation, plumb, level, in line and at correct location in the wall, thoroughly and solidly anchored.

----- END OF SECTION -----

DIVISION EIGHT - DOORS AND WINDOWS

WOOD DOORS

SECTION 08200

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, services and incidentals necessary for the installation of all wood doors.

1.02 DELIVERY, STORAGE AND HANDLING

- A. Prior to accepting delivery, inspect all doors to ensure that no sub-grade, defective or damaged pieces are delivered.
- B. Doors shall be delivered only after General Contractor indicates that proper storage will be provided at the Project Site.
- C. Store doors in a protected area until the General Contractor indicates he is ready to receive them.

1.03 TEST

Underwriters Laboratories labeled doors - All labeled doors shall be of type which has been investigated and tested in accordance with UL-10, ASTM E-152, NFPA 252, ANSI A2-2 and when required UL-305 as shown on the Drawings and specified herein.

1.04 AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE

- A. It is the specific intent of this Specification to require full and complete compliance with the requirements of the ADA. Wood Doors shall be designed for full compliance to include Finish Hardware mounting heights.
- B. The following requirements are applicable to this Project:
 - 1) The lowest twelve inches (12") of the door shall be free of obstructions. Full glazed doors shall have a twelve inch (12") bottom rail.
 - 2) Maximum mounting height for operable hardware shall be forty-eight inches (48") to include deadbolts.
 - 3) Doors shall be designed for a one half inch (½") maximum threshold height.

1.05 SUBMITTALS

- A. Submit shop drawings indicating, to scale, all types, sizes and necessary installation details of the doors to be supplied.
- B. Submit manufacturer's literature fully describing all types of doors to be supplied.
- C. Submit "Life-of-the Installation" warranty.

PART II: PRODUCTS

2.01 MATERIALS

- A. General grades specified conform to the most recent grading rules of the Southern Pine Association, the West Coast Lumberman's Association, Douglas Fir Association, Lumber Manufacturing Association, or Hardwood Plywood Association under whose rules the lumber is produced.
- B. Lumber shall be kiln-dried to 10% to 12% moisture content which shall be maintained during the fabrication and transport of doors.

- C. Solid Core Wood Doors and Transom Panel Doors shall be equal to Weyerhaeuser Doors as listed below, in sizes and thicknesses indicated in the Door Schedule:

DPC-1	Standard non-labeled doors
DFP-20	20-minute door
DFM-45	"C" label door
DFM-90	"B" label door

- 1) Doors shall be faced with Premium, plain sliced red oak.
- 2) Doors shall be factory finished as specified in Painting, Section 09900.
- 3) Solid Core Wood Doors and Transom Panels shall carry a Life-of-the-Installation guarantee against warping, twisting, or manufacturing defects. Issue guarantee to Owner in writing.
- 4) Field cut-outs of particle board core door: Coat all raw edges with a heavy coat of good quality exterior varnish.
- 5) Provide labeled doors where shown on the Door Schedule.

- D. Hollow Core Wood Doors shall be equal to Weyerhaeuser DHC-2, Standard Honeycomb Core, in sizes and thickness as indicated on the drawings.

- 1) Doors shall be faced with Premium grade, plain sliced, red oak 3-ply wood veneer.
- 2) Doors shall be factory finished as specified in Painting, Section 09900.
- 3) Doors shall be furnished with manufacturer's two (2) year performance and defects warranty.

PART III: EXECUTION

3.01 INSTALLATION

- A. All doors to receive clear finish shall be sealed immediately upon delivery to the job site.
- B. Installation of hardware:
- 1) The supplier will mark each item of hardware for location. If any item of hardware is delivered to the job not properly marked, return it.
 - 2) Install and make necessary adjustments for proper working order.
 - 3) Provide clean properly sized and accurately placed mortise and surface mounted finish hardware cuts and routs. Use appropriate jigs and templates and power mortising equipment for the installation of all mortise hardware.
 - 4) Damaged hardware shall be replaced.
 - 5) After hardware is installed, protect exposed surfaces by use of heavy paper and masking tape and maintain until job completion.
- D. Removal for Painting:
- Remove all hardware before painter's finish is applied and permanently replace and re-adjust for proper function after painter's finish has dried hard.
- E. Grilles and Glass in Doors: (If applicable)
- 1) Location: Refer Door Schedule.
 - 2) Materials: Grilles - furnished by mechanical section for installation by this Section.
 - 3) Application: Install square and level.
 - 4) Glass in rated doors shall be installed with metal stops.
- F. Doors shall be hung to accurately fit their frames and shall operate smoothly, closing completely. Do not impair structural strength of the door in fitting or during hardware installation.

----- END OF SECTION -----

DIVISION EIGHT - DOORS AND WINDOWS

FINISH HARDWARE

SECTION 08710

PART I: GENERAL

1.01 SCOPE

- A. Furnish and deliver to the Contractor at the Project Site all finish hardware.
- B. Deliver all items properly marked and identified. The Contractor is responsible for protecting the original finish and texture of all items of finish hardware.
- C. The finish hardware shall be installed by mechanics skilled in this type of work. The escutcheons must be set plumb and locks, knobs and cylinders must be installed square with the door. The materials shall be installed in a neat and workmanlike manner and all knobs, latches, etc., shall work free and easily. Supply all necessary templates and types of hardware specified.
- D. If hardware for any particular door is not listed or described, it shall be furnished and shall be as specified for similar locations.
- E. Rough Hardware: Not a part of this section of Specification. General Contractor is to furnish and set all items that are specified or necessary for a complete job, and all specified in other Sections.

1.02 SUBMITTALS

Submit complete hardware schedule accompanied by manufacturer's literature (cut sheets) for each different item required.

1.03 AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE

- A. Handles, pulls, latches, locks and other operating devices shall comply with the requirements of the ADA. It is the specific intent of this Specification to require full and complete compliance with the ADA. Should a scheduled item of finish hardware be at variance with ADA requirements, notify architect prior to Bidding.
- B. Tactile Warnings shall be applied to operating devices to be installed on doors to hazardous areas such as mechanical rooms, electrical closets, janitor closets, storage rooms and loading platforms. Contact Architect prior to Bidding with questions on where tactile warnings shall be applied.

PART II: PRODUCTS

2.01 MATERIALS AND FINISH

- A. All knobs, escutcheons, strikes shall be finished as noted in the schedule. All lock strikes shall be wrought box types. The lips shall be made to fit the jamb and not project objectionably past the trim. The strike shall be bent where necessary to prevent latch bolt from marring walls or other objects.
- B. Surface closures and brackets shall have standard sprayed finish or match finish of hardware in areas in which they occur.
- C. Machine and wood screws shall match finish of hardware.
- D. All hardware to be commercial grade 1 hardware with stainless finishes.

2.02 LOCKS AND LATCHES

Equip locks with 6-pin tumbler type cylinder.

2.03 PANIC DEVICES

All devices will be furnished with stainless steel roller strikes.

2.04 KEYING

All cylinder locks shall be a part of a master keyed keying system. Such other keying as may be directed by the Owner shall be accomplished as part of the requirements of this Section. Furnish six (6) master keys and two (2) keys per lockset.

2.05 STOPS

All doors shall be supplied with appropriate stops, floor mounted equal to 1210 RP x 26D by Trimco. Wall mounted stops equal to 1276 CS x 26D by Trimco shall only be used where absolutely necessary.

2.06 ACCESS CONTROL SYSTEM

Doors listed in the door schedule with rfid access control shall be connected to a networked access control system using key fob and readers for door access. Provide hardwired network to each door, mag-lock at door head, and emergency exit release at "interior" side of door. Key fobs shall be individually identified with a software-controlled system to allow/deny access based on fob number.

PART III: EXECUTION

3.01 GENERAL

- A. Furnish templates to door and frame manufacturers for all finish hardware. Include doors requiring 3/8" undercut for handicapped thresholds.
- B. Backsets shall be two- and three-quarter inches (2¾") for all lock and latch sets.
- C. Provide temporary cylinders or temporary keying for the construction period. Replace cylinders or re-key on the day that Substantial Completion is achieved. Prior to this day, Contractor shall maintain and be responsible for the full security of Owners keys. Provide Owner with keys on day of Substantial Completion.
- D. Provide UL Tested and listed hardware in compliance with NFPA Standard 80 for all rated doors.
- E. Provide silencers in all non-gasket metal door frames, three (3) per single door frame and four (4) per double door frame.
- F. Set thresholds in continuous mastic bed and seal to insure against water leakage.
- G. Adjust hardware for proper operation and function of each door prior to Substantial Completion. Lubricate and clean each item.

