

# Project Manual

**Lake Land College**  
**Diesel Fire Pump & Piping Replacement**  
**Mattoon, Coles County, Illinois**

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TUG Project No. 2714076

**August 22, 2014**

**Released for Bidding - Set Number \_\_\_\_\_**

Architect / Engineer:

**The Upchurch Group, Inc.**

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123 N. 15<sup>th</sup> St.

Mattoon, Illinois 61938

Phone: 217.235.3177

[upchurchgroup@upchurchgroup.com](mailto:upchurchgroup@upchurchgroup.com)

OWNER: Lake Land College  
ARCHITECT/ENGINEER: The Upchurch Group, Inc.; 123 N. 15<sup>th</sup> St.; Mattoon, Illinois 61938; (217) 235-3177  
PROJECT MANUAL FOR: **Diesel Fire Pump and Piping Replacement**  
DATE: August 22, 2014

<b>DIVISION</b>	<b>SECTION</b>	<b>TITLE</b>
<b>0</b>	<b>BIDDING AND CONTRACT REQUIREMENTS</b>	
	00030	Advertisement for Bids
	00100	Instructions to Bidders
	00300	Bid Form
	00410	Bid Bond
	00500	Standard Form of Agreement Between Owner and Contractor
	00610	Performance Bond
	00700	General Conditions of the Contract
	00800	Supplementary Conditions
<b>1</b>	<b>GENERAL REQUIREMENTS</b>	
	01010	Project Summary
	01027	Application for Payment
	01028	Change Order Procedures
	01060	Regulatory Requirements
	01200	Project Meetings
	01300	Submittals
	01500	Construction Facilities and Temporary Controls
	01600	Product Requirements
	01700	Execution Requirements
<b>9</b>	<b>FINISHES</b>	
	09900	Painting
<b>13</b>	<b>SPECIAL CONSTRUCTION</b>	
	13900	Fire Pump with Diesel Driver
<b>15</b>	<b>MECHANICAL</b>	
	15050	Basic Mechanical Materials and Methods
	15160	Pumps
	15310	Fire Protection Piping
<b>16</b>	<b>ELECTRICAL</b>	
	16050	Basic Electrical Materials and Methods
	16180	Equipment Wiring

**END TOC**

**BIDDING & CONTRACT REQUIREMENTS**  
**Document 00030 - Advertisement for Bids**

Lake Land College District #517, Mattoon, Illinois will receive bids for the **Diesel Fire Pump & Piping Replacement**. Bids will be received until **10:00 a.m.** prevailing time on **Friday, September 5, 2014** in the North Conference Room of Neal Hall on the campus of Lake Land College, 5001 Lake Land Blvd., Mattoon, IL 61938.

The project consists of removing the existing diesel engine, fire pump, and associated valves and piping, and reinstalling a new diesel engine, fire pump, with new piping and valving.

Not less than prevailing hourly wage, as determined by the Illinois Department of Labor for Coles County, shall be paid for any part of the work. Lake Land College #517 is exempt from paying sales tax.

Bid security is required, in the form of a bid bond or certified check in an amount equal to ten percent (10%) of the base bid. Bid security shall be made payable to Lake Land College.

Bonds are required: Both a Performance Bond or a Labor & Material Payment Bond is required for this project, each in an amount equal to 100% of the contract price.

Award of a contract is anticipated to occur at the September 8, 2014 regular meeting of the Board of Trustees. The Work shall be Substantially Complete on or before March 1, 2015 with final completion on or before March 15, 2015.

Bidders are encouraged to access bidding documents electronically by using the architect's FTP website (FTP://upchurchgroup.com) Please email Angela for instructions (aclimer@upchurchgroup.com) or call her at 217-235-3177.

Bidders may obtain hard copies of the bidding documents at the office of the Architect by depositing \$25.00 per set (3 sets maximum) in cash or check payable to The Upchurch Group, Inc.; 123 N. 15<sup>th</sup> St.; Mattoon, Illinois 61938; Telephone: 217-235-3177, Facsimile: 217-258-6115, Email: upchurchgroup@upchurchgroup.com. Bid deposits will be returned to those who submit a bid to the owner and return the documents in serviceable condition no later than one week after the date of the bid opening. This deposit does not include the cost of postage, a separate non-refundable \$10.00 payment is required if documents are to be shipped. Subcontractors are requested to use bidding documents made available to them by prime bidders.

A **prebid meeting** will be held on **Thursday August 28, 2014 at 1:30 P.M.** at the job site. Interested parties should meet in the North Conference Room of Neal Hall on the campus of Lake Land College.

