

PROJECT MANUAL
FOR

**DRIVE REPAIR
FIRE STATION #14**

8121 Colonel Glenn
LITTLE ROCK, ARKANSAS

August 19, 2015



Little Rock Bid #15-162

Project No. HW15-675-1

H+W

Heiple + Wiedower Architects
319 President Clinton, Suite 201
Little Rock, AR

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**BID NO. 15-162
SECTION 00020
INVITATION TO BID**

PROJECT: Drive Repair Fire Station #14
8121 Colonel Glenn Rd.
Little Rock, AR

OWNER: City of Little Rock

ARCHITECT / ENGINEER: Heiple + Wiedower Architects

DATE ON DRAWINGS & MANUAL: August 19, 2015

Sealed bids for the Drive Repair at Fire Station #14 will be received by the Owner at the City of Little Rock Purchasing Office, City Hall, 500 West Markham, Room 300, Little Rock, Arkansas until **2:00 pm Monday October 5, 2015**, at which time they will be opened and read aloud. Bids received after the stated time will be returned unopened. There will be a mandatory pre-bid meeting on this project on **Tuesday September 22, 2015 at 10:00** at Fire Station #14, 8121 Colonel Glenn Road. The meeting will be held at the construction site unless it is raining and it will be held inside the Fire Station.

Bids shall be submitted in accordance with the Instructions to Bidders which is bound in the Project Manual. *Segregated bids will not be accepted.*

The BID DOCUMENTS may be examined at the following locations:

F. W. Dodge
1701 Center View Drive Suite 119
Little Rock, Arkansas

Southern Reprographics
907 West 7th Street
Little Rock, Arkansas

Copies of the BID DOCUMENTS may be obtained at Southern Reprographics, 907 West 7th Street, Little Rock, Arkansas, for the cost of printing. Bonafide Bidders and subcontractors may pick up a limited number of sets of drawings at the pre-bid conference.

Bid security in the amount of five percent of the Bid shall accompany the Bid as described in the Instructions to Bidders.

Direct inquiries to: Tim Heiple, A.I.A.
Heiple Wiedower Architects
319 President Clinton Ave, Suite 201
Little Rock, Arkansas 72201
501-707-0115 phone
501-707-0118 fax
tim@hwarch.com email

The Owner reserves the right to reject any or all Bids and to waive any informalities. The Owner may hold the Bids for a period not to exceed 60 days from the date of opening the Bids for the purpose of reviewing the Bids and investigating the qualifications of Bidders prior to awarding the contract.

Pursuant to Ark. Code Ann. § 22-9-203, the City encourages all small and minority business enterprises to submit bids for capital improvements. Encouragement is also made to all general contractors that in the event they subcontract portions of their work, consideration be given to the identified groups.

END OF SECTION

**SECTION 00300
BID FORM
LR BID #15-162**

Proposal of (hereinafter called "BIDDER") _____
organized and existing under the laws of the State of Arkansas doing business as
_____.

(Insert "a corporation", "a partnership", or "an individual", as applicable.)

To the City of Little Rock (hereinafter called "OWNER").

In compliance with your Invitation to Bid, BIDDER hereby proposes to perform all WORK included in the section in which he is bidding for the **Drive Repair Fire Station #14** 8121 Colonel Glenn Little Rock, in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to his own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other BIDDER or with any competitor. BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to complete the entire work of the contract within **30 (thirty) calendar days**.

The Bidder, in compliance with your advertisement for bids for the Drive Repair Fire Station #14 8121 Colonel Glenn Little Rock, Arkansas. Paving examined the plans and specifications with related documents and the site of the proposed work, and being familiar with all the conditions surrounding the construction of the proposed project, including the availability of materials and supplies, agrees to construct the project in accordance with the Contract Documents, within the time set forth therein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work as described in the Contract Documents, of which this proposal is a part.

1. BASE PROPOSAL

BID PROPOSAL: \$ _____

_____dollars.

Amount shall be shown in both written form and figures. In case of discrepancy between the written amount and the figures, the written amount shall govern.

2. ACCEPTANCE OR REJECTION OR PROPOSAL

In submitting this BID, it is understood that the OWNER reserves the right to reject any and all BIDS. If written notice of acceptance of this bid is mailed, telegraphed or delivered to the Undersigned within 60 (sixty) calendar days after opening of the BID, the Undersigned agrees to execute and deliver a contract in prescribed form and furnish required Bond within 10 (ten) days after contract is presented for signature.

3. ADDENDA RECEIPT

BIDDER acknowledges receipt of the following ADDENDA:

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

4. FIRM NAME

Business Name: _____

Business Address: _____

Business Phone/Fax: _____

Authorized Signature: _____
(Title)

Seal (if Corporation):

Corporate Secretary: _____

License Number: _____

END OF SECTION

SECTION 01010
HW #15-162
SUMMARY OF WORK

To be considered responsive, Bids must be made in accordance with the following instructions:

1. PRE-BID CONFERENCE:

There will be a mandatory pre-bid conference at Fire Station #14, 8121 Colonel Glenn, Little Rock, AR at **10:00 am on Tuesday, September 22, 2015**. Limited copies of the Bid documents will be available at the pre-bid conference.

2. AVAILABILITY OF DOCUMENTS: The BID DOCUMENTS may be examined at the following locations:

F. W. Dodge	Southern Reprographics
1701 Center View Drive Suite 119	907 West 7th Street
Little Rock, Arkansas	Little Rock, Arkansas

Copies of the BID DOCUMENTS may be obtained at Southern Reprographics, 907 West 7th Street, Little Rock, Arkansas. Bonafide Bidders and subcontractors may acquire sets of documents at Southern Reprographics at no cost.

Direct inquiries to: Tim Heiple, A.I.A.
Heiple Wiedower Architects
319 President Clinton Ave, Suite 201
Little Rock, Arkansas 72201
501-707-0115 phone
501-707-0118 fax
tim@hwarch.com email

3. RECEIPT AND OPENING OF BIDS:

The City of Little Rock (hereinafter called the "Owner") invites Bids on the Bid Form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the Purchasing Office of Little Rock City Hall, 500 West Markham Street, Room 300, Little Rock, Arkansas, until **2:00 p.m. Monday October 5, 2015**.

The Owner may consider informal any Bid not prepared and submitted in accordance with the provisions hereof and may waive any irregularities or reject any or all Bids. Any bid may be withdrawn prior to the above scheduled time for the opening of Bid or authorized postponement thereof. Bids received prior to the time of opening will be kept, unopened. Any Bid received after the time and date specified will not be considered. No responsibility will be assumed by any person for the premature opening of a bid not properly addressed and identified.

4. PREPARATION OF BID:

Use Bid Form bound in Project Manual. Bid prices must be written in ink or typewritten, in both words and numbers. The signature of the individual authorized to bind the Bidder shall be in longhand. Each Bid must be submitted in a sealed envelope bearing on the outside the name of Bidder, his address, and name of project for which Bid is submitted.

5. BID SECURITY:

Bids must be accompanied by a bidder's bond in an amount equal to 5% of the Bid, executed by a surety company meeting the requirements of paragraph 5 below. The Bidder may furnish a certified check, in an amount equal to 5% of Bid, drawn on a national bank or a bank having a membership in the Federal Reserve System and signed by the President or Cashier, in lieu of Bond. Such bond or check and the amount thereof shall become the property of the Owner as noted in the Bid Form, as liquidated damages, if the Bidder whose Bid is accepted shall fail upon receipt of written notice of the acceptance of his bid, to execute a contract in accordance with good and sufficient surety or sureties, within ten calendar days after the prescribed forms are presented for signature.

6. BOND REQUIREMENTS

Pursuant to Act 1015 of 2013 which becomes effective on August 16, 2013, all bonds submitted to CLR (bid bonds and Performance/Payment Bonds) must be issued by surety companies that are listed on current United State Department of Treasury's Listing of Approved Sureties. On and after this date:

Any bid bonds submitted by a bidder that are not issued by a surety company qualified and authorized to do business within Arkansas and listed as an approved surety on the US Department of Treasury list will be rejected.