PART IV: SCHEDULE

4.01 SCHEDULE REQUIREMENTS

The following schedule is a listing of hardware groups for guidance in furnishing and applying finish hardware. Refer to Door Schedule Details and Floor Plans for application of hardware to individual doors.

EXTERIOR DOORS

SET NO. 1

Double Door - Exterior, entry, accessible, 7'-0", Aluminum Storefront

4 PR HINGES
2 PANIC/EXIT DEVICE
2 DEADLOCK
2 CYLINDER
1 CLOSER/HOLDER

1 THRESHOLD
1 WEATHERSTRIP
1 DOOR BOTTOM

SET NO. 3

Single Door - Exterior, entry

1 PANIC/EXIT DEVICE
1 CYLINDER
1 CLOSER/HOLDER
1 THRESHOLD
1 WEATHERSTRIP
1 DOOR BOTTOM

SET NO. 7

Single Door - Exterior, entry

1 LOCKSET
1 DEADLOCK
2 CYLINDER
1 CLOSER/HOLDER
1 THRESHOLD
1 WEATHERSTRIP
1 DOOR BOTTOM

INTERIOR DOORS

SET NO. 2

Single Door – Office, 7'-0"

2 PR HINGES
1 LOCKSET
1 DEADLOCK
2 CYLINDER
3 SILENCERS

SET NO. 4

SINGLE DOOR - INTERIOR

2 PR HINGES
1 LOCKSET
1 SWEEP
1 STOP
1 CLOSER
3 SILENCERS

SET NO. 5

Single Door - Rest Room Entry, Not Rated, 7'-0"

2 PR HINGES
1 DEADLOCK (OCCUPANCY LABEL)
1 PUSH
1 PULL
1 STOP
3 SILENCERS

SET NO. 6

Single Door – Office, 7'-0"

- 2 PR HINGES
- 1 LOCKSET
- 1 CYLINDER
- 3 SILENCERS
- 1 SWEEP
- 1 STOP

----- END OF SECTION -----

DIVISION EIGHT - DOORS AND WINDOWS

MILLWORK HARDWARE

SECTION 08780

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, equipment and incidentals necessary for the installation of Millwork Hardware.

1.02 SUBMITTALS AND SUBSTITUTIONS

Submit millwork hardware schedule accompanied by manufacturer's literature (cut sheets) for each item.

PART II: PRODUCTS

2.01 MATERIALS AND FINISH

- A. All exposed millwork hardware items shall be chrome, US26D.
- B. The machine and wood screws shall be finished to match hardware.

2.02 PRODUCTS/SUPPLIERS

<u>HARDWARE</u>	<u>MANUFACTURERS & APPROVED EQUALS</u>	
Steel-Shelf Standards	K & V	M-D
Drawer Slides	K & V	Grant
Closet Rods	K & V	
Cabinet Pulls	Stanley	
Cabinet Hinges	Stanley	
Cabinet Catches	Stanley	
Cabinet Door Lock	Sargent K & V	Corbin

- A. Drawer Slides:
 - 1) 3" to 7½" deep: #1428, K & V
 - 2) 8" or more deep: #1429, K & V
- B. Cabinet Door Hinges (Overlay):
Doors ¾" to 7/8" thick:
 - 1) G4772 120° Half overlay as manufactured by Grass.
 - 2) Equal Hinge as manufactured by Blum.
- C. Gate Hinges (Spring loaded): #2152, half surface, adjustable tension, screen door spring hinges, by Stanley.
- D. Adjustable Shelf Standard (end supported): 255ZC K & V, or SST (Zinc) M-D.
- E. Adjustable Shelf Standard (back supported): 87 K & V, or SBR (Zinc) M-D.
- F. Shelf Support Clips (end supported): 256ZC K & V, or SS20C (Zinc) M-D.
- G. Shelf Support Brackets (back supported): 187 K & V, or SS20C (Zinc) M-D.
- H. Drawer and Door Pulls: Series 4484, Stanley.
- I. Display Case Lock: 965 K & V, or EPCO G-04.
- J. Drawer and Cabinet Door Lock: (Supply Strike Plate)
 - 1) 1" thick and over door or drawers: Series 1654, Sargent.
 - 2) ¾" thick door or drawer - #986 K & V, or Series 4142, Sargent.

- L. Miscellaneous Hardware:
 - 1) Continuous Hinge: SC311 Stanley
 - 2) Magnetic catches for cabinet doors: #41 Stanley, or #916 K & V.
 - 3) Felt adhesive silencers - all doors and drawers.
 - 4) Magnetic catches for doors (1" or thicker): #45 Stanley.
 - 5) Sliding cabinet door guides: 2234 & 235 EPCO with #33 Nylon Buttons.
 - 6) Hanging file rack: Equal to Sparco #SP3-6 for legal files.

2.04 MANUFACTURERS

- A. K & V: Knape and Vogt, Lamirada, CA 90638.
- B. M-D: Macklanburg-Duncan, Oklahoma City, OK 73125.
- C. Sargent: Sargent and Company, New Haven, Conn., 06511.
- D. Stanley: Stanley Hardware, New Britain, CT, 06050.
- E. Engineered Products Company, Flint, Michigan, 48501.

PART III: EXECUTION

3.01 INSTALLATION AND MANUFACTURER

- A. Installation shall be in compliance with manufacturers instructions.
- B. Felt adhesive silencers shall be installed on the corners of all door and drawer fronts.
- C. Magnetic catches shall be installed on all cabinet doors which have pivot hinges.
- D. Each file drawer shall have a hanging file rack installed.

-----END OF SECTION-----

DIVISION EIGHT - DOORS AND WINDOWS

GLASS AND GLAZING

SECTION 08810

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, equipment and incidentals necessary for the complete installation of all glass and glazing.

1.02 REFERENCE SPECIFICATIONS

Comply with applicable portions of following Reference Specifications latest edition in effect on Bid Date.

- A. Prime Glass Standard: FS DD-G-451
- B. Heat Treated Glass Standard: FS DD-G-1403
- C. Safety Glass Standard: "Safety Standard for Architectural Glazing Materials", Consumer Product Safety Commission 16 CFR 1201.
- D. Installation: "Glazing Manual", Flat Glass Marketing Association. (FGMA)

1.03 SUBMITTALS

Submit manufacturer's literature fully describing products and accessories required for the work.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver to the job site in the original manufacturer's packaging.
- B. Store and handle in a manner to prevent damage or breakage.

1.05 SAFETY GLAZINGS

Install safety glazing materials in all locations as required by law, codes and regulations.

PART II: PRODUCTS

2.01 GLAZING MATERIALS

- A. Clear Float Glass; Type I, class I (transparent), quality q3 (glazing select). Glass shall be one quarter inch (1/4") thick unless otherwise indicated.
- B. Tempered safety glass shall be one quarter inch (1/4") thick clear, certified to be in compliance with the Safety Standard for Architectural Glazing Materials (16 CFR 1201).
- C. Wired glass shall be Type II (rolled), class I (translucent), quality q8 (glazing) complying with ANSI Z97.1, one quarter inch (1/4") thick, Form I (wired, polished both sides), square mesh or baroque.
- D. Insulating Glass: Two sheets of float glass, outer sheet of glass to be clear, inner sheet of glass to be clear, Quality q3, one quarter inch (1/4") thick, and one-half inch (1/2") dry air or gas-filled space with -20°F dew point, with Class A sealant-type edge construction to maintain a hermetic seal.
- E. Insulating Safety Glass: Two sheets of glass; both sheets to be one quarter inch (1/4") tempered safety glass, color clear, certified to be in compliance with the safety standard for

Architectural Glazing Materials (16 CFR 1021); Quality q3; with one half inch (1/2") dry or gas filled space, -20°F dew point, with a Class A sealant type edge construction, to maintain hermetic seal.

- F. Exterior Hollow Metal Door Glazing: Two sheets of glass, both sheets to be three sixteenth inch (3/16") tempered safety glass, color clear, certified to be in compliance with the safety standard for Architectural Glazing Materials (16 CFR 1021), Quality q3 with one quarter inch (1/4") dry or gas filled space, -20°F dew point, with a Class A sealant type edge construction to maintain hermetic seal.