Any performance and payment bonds provided by the Contractor that are not issued by a surety company qualified and authorized to do business within Arkansas and listed as an approved surety on the US Department of Treasury list shall be considered as a contractor's default in failing to execute and deliver the contract and bonds. The contractor is liable to the project owner in the amount of the 5% bid surety.

To verify current list of surety companies, please go to: www.fms.treas.gov/c570/c570_a-z.html and search surety company name in the A to Z database listing.

7. CONDITIONS OF WORK:

Before submitting a Bid, Bidders shall carefully examine the Drawings and the Specifications under this work, visit the site of the work, fully inform themselves as to all existing conditions and limitations, and shall include in the Bid the sums to cover the cost of all items included in the Contract.

Insofar as possible, the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of, or interference with, the work of any other Contractor.

8. SUBMISSION OF POST-BID INFORMATION:

Upon receipt of written notice of contract award, the successful Bidder shall execute a contract, in accordance with good and sufficient surety or sureties, within ten calendar days after the prescribed forms are presented for signature. Required bond and insurance documents shall be furnished with the executed contract.

9. SECURITY FOR FAITHFUL PERFORMANCE:

Simultaneously with his delivery of the executed contract, the Contractor shall furnish an executed **Performance Bond and an executed Labor and Material Payment Bond, each in the amount of 100% of the Contract Sum**, as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract, as specified. The surety on such bond shall be a Surety Company that meets the requirements of paragraph 6 above.

10. POWER OF ATTORNEY:

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power-of attorney.

11. LAWS AND REGULATIONS:

The Bidder's attention is directed to the fact that all applicable state laws, municipal ordinances, and the rules and regulations of all authorities have jurisdiction over construction of the project and shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though written out in full.

12. METHOD OF AWARD:

If the Base Bid is within the amount of funds available to finance the construction contract, and the Bidder has met all other qualifications as specified in this and the attached documents, then contract award will be made to that responsible responsive Bidder submitting the low Base Bid.

13. OBLIGATION OF OWNER:

The Owner, within ten calendar days of receipt of acceptable Bonds and Agreement signed by the party to whom the contract was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the Owner not execute the Agreement within such period, the Bidder may, with WRITTEN NOTICE, withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

The NOTICE TO PROCEED will be issued within ten calendar days of the execution of the Agreement by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between the Owner and Contractor. If the Notice to Proceed has not been issued within the ten day period or within the period mutually agreed upon, the Contractor may terminate the Agreement without further liability on the part of either party.

14. Access to the Site: Access to the site must be approved by the owner. All work to be accomplished during normal working hours established as between 7:00 a.m. and 5:00 p.m. Monday through Friday.

15. Record Drawings: The Contractor shall provide the Architect with accurate information to be used in the preparation of permanent record drawings. For this purpose, the Contractor shall record on one set of contract drawings all changes from the installations originally indicated, and record final locations of underground lines by depth from finished grade and by accurate horizontal offset distances to permanent surface improvements such as buildings, curb edges or walks.

16. File Drawings: At the completion of this project, the General Contractor shall furnish to the Architect and to the Owner, a complete file of the final copies of all shop drawings used in the construction of this project.

17. Request for Supplementary Information: It shall be the responsibility of the Contractor to make timely requests of the Architect for color schemes and other additional information, not already in his possession which he will require in the planning and production of the work. Such requests may be submitted from time to time, as the need is approached, but each request shall be

filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay.

18. Job Offices and Storage:

- A. The Contractor and his Subcontractors shall maintain such office and storage facilities on site as may be necessary in the proper conduct of the work. These shall be located so as to cause no interference to any work to be performed on the site. The Architect shall be consulted with regard to locations.
- B. Upon completion of the project, or as directed by the Architect, the Contractor shall remove all such temporary structures and facilities from the site, same as to become his property, and leave the premises in the condition required by the contract.

19. Sanitary Arrangements: The Contractor at the beginning of the work shall provide on the premises a suitable temporary convenience and enclosure for the use of all workmen on the job, all its contents at the completion of the contract.

20. Temporary Utilities: Contractor shall provide his own utilities during construction.

21. Non-Discriminatory or Equal Opportunity Employee:

- A. As a condition for doing business with the City of Little Rock, the contractor shall not discriminate on the basis of race, color, creed, religion, race sex, national origin, age, disability, marital status, sexual orientation, gender identity or genetic information and shall require such compliance in agreements with subcontractors and sub-contractors.

22. Contractor and Subcontractor Participation

- A. The City of Little Rock encourages participation of small, minority and women owned business enterprises in the procurement of goods, services, professional services and construction, either as a general contractor or subcontractor. It is further requested that whenever possible, majority contractors who require subcontractors, seek qualified small, minority and women owned businesses to partner with them.

24. LIQUIDATED DAMAGES:

N/A

END OF SECTION

SECTION 02100
SITE PREPARATION

PART 1 - GENERAL

- 1.01 SCOPE: Provide site preparation , complete, including clearing and grubbing, and removal above and below-grade improvements.
- 1.02 RELATED WORK SPECIFIED IN OTHER SECTIONS:
 - A. Earthwork; Section 02200.
- 1.03 JOB CONDITIONS:
 - A. Protection of Existing Improvements: Provide protections necessary to prevent damage to existing improvements indicated to remain in place. Protect improvements of Owner's property. Restore damaged improvements to their original condition, as acceptable to parties having jurisdiction.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

- 3.01 SITE CLEARING:
 - A. General: Remove vegetation, improvements, or obstructions interfering with installation of new construction. Remove such items elsewhere on the site or premises as specifically indicated. Removal includes stumps and roots.
 - B. Removal of Improvements: Remove above-grade and below-grade improvements necessary to permit construction, and other work as indicated. Remove existing building and foundations as shown in the site plan.
- 3.02 DISPOSAL OF WASTE MATERIALS:
 - A. Removal from Owner's Property: Remove waste materials and unsuitable and excess topsoil from the Owner's property and dispose of legally.

END OF SECTION 02100

SECTION 02200
EARTHWORK

PART 1 - GENERAL

- 1.01 SCOPE: Provide earthwork, complete, including excavation, placement, stabilization and compaction of earth.
- 1.02 RELATED WORK SPECIFIED IN OTHER SECTIONS:
- A. Site Preparation: Section 02100
- 1.03 JOB CONDITIONS:
- A. EXISTING UTILITIES:
1. Locate existing underground utilities in the area of work. Provide adequate means of protections during earthwork operations. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
 2. Do not interrupt existing utilities servicing facilities occupied and used by Owner and others, except when permitted in writing by Architect and then only after acceptable temporary utility services have been provided.
- C. PROTECTION: Protect structure, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.
- 1.04 REFERENCES
- A. ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT(AHTD).
1. Standard specifications for highway construction edition of 1991.

PART 2 - PRODUCTS:

- 2.01 SOIL MATERIALS:
- A. SUB-BASE MATERIAL: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, crushed slag, natural or crushed sand, as acceptable to the Architect. Class 7 crushed stone conforming to grading requirements of the standard specifications for highway construction of the Arkansas State Highway Department table 303-I.
- B. DRAINAGE FILL: Washed, uniformly graded mixture of crushed stone, or crushed or uncrushed gravel, with 100% passing a 1 1/2 sieve and not more than 5% passing a No. 4 sieve.

PART 3 - EXECUTION:

3.01 EXCAVATION:

- A. CLASSIFICATION: Remove and dispose of any material encountered to obtain required sub-grade elevations, including pavement, obstructions visible on ground surface, underground structures and utilities indicated to be removed, boulders, solid rock, rock in ledges, and rock-hard cementitious aggregate deposits. Correct unauthorized excavations (removal of materials beyond indicated sub-grade elevations) by extending the indicated bottom elevation of the footing to the lower elevation.
- B. DEWATERING: Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundations bottoms, undercutting footings, and soil changes detrimental to stability of subgrade and foundations. Provide and maintain pumps, well pints, sumps, suction and discharge lines, and other dewatering system component necessary to convey water away from excavations. Convey water removed from excavations and rain water to collecting or runoff areas. Establish and maintain temporary drainage ditches and other diversions outside excavations limits for each structure. Do not use trench excavations as temporary drainage ditches.
- C. MATERIAL STORAGE: Stockpile excavated material where directed until required for backfill and fill. Place, grade and shape stockpiles for proper drainage. Locate and retain soil materials away from edge of excavations. Dispose of excess soil and material as specified.
- D. EXCAVATION FOR PAVEMENTS: Cut surface under pavements to comply with cross-sections, elevations and grades as indicated.

3.03 COMPACTION: Compact soils to not less than the following percentages of maximum Standard Proctor density for soils which exhibit a well-defined moisture density relationship determined in accordance with ASTM D 698 or ASTM D-1557.

- A. Compact each layer of backfill and fill soil materials and the top 12" of subgrade for structures, slabs and pavements to 95% Modified Proctor maximum density (ASTM D-1557).

3.63 DISPOSAL: Remove trash, debris and waste material from site and dispose of in legal off-site dump site. Excess excavated material must be disposed of off-site, unless otherwise directed by the Owner.

END OF SECTION 02200

SECTION 03310
CONCRETE WORK

PART 1 - GENERAL

- 1.01 SCOPE: Provide all cast in place concrete work, unless otherwise specified. Provide all reinforcing steel, dowels, chairs, and accessories for concrete work.
- 1.02 RELATED DOCUMENTS: Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.
- 1.03 DESCRIPTION OF WORK:
- A. Extent of concrete work is shown on drawings.
- 1.04 QUALITY ASSURANCE:
- A. Codes and Standards: Comply with provisions of ACI Code as it pertains to concrete paving.
- 1.05 SUBMITTALS:
- A. Product Data: Submit data for proprietary materials and items, including reinforcement and forming accessories, admixtures, patching compounds, waterstops, joint systems, curing compounds, and other as requested by Architect.
- B. Laboratory Test Reports: Submit laboratory test reports for concrete materials and mix design test as specified.
- C. Material Certificates: Provide materials certificates in lieu of materials laboratory test reports when permitted by Architect. Material certificates shall be signed by manufacturer and Contractor, certifying that each material item complies with, or exceeds, specified requirements.

PART 2 - PRODUCTS

- 2.01 MATERIALS:
- A. Reinforcing Materials:
1. Polypropylene fiber micro-resin forcing to be utilized for adding strength and prevent cracking on this project.
 2. Welded Wire Fabric: ASTM A 185, welded steel wire fabric.
 3. Supports for Reinforcement: Provide supports for reinforcement including bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcing bars and welded wire fabric in place. Use wire bar type supports complying with CRSI specifications, unless otherwise acceptable.
 - a. For slabs-on-grade, use supports with sand plates or horizontal runners where base material will not support chair legs.

D. Concrete Materials:

1. Portland Cement: ASTM C 150 , Type I, unless otherwise acceptable to Architect:
2. Fly Ash: ASTM 618, Type C or Type F.
 - a. The Contractor may, at his option, use fly ash as an additive to the concrete mix. Limit use of fly ash to not exceed 25% of cement content by weight.
3. Normal Weight Aggregates: Clean, washed aggregate complying with ASTM C 33, and as herein specified. Provide aggregates from a single source for exposed concrete. Aggregate shall be uniformly graded so that a graph of the percentage of each aggregate size is a smooth line or curve.
 - a. Fine Aggregate: Clean, sharp, natural or manufactured sand free from loam, clay, lumps or other deleterious substances.
 - b. Coarse Aggregate: Clean, uncoated, processed, locally available aggregate, containing no clay, mud, loam or foreign matter. The maximum size of coarse aggregate shall be 1 1/2".
4. Water: Drinkable, free from injurious amounts of impurities.
5. Air-Entraining Admixture: ASTM C 260. 5 1/2% + 1 1/2% for all concrete with exterior exposure.
6. Water-Reducing Admixture: ATM C 494, and contain not more than 0.1% chloride ions.
7. High-Range Water-Reducing Admixture (Super Plasticizer): ASTM C 494, and contain not more than 0.1% chloride ions.
8. Certification: Provide admixture manufacturer's written certification that chloridation content complies with specified requirements.
9. Calcium chloride or admixture containing more than 0.1% chloride ions are not permitted.

E. Related Materials:

1. Liquid Membrane-Forming, Curing Compound: Liquid type transparent membrane-forming compound, comply with ASTM C 309 Type 1 Class A. Curing compound to be equal to "Kor-N-Seal" by Sonneborn..

2.02 PROPORTIONING AND DESIGN OF MIXES:

- A. Prepare design mixes for each type and strength of concrete by either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method used, use an independent testing facility acceptable to Architect for preparing and reporting proposed mix designs. The testing facility shall not be the same as used for field quality control testing unless otherwise acceptable to Architect.

- B. Submit written reports to Architect of each proposed mix for each class of concrete at least 15 days prior to start of work. Do not begin concrete production until mixes have been reviewed by Architect.
- C. Design mixes to provide concrete with the following properties. as indicated on drawings and schedules:
 - 1. 5000 psi 28 day compression strength: normal weight concrete, W/C ratio, 0.45 maximum.
- D. Admixtures:
 - 1. Use water-reducing admixture or high range water-reducing admixture (super plasticizer) in concrete as required for placement and workability.
 - 2. Use non-chloride accelerating admixture in concrete slabs placed at ambient temperatures below 50 degrees F (10 deg. C).
 - 3. Use air-entraining admixture in exterior exposed concrete, unless otherwise indicated. All air-entraining admixture of manufacturer's prescribed rate to result in concrete at point of placement having total air content with a tolerance of plus-or-minus 1-1/2% within following limits:
 - a. Concrete structures and slabs exposed to freezing and thawing, or subjected to hydraulic pressure: 5.5% for concrete with 1 1/2" max. aggregate.
- E. Slump Limits: Proportion and design mixes to result in concrete slump at point of placement as follows:
 - 1. Ramps, Slabs, and sloping surfaces: Not less than 2" and nor more than 4" .
 - 2. Concrete containing HRWR admixture (super plasticizer): Not more than 8" after addition of HRWR to verified 2" - 3" slump concrete. In other cases, Engineer must approve water reducer and slump limit.

3.01 PLACING REINFORCEMENT:

- A. Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars", for details and methods of reinforcement placement and supports, and as herein specified.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other materials which reduce or destroy bond with concrete.
- C. Accurately position, support and secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers, as required.
- D. Place reinforcement to obtain at least minimum coverage for concrete protection. Arrange, space and securely tie bars and bar supports to hold reinforcement in position during concrete placement operations. Set wire ties so ends are directed to concrete, not toward exposed concrete surfaces.

- E. Install welded wire fabric in as long lengths as practicable. Lap adjoining pieces at least one fullmesh and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.
- F. Fiber micro-reinforcing to be mixed at the batch plant, not at the job site.

3.02 JOINTS:

- A. Contraction (Control) Joints in Slabs-on-Ground: Construct contraction joints in slabs-on-ground to form panels or patterns as shown. The width of cut is 1/8" x 1/4 of slab depth, unless otherwise indicated.
 - 1. To allow the saw blade to cut cleanly and joint cutting to be completed before random shrinkage cracks could occur, cutting should be scheduled for between 8-12 hours after the concrete was placed. Unless otherwise noted joints should be maximum x 30' o.c. and occur at structural Bays.

3.03 CONCRETE PLACEMENT:

- A. Notify the Architect at least 24 hours before any concrete pour is to allow for proper observation for compliance of concrete placement requirements.
- B. General: Comply with ACI 304 " Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete", and as herein specified.
- C. Deposit concrete continuously or in layers of such thickness that no concrete will be placed on concrete which has hardened sufficiently to cause the formation of seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as herein specified. Deposit concrete as nearly as practicable to its final location to avoid segregation. Do not drop concrete more than 8' without taking measures to prevent separation that have been approved by the Architect.
- D. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand – spading, rodding or tamping. Use equipment and procedures for consolidation of concrete in accordance with ACI recommended practices.
- E. Placing Concrete Slabs: Deposit and consolidate concrete slabs in a continuous operation, within limits of construction joints, until the placing of a panel or section is completed
- F. Consolidate concrete during placing operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.
- G. Bring slab surfaces to correct level with straightedge and strike-off. Use bull floats or darbies to smooth surface, free of humps or hollows. Do not disturb slab surfaces prior to beginning finishing operations.
- H. Maintain reinforcing in proper position during concrete placement operations.
- I. Cold Weather Placing: Protect concrete work from physical damage or reduced strength which could be caused by frost, freezing actions, or low temperatures, in compliance with ACI 306 and as herein specified.