2.02 OTHER MATERIALS

- A. Face glazing compound shall conform to FS TT-G-410; use for glazing single thickness panes unless otherwise recommended by the glass manufacturer.
- B. Setting blocks shall be neoprene, 70-90 Shore A hardness.
- C. Spacers shall be neoprene, 40-50 Shore A hardness.

2.03 INSULATING GLASS EDGE CONSTRUCTION

- A. Edge Construction: Twin primary seals of polyisobutylene; tubular aluminum or galvanized steel spacer-bar frame with welded or soldered sealed corners, and filled with desiccant; and secondary seal outside of bar, bonded to both sheets of glass and bar, of polysulfide, silicone or hot-melt butyl elastomeric sealant (fabricator's option).
- B. Warranty: Provide manufacturer's standard ten (10) year product warranty on maintained hermetic seal.

PART III: EXECUTION

3.01 INSTALLATION

- A. Glass shall be set in accordance with detailed recommendations of the FGMA GLAZING MANUAL. All lites over six square feet (6') to be on two (2) neoprene setting blocks, set at quarter points. Lengths of setting blocks to be such to limit load from glass to fifteen (15) pounds per square inch, but in no case, less than four inches (4"). Frames will be spot puttied before setting stops, if necessary to prevent glass from rattling.
- B. Hollow metal frames: Insulated glass specified herein or indicated on drawings shall be of double sealed construction consisting of interior bead of butyl and exterior seal of polysulfide.

3.02 CLEANING

After other trades have completed their work, thoroughly wash all glass, remove all paint, mortar, labels, etc., and replace with new glass any scratched, broken or otherwise defective glass.

----- END OF SECTION -----

DIVISION NINE - FINISHES

DRYWALL CONSTRUCTION

SECTION 09251

PART I: GENERAL

1.01 GENERAL

Furnish and install all materials, labor and equipment for drywall construction.

1.02 GENERAL REQUIREMENTS:

- A. Building shall be closed in prior to start of drywall work.
- B. In cold weather, the building shall be heated during the application of the gypsum board and joint treatment to maintain a uniform temperature in the range of 45°F to 70°F, and ventilation shall be provided to eliminate excessive moisture.
- C. All materials shall be delivered to the job in original unopened containers or bundles, and stored in a place protected from damage and exposure to the elements.
- D. The installation and application of all materials shall be in accordance with the latest printed directions of the manufacturer.

1.03 SUBMITTALS

- A. Submit manufacturer's literature describing all materials and components to be incorporated into drywall work.
- B. Prepare and submit a sample of drywall texture to be used. Obtain approval before beginning finish work.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. All material shall be delivered to Project Site in original unopened containers or bundles, stored protected from damage or the elements.
- B. Handle materials to prevent damage. Damaged products shall not be incorporated into the work.

1.05 REFERENCE PUBLICATION

Comply with applicable portions of "Gypsum Construction Handbook" as printed by United States Gypsum Company, latest edition in effect on the Bid Date.

PART II: PRODUCTS

2.01 MATERIALS

Materials shall be equal to the following United States Gypsum Products:

- A. Gypsum Panels: one half inch (1/2") thick or five eighths inch (5/8") thick gypsum panels with tapered edges, fire rated, or moisture resistant in compliance with ASTM C 630 at locations shown on Drawings. Two layers of one quarter inch (1/4") thick at curved wall surface.
- B. Sound Deadening Board: one quarter inch (1/4") thick in compliance with ASTM C-36 and Federal Standard SS-L-30D Type TII.
- C. High Strength Ceiling Board: Sag resistant one half inch (1/2") thickness.

- D. Fasteners: USG Brand Screw Type S, GWB-54 or W
- E. Corner Bead: No. 103 DUR-A-BEAD
- F. Metal Trim: No. 200-A Metal Trim
- G. Joint System: PERF-A-TAPE Joint System in compliance with ASTM C 475
- H. Metal Studs and Runners: 22, 20, 18 Gauge Galvanized or painted in compliance with ASTM C 645 where shown on the Drawings. Refer to drawings for stud sizes.
- I. Resilient Channels: RC-1 Resilient Channels.
- J. Furring Channels: DWC-25, Hat shaped in compliance with ASTM C 645
- K. Z-Furring Channels: Depth as shown on Drawings.
- L. Reveal Moldings: Fry Reglet #FDM-625-75 for 5/8" and #FDM-50-75 for 1/2".
- M. Channel stiffener: Cold-rolled one and one half inch (1½")x16 gauge channel with bridging clips.
- N. Control Joints: No. 093
- O. Acoustical Sealant: Latex, Acrylic or Acrylic-Latex, non-staining type, permanently elastic and paintable.
- P. Vapor Barrier: Polyethylene film 4.0 and 6.0 thick, with vapor rating in compliance with ASTM E 96.
- Q. Cement Board: five-eighths inch (5/8") equal to Durrock.

2.02 MANUFACTURERS

Products equal to the above materials, furnished by the following manufacturers, will also be acceptable:

- A. Celotex
- B. Fintkote Products Division
- C. National Gypsum Company
- D. Georgia Pacific

PART III: EXECUTION

3.01 MATERIAL LOCATIONS

Install materials at the specific locations as follows:

- A. Install moisture resistant gypsum panels behind all ceramic tiles.

3.02 RATED ASSEMBLIES

Where Rated Assemblies are required, install in full compliance with ALL the requirements of the rating agency for the system and rating required.

3.03 INSTALLATION

- A. Gypsum Panels:
- 1) Gypsum Panels shall be applied with long dimension parallel to framing members at walls and perpendicular to framing members at ceiling and all abutting ends and edges shall occur over supports. Panels of maximum practical length shall be neatly fitted and staggered. Joints on opposite sides of partitions shall occur on different studs. No joints shall occur within twelve inches (12") of door jambs.
 - 2) All fasteners shall be spaced a maximum of twelve inches (12") on center in the field of the panel and eight inches (8") o.c. along the edges of each panel with fasteners staggered along the vertical abutting edges. Heads of fasteners shall provide a light depression below the surface of the panel and shall not be driven closer than three-eighths inch ($\frac{3}{8}$ ") from the edges and ends of the panel. Fasteners shall be of the length recommended by the manufacturer.
 - 3) Form "Floating" construction at internal corners except where special isolation or edge trim is indicated.
 - 4) Install vapor barrier on interior of exterior wall framing members to comply with ASTM C 755. Seal all joints with vapor retardant tape. Insure full coverage. Seal all punctures, tears or penetrations.
- D. Accessories:
- 1) Install all accessories in accordance with manufacturer's directions, plumb, true and level in a neat and workmanlike manner with corners mitered and true fitting. All accessories shall be installed in full lengths where practical. Where it is not practical for installation in full lengths, a minimum of accurately-fitted joints will be permitted.
 - 2) All vertical or horizontal external corners shall have DUR-A-BEAD corner reinforcement.
 - 3) All interior corners shall have PERF-A-TAPE corner reinforcement.
 - 4) All intersections of drywall with other materials and all perimeters of gypsum board walls shall have No. 200-A Metal taping bead.
 - 5) Install control joints in full compliance with manufacturer's directions and printed instructions. Do not exceed recommended spacing even if specific joint locations are not shown on Drawings. Coordinate locations of joints with Architect.
 - 6) During the one (1) year warranty period, any cracks which occur in the drywall surfaces shall be repaired by installing a drywall control joint and finishing the wall to match the existing.
- E. Drywall arches and vaults shall be constructed as shown on the Drawings. All metal framing members forming a radius shall have the leg members cut as required to bend to form the radius. Use a plywood template cut to the shape of the required radius to fabricate the metal framing. The same plywood template or matching templates shall be used on every radius to maintain a consistent shape for the arches and vaults. Utmost care shall be taken to control the quality of the finish drywall surfaces for uniformity.
- F. Joint Treatment: All joints, screw heads and other depressions in the surface of the panels shall be treated in accordance with the manufacturer's directions for the PERF-A-TAPE Joint System. Neatly smooth off and make ready for the painter.
- G. Wall Texture: All walls and ceilings shall receive the finishes as noted below. Walls to receive wall fabric, vinyl wall fabric or wall paper shall be sealed with one coat of varnish.
- 1) Light/Medium stipple in all areas unless noted otherwise.
 - 2) Other finishes noted on the drawing are a smooth finish and a heavy skip-trowel finish.

----- END OF SECTION -----

DIVISION NINE - FINISHES

PORCELAIN TILE

SECTION 09300

PART I: GENERAL

1.01 SCOPE

Furnish all materials, labor, equipment and incidentals necessary for installation of all ceramic tiles.

1.02 SUBMITTALS AND SUBSTITUTIONS

- A. Submit manufacturer's literature fully describing the product, trim and accessories to be incorporated within the work, and actual samples of tile and grout in accordance with the Conditions of the Contract.
- B. Request for approval of materials and/or methods other than those specified herein shall be made in accordance with Conditions of the Contract.

1.03 EXTRA STOCK

Supply an extra two percent (2%) of each tile used in the project in clean marked cartons for the Owner's use.

1.04 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. All materials shall be delivered in manufacturer's original packages, containers and/or bundles bearing the manufacturer's label of contents.
- B. Materials shall be stored in a climate controlled, protected area at a temperature of not less than 50°F for a period of at least forty-eight (48) hours prior to use.
- C. Damaged or deteriorated materials shall be removed from the project site.

PART II: PRODUCTS

2.01 MATERIALS

- A. Tile: All tiles shall be Standard Grade conforming to ANSI A137.1.
 - 1) Floor Tile: Two inch by twelve inch by twenty-four-inch (12"x 24") color body porcelain tile. Color to be selected by Architect. More than one (1) color may be chosen.
 - 3) Tile Allowance: \$6.00 per square foot for tile material. Other materials and labor to be included in base bid.
 - 4) Marble thresholds shall be white honed marble of profile required.
- B. Setting Materials:
 - 1) Latex - Portland cement mortar: ANSI A 118.4

2.02 PRODUCT/MANUFACTURERS

- A. Wall Tile, Floor Tile and Cove Base (12" widths):
 - 1) Color Body Porcelain, as manufactured by Daltile.
 - 2) or approved equal.

2.03 CERTIFICATIONS

- A. All porcelain tiles shall be Quality Certified by Tile Council of America to equal or exceed STANDARD GRADE Requirements. Certification mark of Tile Council of America shall appear on each label or carton of tile and all tiles shall be delivered to site in unopened cartons bearing such labels.
- B. Master Grade Certificate bearing Certification Mark of Tile Council of America, signed by manufacturer and tile contractor and stating type and quality of materials will be furnished by tile contractor.

2.04 PREPARATION OF SURFACES

- A. Tile subcontractor shall carefully inspect surfaces which are to receive ceramic tile and report any which are improperly prepared to General Contractor for correction prior to beginning installation of ceramic tile. Failure to do so shall indicate acceptance of surface and any defects resulting from improper surfaces shall be responsibility of this Subcontractor.
- B. All surfaces which are to receive tile shall be thoroughly cleaned to remove all oil, dirt and dust. Surfaces to receive tile with an organic adhesive setting method are to be sealed in accordance with recommendation of adhesive manufacturer.
- C. CMU surfaces to be properly abraded to allow sufficient bond strength of tile, covered with Metal Lath: ASTM C847, Flat expanded diamond mesh, not less than 2.5 lbs/SY, galvanized finish, or covered with cementitious Backer Board: ANSI A118.9; High density, cementitious, glass fiber reinforced with 2 inch (50 mm) wide coated glass fiber tape for joints and corners: Thickness: 1/4 inch (6 mm).
- D. Drywall surface not requiring demolition shall be covered with cementitious Backer Board: ANSI A118.9; High density, cementitious, glass fiber reinforced with 2 inch (50 mm) wide coated glass fiber tape for joints and corners: Thickness: 1/4 inch (6 mm).

PART III: EXECUTION

3.01 WORKMANSHIP AND INSTALLATION

- A. All tile work to be carefully laid out to avoid small cuts. All cutting of tile at perimeters and at fixtures shall be made carefully and neatly and all cuts shall be rubbed smooth and even. Provide all trim pieces required for a complete installation including cove base and bull-nose edges.
- B. Toilet and Bath Area Floors: The tile shall be set with latex Portland cement (ANSI A118-4) on a clean concrete floor slab (TCA Method F113). Use Latex Portland cement Grout (ANSI A118.6).
- C. Toilet and Bath Area Walls: The tile shall be set with organic adhesive (ANSI A136.1, Type 1) on moisture resistant gypsum board, on metal studs (TCA Method W242). Use Latex-Portland Cement Grout (ANSI A118.6). Metal studs backing ceramic wall tile, full height or wainscot shall be spaced at sixteen (16") inches o.c.
- D. Joints are to be maintained at a standard width of 1/16" inch. All interior corners shall be square and exterior corners shall be bull-nose.
- E. Marble Thresholds: Shall be set in full latex Portland cement mortar bed. Point thresholds base flush with the adjoining floor surfaces. Place thresholds at each doorway or opening where tile abuts another floor material (TCA Method TH611).

3.02 CLEANING

- A. Clean tile surfaces as thoroughly as possible on completion of grouting.
- B. Remove all grout haze, observing grout manufacturer's recommendations as to use of acid and chemical cleaners.

- C. Rinse tile work thoroughly with clean water before and after using chemical cleaners.

3.03 PROTECTION FROM CONSTRUCTION DIRT

- A. Apply to all clean, completed tile walls and floors, a protective coat of neutral cleaner solution, 1 part cleaner to 1 part water.
- B. In addition, cover all tile floors with heavy duty, non-staining construction paper, masked in place.
- C. Just before final acceptance of tile work, remove paper and rinse protective coat of neutral cleaner from all tile surfaces.

----- END OF SECTION -----

DIVISION NINE - FINISHES

LVT-FLOORING

SECTION 09650

PART I: GENERAL

1.01 GENERAL

Furnish all materials, labor and equipment for the installation of floor covering and rubber base.

1.02 SUBMITTALS

- A. Complete manufacturer's data on both tile and adhesive. Data shall include substrate moisture limits and recommendations.
- B. Complete range of manufacturer's color samples.

1.03 TESTS

- A. Prior to start of installation, conduct moisture content testing on substrate.
- B. Testing shall be by the calcium chloride method using test kits equal to those developed by the Rubber Manufacturers Association.
- C. Take one (1) test for each 500 square feet of tiled area and at least one (1) test for each tiled area. The tile subcontractor shall be responsible for selection of test location. Priority for test location shall be given to any suspect area.
- D. Submit moisture test results to Architect.
- E. Do not proceed with tile installation until moisture is within specified limits.

PART II: PRODUCTS

2.01 MATERIALS

- A. Provide labor, materials and accessories with a \$5/sqft flooring material allowance.
- B. Adhesive (if required) shall be as recommended by manufacturer for use over concrete floors with curing compounds as specified elsewhere and wall surfaces as shown on Drawings.

2.03 COLOR AND PATTERN

Colors and patterns shall be selected by Architect from manufacturer's standard colors. More than one color or pattern may be chosen.

PART III: EXECUTION

3.01 PREPARATION OF SURFACES

- A. Before installation of floor covering, concrete floor slab shall be thoroughly cleaned and any cracks or joints filled with floor stone or similar material. Depressions, hollows, peaks or other irregularities shall be corrected by installation of latex underlayment or by grinding.
- B. Apply concrete slab primer when recommended by flooring manufacturer prior to application of adhesive in compliance with manufacturer's directions.

3.02 INSTALLATION

- A. Floor Tile: Install floor tile in areas indicated on Drawings. Tile to be installed according to latest written instructions of manufacturer.
- B. Apply rubber base in as long lengths as practicable to walls, columns and all permanent fixtures where indicated. On masonry or other irregular surfaces, fill voids behind base and along top edge with manufacturer's recommended adhesive filler. Apply rubber base only after completion of carpet or vinyl flooring installation. Match and wrap base around corners. Joints in base shall be neatly fitted and no closer than two feet zero inches (2'-0") to any corner.
- C. Install vinyl edge or reducing strips at all doorways where finish floor material is a different height, where carpet abuts another material and where exposed concrete abuts a finish floor material.

3.03 CLEANING AND WAXING

- A. After tile installation is complete, clean tile and base in manner recommended by manufacturer.