- 1. When air temperature has fallen to or is expected to fall below 40 degrees F (4 deg. C), uniformly heat water and aggregates before mixing to obtain a concrete

mixture temperature of not less than 50 degrees F (10 deg. C) and not more than 80 degrees F (27 deg. C) at point of placement.

2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
3. Do not use calcium chloride, salt and other materials containing antifreeze agents or chemical accelerators, unless otherwise accepted in mix designs.

J. Hot Weather Placing:

1. Comply with requirements of ACI 305, "Hot Weather Concreting" and as herein specified. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 degrees F (32 deg. C). Mixing water may be chilled, or chopped ice maybe used to control temperature provided water equivalent of ice is calculated to total amount of mixing water. Use of liquid nitrogen to cool concrete is Contractor's option.
2. Cover reinforcing steel with water - soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedment in concrete.
3. Fog spray forms, reinforcing steel and sub-grade just before concrete is placed.
4. Use water - reducing retarding admixture when required by high temperatures, low humidity, or other adverse placing conditions.

3.04 CONCRETE CURING AND PROTECTION:

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 7 days.
- C. Begin final curing procedures immediately following initial curing and before concrete dried. Continue final curing for at least 7 days in accordance with ACI 301 procedures. Avoid rapid drying at end of final curing period.

D. Curing Methods: Perform curing of concrete by curing and sealing compound, as herein specified.

1. Provide moisture-cover curing as follows:
 - a. Cover concrete surfaces with moisture - retaining cover for curing concrete, placed in widest practicable width with sides and end lapped at least 3" and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
2. Provide curing and sealing compound to slabs as follows:

- a. Apply specified curing and sealing compound to concrete slabs as soon as final finishing operations are complete (within 2 hours). Apply uniformly in continuous operation by power - spray or roller in accordance with manufacturer's directions. Re-coat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.
3. Curing Unformed Surfaces: Cure unformed surfaces, such as slabs, floor topping, and other flat surfaces by application of appropriate curing method.

END OF SECTION 03310

SECTION 07900
JOINTS SEALANTS

PART 1 - GENERAL

- 1.01 SCOPE: Completely close with calking compound or sealant at all joints, including control and construction joints in slabs and other joints indicated or specified to be calked or sealed.
- 1.02 RELATED WORK SPECIFIED IN OTHER SECTIONS:
- A. N/A
- 1.03 QUALITY ASSURANCE: Obtain elastomeric materials only from manufacturer who will, if required, send a qualified technical representative to project site, for the purpose of advising the Installer or proper procedures and precautions for the use of the material.
- 1.04 SUBMITTALS: Comply with Section 01300
- A. Manufacturer's Data: Submit manufacturer's specifications, recommendations, and installation instructions for each type of sealant, calking compound and miscellaneous materials. Include letter of certification, or certified test laboratory reports indicating that each material complies with the requirements and is intended for the applications indicated. Transmit a copy of recommendations and instructions to the Installer.
- B. Samples: Submit 1/2" long sample of each color required (except black) for each type of sealant or calking compound exposed to view. Install sample between 2 strips of material similar to or representative of typical surfaces where sealant or calking compound will be used, held apart to represent typical joint widths. Samples will be viewed for color and texture only.
- 1.05 JOB CONDITIONS:
- A. Examine joint surfaces, backing , and anchorage of units forming sealant rabbet. Do not proceed with work until unsatisfactory conditions have been corrected.
- B. Do not proceed with installations of sealant under adverse weather conditions, or when temperatures are above or below manufacturer's recommended limitations for installation. Proceed with the work only when forecasted weather conditions are favorable for proper cure and development of high early bond strength.

PART 2 - PRODUCTS

- 2.01 MATERIALS:
- I A. Sealant: Two component polyurethane sealant conforming to F.S. TT-S-227 Class A Type (self-leveling) unless Type II (non-sag) is recommended by the manufacturer for the application indicated. PRC "Rubber Calk 230", Woodmont " Chem-Chalk 500", Pecora "NR-100" Toch Brothers Polytok Sealant PG", or acceptable equal. Color as selected by the Architect. Contractor's Option: Provide Tremco "Dymeric" or "Sonolastic NP II" in lieu of sealants specified above.
- B. Miscellaneous Materials:

1. Joint Cleaner: Type of joint cleaning compound recommended by the sealant or calking compound manufacturer for the joint surfaces to be cleaned.
2. Joint Prime/Sealer: Type recommended by the sealant manufacturer for the joint surfaces to be primed or sealed.
3. Bond Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer, to be applied to sealant-contact surfaces where bond to the substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape wherever applicable.
4. Sealant Backer Rod: Compressible rod stock polyethylene foam, polyethylene jacketed polyurethane foam, butyl rubber foam, neoprene foam or other flexible, permanent, durable non-absorptive material as recommended for compatibility with sealant by the sealant manufacturer. Provide size and shape of rod which will control the joint depth for sealant placement, break bond of sealant at bottom of joint, form optimum shape of sealant bond on back side, and provide a highly compressible backer to minimize the possibility of sealant extrusion when joint is compressed.

PART 3 - EXECUTION

3.01 JOINT TYPES AND USAGES: Calking and sealant usage is specified below.

- A. Sealants: Use Type II sealant for concrete paving joints.

3.02 JOINT SURFACE PREPARATION:

- A. Clean joint surfaces immediately before installation of sealant or calking compound. Remove dirt, insecure coatings, moisture, and other substances which would interfere with bond of sealant or calking compound.
- B. For elastomeric sealants, do not proceed with installation of sealant over joint surfaces which have been painted, lacquered, waterproofed or treated with water repellent or other treatment or coating. Remove coating or treatment from joint surfaces before installing sealant.
- C. Etch concrete and masonry joint surfaces to remove excess alkalinity. Etch with 5% solution, rinse thoroughly with water and allow to dry before sealant installation.
- D. Roughen joint surfaces on vitreous coated and similar non-porous materials, wherever sealant manufacturer's data indicates lower bond strength than for porous surfaces. Rub with fine abrasive cloth or wool to produce a dull sheen.
- E. See manufacturer's information for preparation and application of epoxy joint sealant.

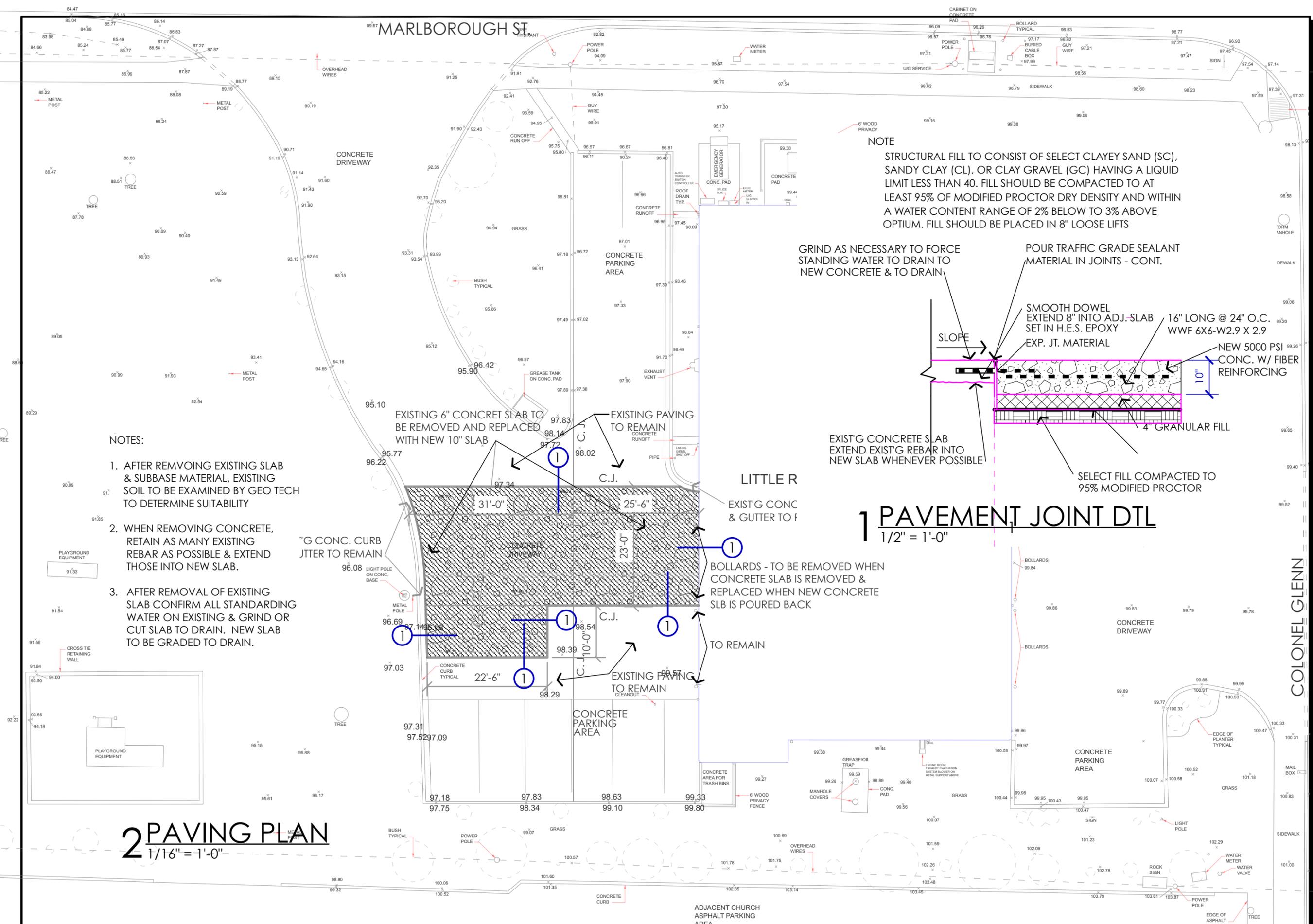
3.03 INSTALLATION:

- A. Comply with sealant manufacturer's printed instructions and Thiokol Chemical Corp. Standards (for polysulfide sealants) except where more stringent requirements are

representative indicated or specified and except where manufacture's technical directs otherwise.

- B. Prime or seal the joint surfaces wherever shown or recommended by the sealant manufacturer. Do not allow primer/sealer to spill or migrate onto adjoining surfaces.
- C. Install sealant backer rod for liquid elastomeric sealants, except where shown to be omitted or recommended to be omitted by sealant manufacturer for the application shown.
- D. Install bond breaker tape wherever shown and and wherever required by manufacturer's recommendations to ensure that elastomeric sealants will perform properly.

END OF SECTION

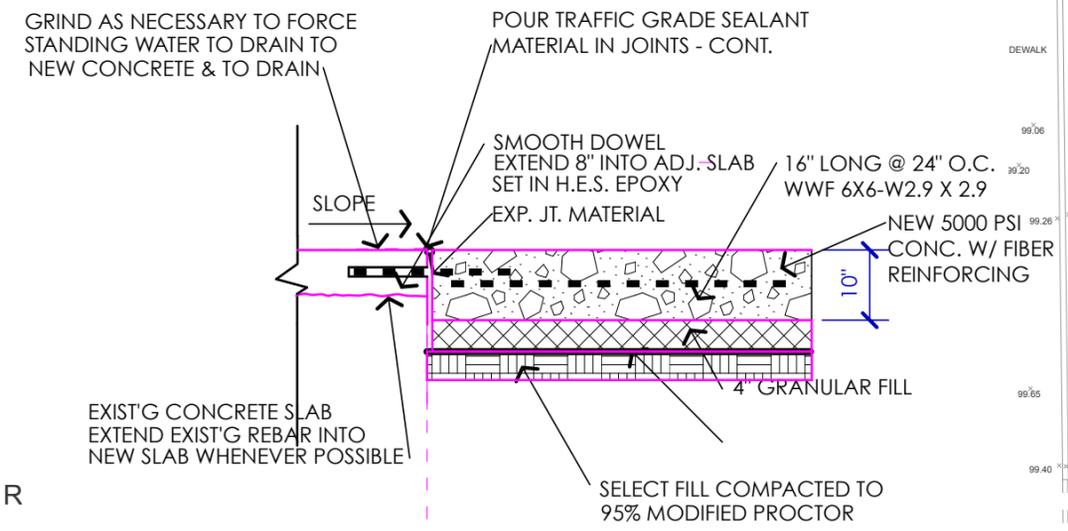


- NOTES:
1. AFTER REMOVING EXISTING SLAB & SUBBASE MATERIAL, EXISTING SOIL TO BE EXAMINED BY GEO TECH TO DETERMINE SUITABILITY
 2. WHEN REMOVING CONCRETE, RETAIN AS MANY EXISTING REBAR AS POSSIBLE & EXTEND THOSE INTO NEW SLAB.
 3. AFTER REMOVAL OF EXISTING SLAB CONFIRM ALL STANDARDING WATER ON EXISTING & GRIND OR CUT SLAB TO DRAIN. NEW SLAB TO BE GRADED TO DRAIN.

2 PAVING PLAN

1/16" = 1'-0"

NOTE
 STRUCTURAL FILL TO CONSIST OF SELECT CLAYEY SAND (SC), SANDY CLAY (CL), OR CLAY GRAVEL (GC) HAVING A LIQUID LIMIT LESS THAN 40. FILL SHOULD BE COMPACTED TO AT LEAST 95% OF MODIFIED PROCTOR DRY DENSITY AND WITHIN A WATER CONTENT RANGE OF 2% BELOW TO 3% ABOVE OPTIMUM. FILL SHOULD BE PLACED IN 8" LOOSE LIFTS



1 PAVEMENT JOINT DTL

1/2" = 1'-0"

REV	DATE	DESCRIPTION

DRIVE REPAIR
 FIRE STATION #14
 8121 COLONEL GLENN
 LITTLE ROCK, ARKANSAS

H+W
 Heiple+Wiedower
 Architects Planners
 319 Pres. Clinton Avenue
 Little Rock, AR 72201
 (F) 501-707-0115
 (F) 501-707-0118

Project No:
HW15-675
 Date:
8/19/15
 Sheet Title:
SITE PLAN

Sheet No:
A1.1

GENERAL CONDITIONS

1. Definitions
2. Additional Instruction & Detail Drawings
3. Schedules, Reports & Records
4. Drawings and Specification
5. Shop Drawings
6. Materials, Services & Facilities
7. Inspection & Testing
8. Substitutions
9. Patents
10. Surveys, Permits & Regulations
11. Protection of Work, Property & Persons
12. Supervision by Contractor
13. Changes in the Work
14. Changes in Contract Price
15. Time for Completion & Liquidated Damages
16. Correction of Work
17. Subsurface Conditions
18. Suspension of Work, Termination & Delay
19. Payments to Contractor
20. Acceptance of Final Payment as Release
21. Insurance
22. Contract Security
23. Assignments
24. Indemnification
25. Separate Contracts
26. Subcontracting
27. Land & Rights of Way
28. Guaranty
29. Taxes
30. Architect's Authority

1. DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:
- 1.2 AGREEMENT - Contract between the OWNER and CONTRACTOR regarding the PROJECT.