3.04 REPLACEMENT TILE

Contractor shall provide enough spare tile of each color in unopened cartons to cover fifty (50') square feet for Owner's future use. Spare tile shall be in perfect condition.

----- END OF SECTION -----

DIVISION NINE - FINISHES

RUBBER BASE

SECTION 09651

PART I: GENERAL

1.01 GENERAL

Furnish all materials, labor and equipment for the installation of rubber base.

1.02 SUBMITTALS

- A. Complete manufacturer's data on both base and adhesive.
- B. Complete range of manufacturer's color samples.

PART II: PRODUCTS

2.01 MATERIALS

- A. Rubber Base: Comply with FS SS-W-40, Type I, four inches (4") high, one eighth inch ($\frac{1}{8}$ ") gauge, coved, roll type. Pre-molded corners are acceptable on returns of eight inches (8") or less only. Acceptable manufacturers:
 - 1) Flexco, Division of Textile Rubber Co., Inc.
 - 2) Johnson Rubber Company
 - 3) R.C. Musson Rubber Company
 - 4) Roppe Rubber Company
- B. Adhesive shall be as recommended by manufacturer for use on wall surfaces shown on Drawings.

2.03 COLOR

Colors shall be selected by Architect from manufacturer's standard colors to closely match existing base color.

PART III: EXECUTION

3.01 INSTALLATION

- A. Apply rubber base in as long lengths as practicable to walls, columns and all permanent fixtures where indicated. On masonry or other irregular surfaces, fill voids behind base and along top edge with manufacturer's recommended adhesive filler. Apply rubber base only after completion of carpet or vinyl flooring installation. Match and wrap base around corners. Joints in base shall be neatly fitted and no closer than two feet zero inches (2'-0") to any corner.
- B. Install vinyl edge or reducing strips at all doorways where finish floor material is a different height, where carpet abuts another material and where exposed concrete abuts a finish floor material.

----- END OF SECTION -----

DIVISION NINE - FINISHES

CARPET (ALLOWANCE)

SECTION 09689

PART I: GENERAL

1.01 SCOPE

Furnish all labor, materials, equipment, and incidentals necessary to install carpet.

1.02 SUBMITTALS

- A. Submit manufacturer's literature fully describing carpet and all materials to be incorporated into the work to include adhesives.
- B. Submit full range of manufacturers color samples. More than one color may be chosen.
- C. Submit complete installation instructions to include:
 - 1. Trowel Notching Requirements
 - 2. Spread Rates
 - 3. Adhesive Set Times
 - 4. Seaming methods and procedures

1.03 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. The carpet material shall not be delivered until the building is dried-in, heated and air conditioned.
- B. Store carpet in an enclosed air conditioned and ventilated area protected from construction activity that could damage the product.
- C. Damaged or deteriorated materials shall not be incorporated into the Work and shall be removed from Project Site.

1.04 INSTALLATION CREWS

- A. Carpet Installation Crews shall be on the direct payroll of the carpet supplier.
- B. Subcontracted Installation Crews may be used only with the approval of the Architect prior to Bidding.

1.05 WARRANTY

Submit the following written warranties in a form acceptable to the Owner:

- A. Ten (10) year Wear Warranty
- B. Ten (10) year Colorfast Warranty
- C. Ten (10) year Edge Ravel Warranty
- D. 20 lb. Tuft Bind Warranty (ASTM D-1335)
- E. A 3-year Installers Warranty covering all aspects of installation to include, but not limited to, seams and bubbles.

PART II: PRODUCTS

2.01 CONSTRUCTION STANDARDS FOR CARPET

- A. Carpet: The Contractor shall include an allowance of \$4.00 per square foot (material only) for carpeting required for the project. Carpet selected will 24"x24" squares. Bid to include all labor, materials and accessories.

2.02 ACCESSORIES

- A. Adhesive for carpet:
 - 1) Adhesive shall be a premium multi-purpose adhesive.
 - 2) Adhesive used shall be approved by the carpet manufacturer.
 - 3) Adhesive used shall be compatible with curing compounds, admixtures and other materials used in the concrete slab
 - 4) Adhesive shall be a high temperature resistant product capable of withstanding non-air conditioned, unventilated summertime temperatures in the facility without loss of performance.
- B. Riser nosing: Double undercut carpet stair nosing (Stock no. 565) as manufactured by Burke or approved equal. Use at all stairs in Auditorium.
- C. Edge: Carpet Edge reducer (Stock no. 901) as manufactured by Burke, or approved equal. Use at all aisle edges in Auditorium.

PART III: EXECUTION

3.01 INSPECTION

- A. Examine substrate and conditions under which flooring is to be installed and report any unacceptable conditions to General Contractor.
- B. Do not proceed with installation until unsatisfactory conditions have been corrected Installation of carpet materials shall constitute acceptance of substrate.

3.02 PREPARATION

- A. Concrete shall be smooth with no more than one eighth inch ($\frac{1}{8}$ ") variation from the plane within any ten feet (10'). Grind down all ridges and other irregularities. Fill all cracks, holes and depressions with latex cement underpayment (patching compound) as recommended by the carpet manufacturer.
- B. Remove all paints, oils, waxes, sealers and curing compounds not compatible with the adhesive employed. Organic solvents shall be avoided.
- C. Moisture tests: Determine the suitability of the concrete sub floor for receiving the carpeting with regard to moisture content (and curing compounds) by a bond test as recommended by the carpet and/or adhesive manufacturer.
- D. Sub floor cleaning: Broom and vacuum clean sub floor prior to the installation of the carpet.

3.03 INSTALLATION

- A. Lay out: Lay carpet with a minimum number of seams consistent with prudent use of material.
- B. Adhesive application: Apply the adhesives in strict compliance with the manufacturer's specific recommendations for this Project, observing the recommended trowel notching, spread rates, and open times.
- C. Carpet installation: Install the carpet in strict compliance with the manufacturer's written instructions.
- D. Seal all seams in the carpet in conformance with the written instructions of the carpet manufacturer to provide tight hidden seams.
- E. Carpet joiner shall be installed as per manufacturer's instructions, in locations where carpet abuts other flooring.
- F. Carpet edge shall be installed as per manufacturer's instructions, in locations where carpet abuts exposed concrete flooring or other floor finish materials.

3.04 CLEANING AND PROTECTION

- A. Remove all excessive adhesives from the surface of the carpet.
- B. Perform initial maintenance on the completed installation as recommended by the carpet manufacturer.
- C. Protect the carpet as recommended by the carpet manufacturer from damage by other trades and by the placement of fixtures and furnishings.

----- END OF SECTION -----

DIVISION NINE - FINISHES

PAINTING

SECTION 09901

PART I: GENERAL

1.01 GENERAL

Furnish of all materials, labor and equipment necessary for the completion of all painting throughout the Project.

1.02 SCOPE

It is the intent of this Section to require the field painting of all unfinished interior and exterior items included in the Project to include rooftop mounted equipment, flashing and vents. The Contractor, or painting Subcontractor, shall thoroughly examine the full Contract Documents to determine the extent of painting that is required. Through submission of his bid, the Contractor attests that he has identified all materials and items which are left unfinished by other trades and necessitate painting. This Section does not require painting of factory pre-finished items or prime coats on factory primed items.

PART II: PRODUCTS

2.01 MATERIALS

- A. Paint, enamel, varnish, stains and other materials shall be of the type and quality specified in the Schedule of Finishes.
- B. Basic painting materials such as linseed oil, shellac, turpentine, thinners, etc., shall be of the highest quality and shall have identifying labels on containers.
- C. All paint materials shall be delivered to the site in manufacturer's sealed containers with the manufacturer's label stating brand, type of paint, color and instruction for thinning. Thinning shall be done only in accordance with the manufacturer's instructions.
- D. Bids will be based on paint products of the quality specified and produced by an approved manufacturer. The use of specific manufacturer's products in the Schedule of Finishes is not intended to limit competition but to define quality of finish required. The Contractor will submit to the Architect a list of manufacturers whose products are to be used on the project.

2.02 COLORS AND SAMPLES

- A. Colors are to be selected by the Architect. Different colors may be selected in each room. The Architect will prepare and furnish a color schedule to the Contractor. First coats of paint are to be tinted toward the final color and the Architect may make changes in the tint of the final coat after inspection of appearance of first coat.
- B. Prepare samples of wood finishes for approval prior to finishing installed materials.

2.03 ACCEPTABLE MANUFACTURERS

First line products, of the type specified, manufactured by the following companies will be acceptable.

- A. Benjamin Moore and Company
- B. Pittsburgh Paint Company
- C. Pratt and Lambert
- D. Sherwin-Williams

- E. Glidden
- F. H.I.S. Products.

PART III: EXECUTION

3.01 PREPARATION OF SURFACES

- A. Inspect all surfaces which are to receive field finish and notify the General Contractor of any surface not in proper condition to receive paint. Starting work will constitute acceptance of preceding work and assumption of full responsibility for obtaining satisfactory finish.
- B. Surfaces which are to be repainted shall be thoroughly cleaned prior to painting. Loose or poorly bonded paint shall be scraped or otherwise removed. Roughen existing paint to receive new paint to insure a tight bond.

3.02 WORKMANSHIP

- A. The number of coats of the various finishes specified in the Schedule of Finishes will produce first quality finishes, if properly applied. If the number of coats specified fails to produce a finish acceptable to the Architect, the Painting Contractor shall apply additional coats at his own expense until an acceptable finish is obtained.
- B. Before painting, remove all hardware, plates, and accessories, light fixtures, etc. or adequately protect them during painting. Replace removed items upon completion of the various stages of work. Use skilled mechanics for the removal and replacement of items. During the progress of the work, protect all painting work and the work of others against damage.
- C. Clean all surfaces prior to finishing according to the recommendations of the paint manufacturer, removing all grease, dirt, etc. Surface to be finished shall be clean, dry, smooth and adequately protected against dampness. Touch-up knots and resinous spots in wood with shellac, putty nail holes, crack, and blemishes in wood after priming or staining. Match putty to shade of finish coat. Sand and dust between all coats of finish on natural finish wood items.
- D. All work is to be performed under favorable weather conditions. Each coat of paint shall be applied smoothly, worked out evenly, and allowed to dry completely before the subsequent coat is applied. Allow exterior paints to dry seventy-two (72) hours between coats and interior paints to dry twenty-four (24) hours between coats. Allow enamels and varnishes to dry forty-eight (48) hours between coats. Finished work shall be uniform and of the approved color. It shall completely cover, be smooth and free from runs, holidays sags, clogging or excessive flooding. Edges of paint adjoining other materials or colors shall be sharp and clean without overlapping.
- E. All wood surfaces not exposed to view which require sealers, such as drawers and interior cabinets, shall be sealed with a sealer with a light red tint.

3.03 CLEAN UP

At completion, clean all paint spots from work, touch up and restore finish were damaged, remove surplus materials and equipment and leave entire job clean and acceptable to Architect.

3.04 SCHEDULE OF FINISHES

The following Specification for finishes is not intended to mention every particular item which will receive painter's finish, but is intended to establish type and quality of finish which will be required on various materials. All paint products listed are manufactured by the Pittsburgh Paint Company and are intended to establish the standard of quality required. See Paragraph 2.03 for acceptable manufacturers.

A. Interior Work:

- 2) Stained Finish Wood - doors, cabinets trim panels and handrails.
 - a. Primer: (Open grain woods) One coat REZ semi-transparent Alkyd-Oil Stain 77 line. (If required use Natural Past Wood Filler tinted with oil stain before final finishing.
 - b. Finish: Two coats REZ water base satin clear varnish 77-479, MWF 3.6 mils per coat.
- 4) Gypsum Drywall - Walls
 - a. Primer: One coat PPG quick-drying emulsion sealer 6-2, MWF 3.6 mils per coat.
 - b. Finish: Two coats Speedhide Latex Interior semi-gloss enamel 6 line, MWF 3.6 mils per coat.
- 5) Gypsum Drywall - Furr downs, ceilings
 - a. Primer: One coat PPG quick-drying emulsion sealer 6-2, MWF 3.6 mils per coat.
 - b. Finish: Two coats Speedhide Alkyd flat enamel 6 line, MWF 3.6 mils per coat.
- 6) Gypsum Drywall - Toilets
 - a. Primer: One coat PPG quick-drying emulsion sealer 6-2, MWF 3.6 mils per coat.
 - b. Finish: Two coats Pitt-glaze semi-gloss 16 line, high solids acrylic - epoxy water base, MWF 6.0 mils per coat.
- 7) Plaster Walls - Columns, walls
 - a. Primer: One coat PPG Latex Sealer 6-2, MWF 3.6 mils per coat
 - b. Finish: Two coats Speedhide Latex semi-gloss enamel 6 line, MWF 3.6 mils per coat.
- 9) Exposed Concrete Block - Walls
 - a. Primer: One coat PPG Latex masonry block filler 6-7.
 - b. Finish: Two coats Speedhide Latex Interior semi-gloss enamel 6 line, MWF 3.6 mils per coat.
- 10) Hollow Metal Frames and Doors - (Factory Primed)
 - a. Primer: One coat PPG Red 6-208 inhibitive primer or Speedhide machinery and equipment primer 6-205, MWF 3.6 mils per coat.
 - b. Finish: Two coats Speedhide Alkyd interior Lo-sheen enamel 6 line, MWF 3.5 mils per coat.

NOTE: Spot prime abraded areas.

B. Exterior Work:

- 1) Ferrous Metals - Steel, hollow metal doors and frames.
 - a. Primer: One coat PPG inhibitive Red or White primers, MWF 3.6 mils per coat.
 - b. Finish: Two coats Speedhide exterior-interior enamel 6 line, MWF 3.6 mils per coat.
- 2) Galvanized Metals- Flashing, fascia, vents
 - a. Primer: One coat PPG galvanized steel primer white or gray, MWF 3.2 mils per coat.
 - b. Finish: Two coats Speedhide exterior-interior gloss enamel 6 line, MWF 3.6 mils per coat.

NOTE: Surface must be free from grease, dirt, rust, and all other surface contaminants. All rust spots must be properly cleaned and primed.
- 3) Roof Top Units, Equipment and Items
All roof top mechanical units and equipment which is higher than roof parapets shall receive field paint finish. As specified for exterior ferrous and galvanized metals.

----- END OF SECTION -----

DIVISION TEN - SPECIALTIES

FIRE EXTINGUISHER AND CABINETS

SECTION 10522

PART I: GENERAL

1.01 GENERAL

This section includes the furnishing and installation of all miscellaneous accessories as shown on the Drawings and specified herein.

1.02 SHOP DRAWINGS

- A. Submit shop drawings or submittals for all items in this section.
- B. Submit color samples of manufacturer's standard colors. Architect shall select a standard color.

1.03 STANDARD OF QUALITY

It is the intentions of this specification to establish a standard of quality by specifying brand name. Other manufacturers, upon submittal to Architect of sufficient date to establish an equivalent standard of quality, may be used.

PART II: PRODUCTS

2.01 MATERIALS

- A. Fire Extinguishers and Cabinets:
 - 1) Location: Refer to Floor Plans
 - 2) Cabinet type: Muckle Manufacturing, Model No. 102 SR-3 in 8" or deeper walls, Model No. 104 SR-4 in 6" or deeper walls recessed with 2 1/2" or 4" deep trim with solid panel door, or equal.
 - 3) Extinguisher: Larsen's Model MP10 or equal.

PART III: EXECUTION

3.01 INSTALLATION

Install all miscellaneous accessories in strict compliance with manufacturer's directions.

-----END OF SECTION-----

DIVISION TEN - SPECIALTIES

TOILET ACCESSORIES

SECTION 10810

PART I: GENERAL

1.01 GENERAL

Furnish all materials, labor, equipment and incidentals necessary for the installation of toilet accessories.

1.03 SUBMITTALS

Submit manufacturer's literature (cut sheets) fully describing, verbally and graphically, the items to be furnished along with a schedule showing quantity and location of each accessory.

PART II: PRODUCTS

2.01 PRODUCTS

Toilet accessories shall be the following fixtures as shown on the Drawings, and as manufactured by Bradley:

- A. Paper Towel Dispenser, Toilet Paper Holder and Soap Dispenser – By Owner, Installed by Contractor
- B. Grab Bars - #800-001 x 18" , #800-001 x 36" and #800-001 x 42"
- D. Framed Mirrors - #780 (24X36 min. at each lav)

2.02 APPROVED MANUFACTURERS

- A. Bobrick Washroom Equipment
- B. American Specialties, Inc.