- 1.3 ADDENDA - Written or graphic instruments issued prior to the time of opening the bids which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarification or corrections.
- 1.4 BID - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.5 BIDDER - Any person, firm or corporation submitting a BID for the WORK.
- 1.6 BONDS - Bid, Performance, and Payment Bonds, and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the CONTRACT DOCUMENTS.
- 1.7 CHANGE ORDER - A written order to the CONTRACTOR authorizing an addition, deletion or revision of the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.8 CONTRACT DOCUMENTS - The contract, including BID, AGREEMENT, Payment Bond, Performance Bond, General Conditions, SUPPLEMENTARY CONDITIONS; NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE and FIELD ORDERS, DRAWINGS, SPECIFICATIONS, and ADDENDA.
- 1.9 CONTRACT PRICE - The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.10 CONTRACT TIME - the number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.
- 1.11 CONTRACTOR - The person, firm or corporation with whom the OWNER has executed the Agreement.
- 1.12 DRAWINGS - The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ARCHITECT.
- 1.13 ARCHITECT- The person, firm or corporation named as such in the CONTRACT DOCUMENTS.
- 1.14 FIELD ORDER - A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE, or an extension of the CONTRACT TIME, issued by the ARCHITECT and OWNER to the CONTRACTOR during construction.

- 1.15** NOTICE OF AWARD - The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.
- 1.16** NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.
- 1.17** OWNER - A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.
- 1.18** PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.19** PROJECT COORDINATOR or RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the OWNER who is assigned to the PROJECT site, or any part thereof.
- 1.20** SHOP DRAWINGS - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, MANUFACTURER, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.21** SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards, and workmanship.
- 1.22** SUBCONTRACTOR - An individual, firm or corporation having a direct contract with the CONTRACTOR, or with any other SUBCONTRACTOR, for the performance of a part of the WORK at the site.
- 1.23** SUBSTANTIAL COMPLETION - That date, when the construction of the PROJECT, or a specified part thereof, is sufficiently completed in accordance with the CONTRACT DOCUMENTS, so that the PROJECT, or specified part, can be utilized for the purposes for which it is intended.
- 1.24** SUPPLEMENTARY CONDITIONS - Modifications to adapt the General Conditions to the specific requirements of the Project and that may be imposed by applicable federal, state, and local laws.

- 1.25** SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.
- 1.26** WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT. Unless otherwise specified, all materials shall be new, and both workmanship and materials shall be of a good quality. The CONTRACTOR shall, if required, furnish satisfactory evidence as to the kind and quality of materials.
- 1.27** WRITTEN NOTICE - Any notice to any party of the Agreement relative to any part of this Agreement shall be in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party or his authorized representative.

2. ADDITIONAL INSTRUCTION AND DETAIL DRAWINGS

- 2.1** The CONTRACTOR may be furnished additional instruction and detail drawings, by the ARCHITECT, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
- 2.2** The additional drawings and instruction thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

3. SCHEDULES, REPORTS AND RECORDS

- 3.1** The CONTRACTOR shall submit to the OWNER, upon request, such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, and other such records pertaining to the PROJECT.
- 3.2** Prior to the first partial payment estimate, the CONTRACTOR shall submit construction progress schedules showing the order in which he proposes to carry on the WORK, including dates at which he will start the various parts of the WORK, estimated date of completion of each part and, as applicable:
- 3.2.1** The dates at which special detail drawings will be required; and
- 3.2.2** Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.

4. DRAWINGS AND SPECIFICATIONS

- 4.1** The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS, and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.
- 4.2** It is understood and agreed that the CONTRACTOR has, by careful examination, satisfied himself as to the nature and location of the WORK, the conformation of the ground, the character of equipment and facilities needed preliminary to and during the execution of the WORK, the character, quality and quantity of the materials to be encountered, the general and local conditions, and all other matters which can, in any way, affect the WORK under this CONTRACT.
- 4.3** In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern over general DRAWINGS.
- 4.4** Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions, or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS, shall be immediately reported to the ARCHITECT, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.
- 4.5** CONTRACTOR acknowledges that, based upon the CONTRACTOR'S examination of the Drawings and Specifications which comprise a part of the Contract Documents, the CONTRACTOR has not observed anything in the Contract Documents indicating that same are incomplete or inconsistent or otherwise contain any error or omission that would cause the CONTRACTOR to be entitled to make any claim for increases in the CONTRACT PRICE or the CONTRACT TIME.
- 4.6** The intent of the CONTRACT DOCUMENTS is to include all items necessary for the proper execution and completion of the WORK by the CONTRACTOR. The CONTRACT DOCUMENTS are complimentary, and what is required by one shall be as binding as if required by all; performance by the

CONTRACTOR shall be required to the extent inferable from the CONTRACT DOCUMENTS as being necessary to produce the intended results given the CONTRACTOR'S experience in general construction. The SPECIFICATIONS are written in the imperative and abbreviated form. The imperative language is directed to the CONTRACTOR, unless specifically noted otherwise. Any incomplete sentences shall be completed by inserting "shall," "the CONTRACTOR shall," "shall be," and similar mandatory phrases by inference in the same manner as they are applied to notes on the DRAWINGS. The words "shall be" shall be supplied by inference where a colon (:) is used within sentences or phrases. Except as worded to the contrary, all indicated requirements shall be performed whether stated imperatively or otherwise. Further, whenever the term "WORK Includes" or "Section Includes" is used as an article or paragraph heading in a SPECIFICATIONS section, it is merely a listing of the significant items described within the section and is not intended to limit the scope of the section or to imply a trade responsibility.

4.7 Conflicts or discrepancies among the Contract Documents shall be resolved in the following order of priority:

1. The AGREEMENT;
2. AMENDMENTS and revisions of later date take precedence over those of earlier date;
3. SUPPLEMENTARY CONDITIONS;
4. The GENERAL CONDITIONS;
5. The Project Manual;
6. DRAWINGS and SPECIFICATIONS: DRAWINGS GOVERN SPECIFICATIONS for quantity and location, and SPECIFICATIONS govern for quality and performance. In the event of an ambiguity in quantity or quality, the greater quantity and the better quality shall govern;
7. Figure dimensions govern scale dimensions and large scale DRAWINGS govern small scale DRAWINGS; and,
8. SUBMITTALS; if and only if OWNER concludes, in its sole discretion, that a conflict or discrepancy cannot be otherwise resolved.

5. SHOP DRAWINGS

5.1 The CONTRACTOR shall provide SHOP DRAWINGS as may be necessary for the prompt prosecution of the WORK as required by the CONTRACT DOCUMENTS. The ARCHITECT shall promptly review all SHOP DRAWINGS.

- 5.2 When submitted for the ARCHITECT'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked, and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3 Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been reviewed by the ARCHITECT. A copy of each processed SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ARCHITECT AND OWNER.

6. MATERIALS, SERVICES AND FACILITIES

- 6.1 It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, sewer, light, utilities, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 6.2 Materials and equipment shall be so stored as to ensure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 6.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 6.4 Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ARCHITECT.
- 6.5 Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR(S) subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING

- 7.1 All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally

accepted standards, as required and defined in the CONTRACT DOCUMENTS.

- 7.2 The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3 The CONTRACTOR shall provide, at the CONTRACTOR'S expense, the testing and inspection services required by the CONTRACT DOCUMENTS, unless otherwise noted.
- 7.4 If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR shall give the ARCHITECT AND OWNER timely notice of readiness. The CONTRACTOR will then furnish the ARCHITECT AND OWNER the required certificates of inspection, testing or approval.
- 7.5 Inspections, tests, or approvals by the ARCHITECT, OWNER or others shall not relieve the CONTRACTOR from his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6 The ARCHITECT, OWNER and their representatives will, at all times, have access to the WORK. In addition, authorized representatives and agents of any participating federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The CONTRACTOR shall provide proper facilities for such access and observation of the WORK and also for any inspection or testing thereof.
- 7.7 If any WORK is covered contrary to the written instructions of the ARCHITECT OR OWNER, it shall, if requested by the ARCHITECT OR OWNER, be uncovered for their observation and replaced by the CONTRACTOR at no increase in Contract Price.

8. SUBSTITUTIONS

- 8.1 Whenever a material, article or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in

the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the OWNER, such material, article, or piece of equipment is of equal substance and function to that specified, the OWNER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deducted from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute shall be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS

- 9.1** The CONTRACTOR shall pay all applicable royalties and license fees. The CONTRACTOR shall defend all law suits or claims for infringement of any patent rights and save the OWNER AND ARCHITECT harmless from loss on account thereof; however, if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the OWNER AND ARCHITECT.

10. SURVEYS, PERMITS, AND REGULATIONS

- 10.1** The OWNER will furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK, together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope sheets.
- 10.2** The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, the CONTRACTOR shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.
- 10.3** Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTARY CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise

specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, he shall promptly notify the ARCHITECT AND OWNER, in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY AND PERSONS

- 11.1** The CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 11.2** The CONTRACTOR shall comply with all applicable laws, ordinances, rules regulations and orders of any public body having jurisdiction. The CONTRACTOR shall erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. The CONTRACTOR will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR shall remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the ARCHITECT or OWNER or anyone employed by them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- 11.3** In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ARCHITECT or OWNER, shall act to prevent threatened damage, injury or loss. The CONTRACTOR shall give the ARCHITECT and OWNER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a

CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

- 11.4 The CONTRACTOR shall confine operations at the PROJECT site to areas permitted by law, ordinances, permits and this AGREEMENT and shall not unreasonably encumber the PROJECT site with materials or equipment.
- 11.5 The CONTRACTOR shall at all times keep the premises free from accumulation of waste materials or rubbish.

12. SUPERVISION BY CONTRACTOR

- 12.1 The CONTRACTOR shall supervise and direct the WORK. The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR shall employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR, and all communications given to the supervisor shall be as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN THE WORK

- 13.1 The ARCHITECT, UPON the OWNER's approval, may, at any time, as the need arises, order changes within the scope of the WORK without invalidating the Agreement. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by a CHANGE ORDER.
- 13.2 The ARCHITECT, UPON the OWNER's approval, may, at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ARCHITECT and OWNER unless the CONTRACTOR believes that such FIELD ORDER entitles the CONTRACTOR to a change in CONTRACT PRICE or CONTRACT TIME, or both, in which event the CONTRACTOR shall give the ARCHITECT and OWNER WRITTEN NOTICE thereof within seven (7) days after the receipt of the ordered change. Thereafter, the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or CONTRACT TIME within thirty (30) days. The CONTRACTOR shall not execute such changes

pending the receipt of an executed CHANGE ORDER or further instruction from the ARCHITECT and OWNER.

14. CHANGES IN CONTRACT PRICE

14.1 The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:

- (A) Unit prices previously approved.
- (B) An agreed lump sum.
- (C) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the WORK.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

15.1 The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the written NOTICE TO PROCEED.

15.2 The CONTRACTOR shall proceed with the WORK at such rate of progress to ensure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.

15.3 If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR shall pay, to the OWNER, the amount for liquidated damages as specified in Section 3.2 of the AGREEMENT for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4 The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following, and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the ARCHITECT and OWNER:

15.4.1 To any preference, priority or allocation order duly issued by the ARCHITECT or OWNER;

15.4.2 To unforeseeable causes beyond the control, and without the fault or negligence of, the CONTRACTOR, restricted to acts of God or of the public enemy, acts of the ARCHITECT or OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes and freight embargoes; and

15.4.3 To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. CORRECTION OF WORK

16.1 The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ARCHITECT or OWNER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2 All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUBSURFACE CONDITIONS

17.1 The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the ARCHITECT and OWNER by WRITTEN NOTICE of:

17.1.1 Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

17.1.2 Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

17.2 The ARCHITECT and OWNER will promptly investigate the conditions, and if ARCHITECT and OWNER jointly find that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment will be made and the CONTRACT DOCUMENTS will be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder will not be allowed unless the CONTRACTOR has given the required WRITTEN NOTICE, provided that the ARCHITECT and OWNER may, if ARCHITECT and OWNER jointly determine the facts so justify, consider and adjust any such claims asserted before the date of final payment.

18. SUSPENSION OF WORK, TERMINATION AND DELAY

18.1 The OWNER may suspend the WORK, or any portion thereof, for a period of not more than ninety (90) days, or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR, which notice will fix the date on which WORK shall be resumed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any such suspension.

18.2 If the CONTRACTOR is adjudged as bankrupt or insolvent, or if the CONTRACTOR makes a general assignment for the benefit of the CONTRACTOR'S creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if the CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if the CONTRACTOR repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if the CONTRACTOR repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK, or if the CONTRACTOR otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and the CONTRACTOR'S surety a minimum of twenty (20) days' WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method the OWNER may deem expedient. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the

WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess WILL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR SHALL PAY THE DIFFERENCE TO THE OWNER. Such costs incurred by the OWNER will be incorporated in a CHANGE ORDER. **The OWNER has the right to withhold any such costs incurred by the OWNER from any payments due the CONTRACTOR.**

- 18.3** Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.4** After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the contract. In such case, the CONTRACTOR will be paid for all WORK executed up to the date of termination.
- 18.5** If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER, or the WORK is suspended under an order of a court of competent jurisdiction for more than ninety (90) days, or the OWNER fails to pay the CONTRACTOR substantially the sum requested within sixty (60) days of approval and receipt of a request for payment by the OWNER, then the CONTRACTOR may, after thirty (30) days from delivery of a WRITTEN NOTICE to the OWNER, such thirty (30) day WRITTEN NOTICE also giving the OWNER an opportunity to cure any default, terminate the CONTRACT and recover from the OWNER payment for all WORK executed up to the date of termination. In addition and in lieu of terminating the CONTRACT, if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may, upon twenty (20) days WRITTEN NOTICE to the OWNER, stop the WORK until the CONTRACTOR has been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME, or both, to compensate for the costs and delays attributable to the stoppage of the WORK.
- 18.6** If, through no act or fault of the CONTRACTOR, the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER to act within the time specified in the CONTRACT

DOCUMENTS, including default cure time periods, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, will be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays directly caused by the failure of the OWNER.

19. PAYMENTS TO CONTRACTOR

- 19.1** At least ten (10) days before each progress payment falls due, but not more often than once a month, the CONTRACTOR shall submit to the ARCHITECT a Partial Payment Estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the Partial Payment Estimate and supported by such data as the ARCHITECT or OWNER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the ARCHITECT and OWNER, as will establish the OWNER'S title to the material and equipment and protect the OWNER'S interest therein, including applicable insurance. The ARCHITECT will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing the ARCHITECT'S approval of payment, or return the partial payment estimate to the CONTRACTOR indicating, in writing, the reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within thirty (30) days of presentation to the OWNER of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate. In accordance with Ark. Code Ann. § 22-9-604, the ARCHITECT will retain five percent (5%) of the earned amount of the WORK progress shown on the partial payment estimate, excluding materials and equipment on hand but not installed, and upon certification by the ARCHITECT that the WORK progress is fifty percent (50%) complete, based on the adjusted contract price, there will be no additional retainage on account of WORK completed, in which case the remaining progress payments prior to SUBSTANTIAL COMPLETION will be in an amount equal to one hundred percent (100%) of the WORK completed. Further, upon certification of SUBSTANTIAL COMPLETION of the WORK, the retained amount may be reduced to only that amount necessary to assure completion. On completion and acceptance of a part of the WORK on which the price is stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages, less authorized deductions.

- 19.2** The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 19.3** Prior to SUBSTANTIAL COMPLETION, the OWNER may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.4** The OWNER will have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK, except such as may be caused by agents or employees of the OWNER.
- 19.5** Upon completion and acceptance of the WORK, and after the receipt of all lien waivers and other proper documentation from the CONTRACTOR, the OWNER will sign the final payment request as its certification that the WORK has been accepted by the OWNER under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, will be paid to the CONTRACTOR within thirty (30) days of completion and final acceptance of the WORK by the OWNER.
- 19.6** The CONTRACTOR shall indemnify and save the ARCHITECT and OWNER, or the ARCHITECT'S and OWNER'S agents, harmless from all claims growing out of the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall furnish the OWNER and ARCHITECT satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so, the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, where upon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the ARCHITECT or OWNER to either the CONTRACTOR, his Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment, so made by the OWNER shall be considered as a payment made under the

CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER will not be liable to the CONTRACTOR for any such payments made in good faith.