2.03 FINISHES

All accessories shall be type 304 satin finish stainless steel unless otherwise noted.

PART III: EXECUTION

3.01 INSTALLATION

- A. Installation of all accessories shall be in accordance with manufacturer's instructions. Grab bars shall withstand a 250# pull or load for five minutes.
- B. Mounting heights shall conform to ADA handicapped accessibility standards.
- C. Prior to installation, ensure that adequate blocking is in place for proper and secure anchorage.
- D. Adjust as required for smooth operation and properly functioning mechanisms. Clean and patch all exposed surfaces after removing protective coatings.

3.02 WARRANTY

Provide standard manufacturer's warranty.

----- END OF SECTION -----

DIVISION FIFTEEN - MECHANICAL

BASIC MATERIALS AND METHODS

SECTION 15050

PART I: GENERAL

1.01 CODES

- A. Comply with local plumbing code, local building code, all of which shall be the latest edition with all amendments; also, other applicable state and local codes ordinances.

1.02 COORDINATION

Install materials and equipment at proper time to keep pace with the general construction and the work of other trades involved.

PART II: MATERIALS

2.01 USES

Match existing material types, makes and manufactures. Upgrade materials as required for code compliance. Preference should be given to readily available materials to minimize service disturbances.

PART III - EXECUTION

3.01 THERMAL EXPANSION OF PIPING

- A. Swing joints, turns expansion loops or ling offsets shall be provided whenever shown on the Drawing or whenever necessary to allow for the expansion of piping within the building. Broken pipes or fittings broken due to rigid connections must be removed and replaced at Contractors expense.
- B. Anchor all lines having expansion loops or joints as indicated or required so than expansion and contraction effect is equally distributed. Lines having expansion joints shall be accurately guided on both sides of the joint.

3.02 DRAIN PIPING

This system shall consist of all piping from the source to a floor drain or other point of disposal in the building plumbing system. Final connections to the plumbing system shall be through open sight, or indirect trapped connection. All horizontal drains shall pitch one eighth inch ($\frac{1}{8}$ ") per foot and shall be provided with plugged tee cleanouts, unless otherwise accessible for cleaning. Fittings shall be drainage pattern.

3.03 EQUIPMENT CONNECTIONS

Extend waste water to the various items of equipment as indicated or required, terminating the lines where and as directed. Make all final plumbing connections. Provide shut-off valves and unions at each water connection to each item of equipment requiring same. Furnish all P-traps for waste connections to this equipment.

3.04 OPERATING INSTRUCTIONS

Complete, neatly framed instructions for the care and operation of all equipment shall be provided and installed where directed. This Contractor shall carefully instruct the Owner's maintenance person during the adjustment and testing period. The Contractor shall also, in the presence of both the Owner's representative and the Architect, demonstrate the complete operation of each and every piece of apparatus. In the case of heating and air conditioning equipment, both the heating and cooling functions shall by fully demonstrated at such times as are required. Instructional periods shall be for such lengths of time as may be necessary to thoroughly familiarize operating personnel with the proper care, operation and maintenance of the equipment.

3.05 FOUNDATIONS AND BASES

- A. In general, fans and other belt-connected equipment shall incorporate adjustable slide rails for the motors.

----- END OF SECTION -----

DIVISION SIXTEEN - ELECTRICAL

GENERAL CONDITIONS FOR ELECTRICAL WORK

SECTION 16010

PART I: GENERAL

1.01 SPECIAL NOTICE

- A. All work covered by this Section shall be accomplished in accordance with the entire set of Contract Documents.

1.02 SCOPE

- A. Furnish all labor and materials noted, required or necessary for the complete Electrical Installation. All work shall be completed to the entire satisfaction of the Architect.

1.03 INSPECTION OF SITE

The Contractor shall visit the site, verify all existing items shown on Drawings or specified, and familiarize himself with the working conditions, hazards, existing grades, actual formations, soil conditions, and local requirements involved. Submission of Bids shall be deemed evidence of such visit. All proposals shall take these existing conditions into consideration and the lack of specific information on the Drawings shall not relieve the Sub-Contractor of any responsibility.

1.05 ELECTRICAL SERVICE

- A. This Contractor shall contact the local Power Company and make all arrangements, pay all fees, and acquire all permits as required for the installation of the electrical service and systems as hereinafter specified.
- C. The Electrical Contractor shall also make all provisions and pay all fees which may be required by the servicing utility companies. Verify these requirements.

1.06 FEES AND PERMITS

Each Contractor shall obtain all permits, inspections, and approvals applicable to this trade, as required by regulatory authorities. All fees and costs of any nature whatsoever incidental to these permits, inspections and approvals shall be assumed and paid by the Contractor. The general building permit will be obtained under other sections of the Work and that portion of the costs involved in obtaining this permit will be paid by the Contractor for the electrical trade

1.07 CODES AND STANDARDS

- A. All materials and workmanship shall comply with the applicable local, county, state and national codes, specifications, ordinances, utility company regulations and specified industry standards.
- B. 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.
- C. In addition to the above, if the following industry standards and codes are more stringent, they shall take precedence.
 - NEC - National Electric Code
 - NEMA - National Electric Manufacturer's Association
 - UL - Underwriter's Laboratories
- D. All work shall be performed in a neat and workmanlike manner. Any work found to be unsatisfactory by the Architect shall be removed and reinstalled immediately at no additional cost.
- E. Any and all installation of electrical conductors and apparatus shall be performed by skilled and properly licensed Electricians.

1.08 MANUFACTURER'S DIRECTION

The manufacturer's published directions shall be followed in the delivery, storage, protection, installation, piping and wiring of all equipment and material. Should the Contractor perform any work that does not comply with the manufacturer's directions or instructions from the Architect, he shall bear all costs arising in connection with deficiencies.

1.11 EQUIPMENT IDENTIFICATION

- A. All major equipment such as panel boards, disconnects, and other similar equipment shall be identified by the attachment of name plates properly spaced for easy and legible reading. Plates shall be attached to equipment by the use of a permanent type adhesive.
- B. Complete all identification cards for switches, starters and other devices, install panel boards and similar pieces of equipment on a typewriter in a neat manner and insert the card in the card holders behind a sheet of clear plastic.

1.12 SUPERVISION

Each Contractor shall keep a competent superintendent or foreman on the job at all times and shall be fully responsible for the supervision of his work.

PART II: PRODUCTS

2.01 MATERIALS AND MANUFACTURERS

- A. Materials furnished shall be new, of best quality and grade of standard manufacture and shall conform to National Board of Fire Underwriter's requirements and bear the Underwriter's Laboratories seal of approval.

2.02 SUPPORTS AND HANGERS

- A. All horizontal runs of conduit shall be supported as required by code. Supports and hangers shall be installed to permit free expansion and contraction in the conduit system as necessary. No conduit shall be self-supporting nor shall it be supported from the equipment connections.

2.03 SLEEVES

- A. Each and every conduit, regardless of material, which passes thru an elevated concrete slab, masonry wall, roof or other portion of the building structure shall be free from the structure and shall pass through a sleeve.
- B. All sleeves, except as hereinafter specified, shall be constructed from electro metallic tubing or equivalent weight steel tubing and shall be flush on both sides of the surface penetrated. The sleeves shall be sized to allow free passage of the conduit to be inserted.

----- END OF SECTION -----

DIVISION SIXTEEN - ELECTRICAL

ELECTRICAL TEMPORARY FACILITIES SECTION 16049

PART I: GENERAL

1.01 RELATED DOCUMENTS

- A. The general provisions of the contract, including General and Supplementary Conditions and General Requirements (if any), apply to the work specified in this section.

1.02 DESCRIPTION OF WORK

- A. The types of temporary facilities and uses requiring electrical work include (but are not necessarily limited to) the following:
 - 1. Temporary power service/source.
 - 2. Temporary power distribution.
 - 3. Temporary lighting.
 - 4. Temporary use of permanent electrical facilities.
- B. Refer to Division 1 for basic requirements and administrative requirements relating to electrical work of temporary facilities.

1.03 QUALITY ASSURANCE

- A. Governing Regulations and Permits: Comply with governing regulations for the electrical work of temporary facilities; including but not necessarily limited to code compliances, permits, inspections, and health and safety compliances.