- 19.7 The CONTRACTOR warrants that upon submittal of a request for payment, all work for which payment has been received by the CONTRACTOR shall be free and clear of liens, claims, security interests or encumbrances in favor of the CONTRACTOR, subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials or equipment relating to the work or project.**
- 19.8 Any payment to the CONTRACTOR by the OWNER, final or otherwise, shall not constitute an acceptance of any WORK not in accordance with the CONTRACT DOCUMENTS.**

20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

- 20.1** The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR, other than claims in stated amounts as may be specifically excepted by the CONTRACTOR, for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to, or arising out of, this WORK. Any payment, however, final or otherwise, will not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance BOND and Payment BOND.

21. INSURANCE

- 21.1** Contractor's Liability Insurance: CONTRACTOR shall purchase and maintain, in a company or companies licensed to do business in the State of Arkansas, such commercial general liability and other insurance as is appropriate for the WORK being performed and furnished and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR'S performance and furnishing of the WORK and CONTRACTOR'S other obligations under the CONTRACT DOCUMENTS, whether it is to be performed or furnished by CONTRACTOR, by any Subcontractor, by anyone directly or indirectly employed by any of them to perform or furnish any of the WORK, or by anyone for whose acts any of them may be liable:

- 21.1.1** Claims under workers or workmen's compensation, disability benefits, and other similar employee benefit acts;
 - 21.1.2** Claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR'S employees;
 - 21.1.3** Claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR'S employees;
 - 21.1.4** Claims for damages insured by personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (b) by any other person for any other reason;
 - 21.1.5** Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom;
 - 21.1.6** Claims arising out of operation of Laws or Regulations for damages because of bodily injury or death of any person or for damage to property;
 - 21.1.7** Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle; and
 - 21.1.8** Claims involving contractual liability insurance applicable to the Contractor's obligations under Article 24.
- 21.2** The insurance required by paragraph 21.1 shall include the specific coverages and be written for not less than the limits of liability and coverages provided in the SUPPLEMENTARY CONDITIONS, or required by law, whichever is greater. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective WORK in accordance with paragraph 28.1. In addition, CONTRACTOR shall maintain completed operations insurance for at least one (1) year after date of final completion and furnish OWNER with evidence of continuation of such insurance at final completion.
- 21.3** The CONTRACTOR shall purchase and maintain in the name of the ARCHITECT and OWNER an Owner's and Contractor's Protective Liability

Policy as will protect the ARCHITECT and OWNER against claims which may arise from operations under the contract. Coverage shall not exceed coverage of CONTRACTOR'S Commercial General Liability policy.

- 21.4** The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.
- 21.5** The CONTRACTOR shall procure and maintain, at the CONTRACTOR'S own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the WORK is performed, Workers' Compensation Insurance, including occupational disease provisions, for all of CONTRACTOR'S employees at the site of the PROJECT and in case any work is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workers' Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this AGREEMENT at the site of the PROJECT is not protected under Workers' Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.
- 21.6** Certificates of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These Certificates and the insurance policies required by Paragraph 21.1 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least thirty (30) days' prior written notice has been given to the Owner.

22. CONTRACT SECURITY

- 22.1** The CONTRACTOR shall, within ten (10) days after the receipt of the NOTICE OF AWARD, furnish the OWNER with a Performance BOND and a Payment BOND, each in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK

provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If, at any time, a surety on any such BOND is declared a bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of "Surety Companies Acceptable on Federal Bonds," CONTRACTOR shall, within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.

23. ASSIGNMENTS

23.1 Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of this AGREEMENT, the CONTRACT DOCUMENTS, or any portion thereof, or of the right, title or interest therein, or any obligation thereunder, without written consent of the other party.

24. INDEMNIFICATION

24.1 The CONTRACTOR shall indemnify and hold harmless the OWNER, and their agents and employees, from and against all claims, damages, losses and expenses, including attorney's fees, arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable.

24.2 In any and all claims against the OWNER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation of benefits payable by or for the CONTRACTOR or any

SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.

- 24.3** CONTRACTOR hereby releases, indemnifies and holds harmless the OWNER, its officers, agents and employees from and against any and all loss, damage and expense including, but not limited to; any claim, demand or action for injury, liability or damage to persons or property or, for loss of life; and any and all claims or actions brought by any person, firm, government body or other entity, resulting from, arising from or in connection with contamination of, or threatened contamination of, or adverse effects on, the environment, or violation of any environmental or other statute, ordinance, rule, regulation, order, permit or judgment of any government or judicial entity; and from and against any damages, liabilities, costs, fees, fines, charges, causes of action, law suits, judgments and penalties assessed, including, but not limited to, reasonable investigation and legal expenses in connection with defending any such action, arising from any matter or circumstance on the property regarding the performance of the Work and services under the Agreement between the CONTRACTOR, its officers, agents, employees and assigns, and the OWNER for Work and services provided to the OWNER pursuant to such Agreement.

To evidence proper disposal of all solid waste associated with the Work performed under said Agreement in a legally permitted solid waste disposal facility, CONTRACTOR will provide the OWNER with a receipt for each dump load of solid waste so disposed.

- 24.4** The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ARCHITECT, its agents or employees, arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

25. SEPARATE CONTRACTS

- 25.1** The OWNER reserves the right to let separate contracts for this PROJECT. The CONTRACTOR shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate its WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other contractor, the CONTRACTOR shall inspect and promptly report to the ARCHITECT and OWNER any defects in such WORK that render it unsuitable for such proper execution and results.

- 25.2** The OWNER may perform additional WORK related to the PROJECT itself, or the OWNER may let other contracts containing provisions similar to these CONTRACT DOCUMENTS. The CONTRACTOR will afford the other contractors who are parties to such contracts, or the OWNER if the OWNER is performing the additional WORK, reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his WORK with theirs.
- 25.3** If the performance of additional WORK by other contractors or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, WRITTEN NOTICE thereof shall be given by the OWNER to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves additional expense to the CONTRACTOR, or entitles the CONTRACTOR to an extension of the CONTRACT TIME, the CONTRACTOR may make a claim therefor as provided in Sections 14 and 15.

26. SUBCONTRACTING

- 26.1** The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- 26.2** All SUBCONTRACTORS and material suppliers utilized on this Project shall be experienced in the type of work required by the Project, reputable, qualified and shall be acceptable to the OWNER.
- 26.3** The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of the CONTRACTOR'S SUBCONTRACTORS and material suppliers on this PROJECT, and of persons either directly or indirectly employed by them, as the CONTRACTOR is for the acts and omissions of persons directly employed by the CONTRACTOR.
- 26.4** The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS, and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.

26.5 Nothing contained in the CONTRACT DOCUMENTS will create any contractual relationship between any SUBCONTRACTOR or material supplier and the OWNER.

27. LAND AND RIGHTS-OF-WAY

27.1 Prior to issuance of NOTICE TO PROCEED, the OWNER will obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.

27.2 The OWNER will provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.

27.3 The CONTRACTOR shall provide at the CONTRACTOR'S own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

28. GUARANTY

28.1 The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees, for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system and PROJECT, that the completed system and PROJECT are free from all defects due to faulty materials or workmanship, and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects, including the repairs of any damage to other parts of the system or PROJECT resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance BOND shall remain in full effect throughout the guarantee period.

29. TAXES

29.1 The CONTRACTOR shall pay all sales, consumer, use and other similar taxes required by the law of the place where the WORK is performed.

30. ARCHITECT'S RESPONSIBILITIES

- 30.1 The ARCHITECT will act as the OWNER'S representative during the construction period. The ARCHITECT will jointly decide with the OWNER questions which may arise as to quality and acceptability of materials furnished and WORK performed. The ARCHITECT and the OWNER will jointly interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ARCHITECT or OWNER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 30.2 The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship, and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
- 30.3 The ARCHITECT will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
- 30.4 The ARCHITECT and OWNER will jointly make prompt decisions relative to interpretation of the CONTRACT DOCUMENTS.

END OF DOCUMENT