PART II: PRODUCTS

- A. Provide either new or used materials and equipment for electrical temporary facilities which are suitable and for intended uses and will ensure safe, adequate performance of the facilities in accordance with governing regulations and codes.

PART III: EXECUTION

3.01 INSTALLATION AND OPERATION

- A. General: Connect and terminate electrical temporary facilities at locations as determined by the General Contractor to fulfill project requirements. Install meters where required for the proper allocation of charges for temporary power use. The General Contractor will pay the electric utility bills to the local power company during the period of construction.
- B. Electrical Work:
 - 1. Temporary power service to the project construction area including stand-alone power generating units where and when the connected power service, from an existing utility source is not feasible.
 - 2. Temporary power distribution (Temporary wiring) for the purposes of supplying convenience outlets; connections for construction tools and machines including hoists/cranes and elevators; connections for temporary pumping, heating; temporary lighting; and similar facilities for construction, general services, security and protection. Work includes outlets, overload-protected disconnect switches, and similar devices and facilities; but does not include extension cords and actual temporary mechanical equipment connections.
 - 3. Temporary lighting for construction areas; for temporary offices, shops, storage sheds and similar temporary space enclosures; for exterior construction areas, parking roadways and walkways; and for special lighting for security, protection and project identification; but

excluding plug-in type task lighting (defined as "tools"), needed to supplement general temporary lighting for specific construction activities.

4. A ground fault protective system or ground system per the N.E.C. shall be installed and maintained and shall be subject to the approval of the authority having jurisdiction.

3.02 REMOVAL AND RESTORATION

- A. When no longer needed for construction work, remove electrical temporary facilities. Repair and restore or replace work damaged by installation and operation of electrical temporary facilities. Electrical work installed as temporary facilities shall, upon approval, remain the property of the Installer. All debris and unused materials shall be removed from the site and all costs paid by the electrical contractor.

----- END OF SECTION -----

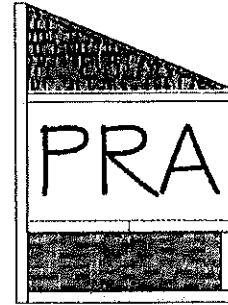
Prairie Rock Architecture, PLLC

Richard O. Starks

P.O. Box 2618

Blanchard, OK 73010

405-255-8202



OK State Fire Marshal's Office,

The components of the Kiowa County Election Board Office located at 215 North Lincoln Street in Hobart, OK are designed and will be installed to the current codes listed below. As required, each contractor will re-affirm this in a letter to the OSFM at project completion.

Architectural and Structural-International Building Code 2018

Electrical-National Electric Code 2020

Fire Alarm-International Fire Code 2018

Mechanical-International Mechanical Code 2018

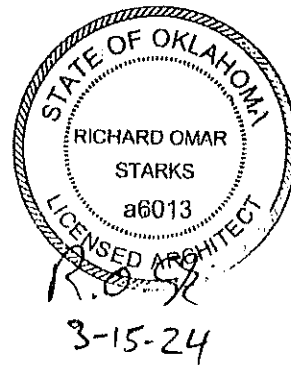
Plumbing-International Plumbing Code 2018,

International Fuel gas Code 2018

Respectfully,

Richard O. Starks

Architect



For State Fire Marshal Use Only

File #			
PO #		Permit Fee Owed	
Uniform Building Code Commission Fee	\$4.00		
Total Amount Owed			
Date Paid		Amount Paid	

Oklahoma State Fire Marshal
 PO Box 36690
 Oklahoma City, OK 73136-2690
 (405) 522-5006 Fax: (405) 522-5028
**New Construction Building
 Permit Application Form**



- If project is located on tribal trust land or a state beneficiary public trust please contact our office before proceeding to fill out this form or sending any drawings or correspondence. Is this project on tribal trust land? (Yes No)
- This form must be completely filled out in order to process your application for plan review.
- Until payment or PO is received all plans will be on hold and will not be put into circulation for review. Plans will be on hold for a maximum of 7 (seven) business days awaiting payment. If payment is not received, the plans will be returned to the submitting person or party without review.

Project Name	Kiowa County Election Board-Office	Date	3-15-2024
Phased Project	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If YES, what phase number?	
Project Address	215 North Lincoln	City / Zip Code	Hobart 73651
Within the city limits?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	County	Kiowa
Construction Type	5B <input type="checkbox"/> CMU Wall <input type="checkbox"/> Wood Stud <input checked="" type="checkbox"/> Metal Stud <input type="checkbox"/>	Number of Stories	1
Occupancy Type	B	Occupant Load: New&Existing	15
Total Square Footage (All floors, Roof Overhangs)	2,500	NOTE: Fees = total square footage x \$0.10 + \$4.00 (Minimum Fee \$54.00)	

Architect / Designer Information

Architect/Designer	PRA, PLLC		
E-mail Address	Richard@pra-prc.com		
Phone Number	405-255-8202	Fax Number	

Owner Information

Project Owner	Gary Jennings		
E-mail Address			
Phone Number	580-682-0288	Fax Number	

Fire Protection and Building Features

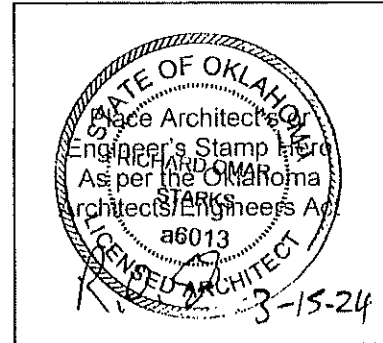
Sprinkler System Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Fire Alarm System Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Existing Sprinkler System Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Voice Evacuation System Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sprinkler Pump Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Fire Sprinkler Tank Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Existing Sprinkler Pump Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Existing Fire Sprinkler Tank Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Full or Partial Coverage	Full <input type="checkbox"/> Partial <input type="checkbox"/>	Partial sprinkler coverage requires 2-hour fire separation.	
Building Area Increase Being Applied?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Building Area Increase by:	Sprinkler <input type="checkbox"/> Frontage <input type="checkbox"/> Both <input type="checkbox"/>
Hood/ Alternative Suppression System Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Elevator or Lift Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		Electric <input type="checkbox"/> Hydraulic <input type="checkbox"/>	
Smoke Control System Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Any OUBCC Changes To The State Adopted Building Codes Being Applied, Explain Each.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is This A Pre-Engineered Metal Building?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is A Return Air Plenum Being Provided?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is this An Unlimited Area Building?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Have Any Alternates Been Accepted And Applied? If So, Explain Each.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Fuel Burning Appliance/Fireplace/Fuel Burning Forced Air Furnace Being Installed?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Separate CO System being installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		Fire Alarm/CO System being installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Carbonated Beverage System Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Carbon Dioxide Detection System being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Access Controlled Egress Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Building Previously Occupied?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Active Shooter/Intruder System Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Storm Shelter Being Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Active Shooter/Intruder System Currently Installed?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Cost of Project?	\$300,000		

NOTE: All required systems shall be reviewed and permitted prior to on-site inspections occurring.

Architect / Engineer Information

Please place the Architect's or Engineers stamp in the box provided.
(If Applicable)
All building drawings requiring an Architect or Engineer must also be stamped on the drawings prior to review.



Mailing / Contact Information

Choose One:	<input checked="" type="checkbox"/> Please mail reviewed plans. (All plans will be mailed through USPS using standard media mail)	<input type="checkbox"/> Mail using third party carrier: (Fed Ex / UPS etc.) LABEL MUST BE PROVIDED?
All items shipped through a third-party carrier will be at the customer's expense. A properly filled out return label must be provided to our office with this transmittal form or items will be returned using standard mail		
Name:	Gary Jennings	
Street Address:	316 South Main Street	
City:	Hobart	State: OK
Zip:	73561	
E-mail:		
Phone:	580-682-0288	
Third Party Carrier Information		
Preferred Carrier:		
Account #:		

Remarks / Scope of work:

// FIRE LINE - DO NOT CROSS // FIRE LINE - DO NOT CROSS // FIRE LINE - DO NOT CROSS //
 State Fire Marshal Use Only State Fire Marshal Use Only State Fire Marshal Use Only State Fire Marshal Use Only

1 st Contact: Date/Person Contacted	2 nd Contact: Date/Person Contacted	3 rd Contact: Date/Person Contacted
Name	Name	Name
Date	Date	Date