Mike Sullivan  
Chairperson

**END 00030**

**1. GENERAL**

**1.01 DEFINITIONS**

- A. All definitions set forth in the General Conditions of the Contract for Construction, AIA Document A-201, are applicable to these Instructions to Bidders.
- B. Bidding documents include the Advertisement for Bid, Instructions to Bidders, the bid forms and the proposed Contract Documents including any Addenda issued prior to receipt of Bids.
- C. Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the bidding documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.
- D. The Upchurch Group, Inc. will be hereafter referred to in this Specification as "Architect", "Architect/Engineer" or "A/E" and all correspondence shall be addressed to: 123 N. 15<sup>th</sup> St. Mattoon, Illinois 61938.
- E. A Bid is a complete and properly signed proposal to do the Work for designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- F. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which work may be added or from which work may be deleted for sums stated in Alternate Bids.
- G. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents or in the proposed Contract Documents.
- H. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials or service as described in the Bidding Documents or in the proposed Contract Documents.
- I. A Bidder is a person or entity who submits a Bid to the Owner.
- J. A Sub-Bidder is a person or entity who submits a bid to a Bidder for materials or labor for a portion of the Work.

**1.02 EXAMINATION OF DOCUMENTS AND SITE**

- A. Each Bidder, by making his Bid, represents that he has read and understands the Bidding Documents.
- B. Each Bidder, by making his Bid, represents that he has visited the site and familiarized himself with the local conditions under which the Work is to be performed.
- C. Each Bidder by making his Bid represents that his Bid is based upon the materials, systems and equipment required by the Bidding Documents without exception.

**1.03 BIDDING PROCEDURES**

- A. All Bids shall be prepared on the forms provided by the Architect and submitted in accordance with the Instructions to Bidders.
- B. A Bid is invalid if it has not been deposited at the designated location prior to the time and date for receipt of bids indicated in the Advertisement or Invitation to Bid, or prior to any extension thereof issued to the Bidders.
- C. Unless otherwise provided in any supplement to these Instructions to Bidders, no bidder shall modify, withdraw or cancel his Bid or any part thereof for thirty days after the time designated for the receipt of Bids in the Advertisement or Invitation to Bid.
- D. Prior to the receipt of Bids, Addenda will be mailed or delivered to each person or firm recorded by the Architect as having received the Bidding Documents and will be available for inspection wherever the Bidding Documents are kept available for that purpose.
- E. Bids shall not contain any recapitulation of the Work to be done and no oral or telephone proposals or modifications will be considered.
- F. The Bidder shall make no additional stipulations on the Bid Form nor limit or qualify his Bid in any other manner. Bids so qualified will be subject to disqualification.
- G. Only written instructions will be binding. The Architect will not be responsible for any oral,

DATE: \_\_\_\_\_

BID TO: Lake Land College #517

BID FROM: \_\_\_\_\_  
(Bidder's Name)

\_\_\_\_\_  
(Bidder's Address)

THE UNDERSIGNED:

1. Acknowledges receipt of:
  - a. Project Manual for Diesel Fire Pump & Piping Replacement; dated August 22, 2014.
  - b. Drawings; dated August 22, 2014.
  - c. Addenda: No.\_\_\_\_, dated: \_\_\_\_\_. No.\_\_\_\_, dated: \_\_\_\_\_.  
No.\_\_\_\_, dated: \_\_\_\_\_. No.\_\_\_\_, dated: \_\_\_\_\_.  
No.\_\_\_\_, dated: \_\_\_\_\_. No.\_\_\_\_, dated: \_\_\_\_\_.
2. Has examined the site and all bidding documents. He shall be responsible for performing all work specifically required of him by all parts of the bidding documents, including all drawings and specifications for the entire project even though such work may be included as related requirements specified in other divisions or sections.
3. Agrees:
  - a. To hold this bid open until 30 calendar days after bid opening date.
  - b. To accept the provisions of the Instructions To Bidders regarding disposition of bid security.
  - c. To enter into and execute a contract with the Owner if awarded on the basis of this bid, and in connection therewith to:
    - (1) Furnish bonds and insurance required by the bidding documents.
    - (2) Accomplish the work in accordance with the Contract.
    - (3) Complete the work within the contract time herein specified.
4. CONTRACT TIME. The College anticipates issuing a Notice of Award at the September 8, 2014 regular meeting of the Board of Trustees. The work shall be substantially complete no later than March 1, 2015.

\_\_\_\_\_

\_\_\_\_\_

as Principal, and \_\_\_\_\_

a corporation of the State of \_\_\_\_\_ as Surety, are held and firmly bound unto the **Lake Land College #517** as Obligee, in the amount of \_\_\_\_\_ for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns jointly and severally, to this agreement.

Principal has submitted to Obligee a bid to enter into a written contract, for the **Diesel Fire Pump & Piping Replacement** in accordance with bidding documents for the project, which contract is by reference made a part hereof and is hereinafter referred to as "the Contract".

THE CONDITION OF THIS OBLIGATION is that if Principal, upon acceptance by Obligee of his bid within the period of time specified for acceptance, shall comply with all post award requirements as required by the terms of the bid within the time specified after receipt of the Notice of Award, or in the event of the failure to comply with all post award requirements, if Principal shall pay Obligee (1) for all costs of procuring the work which exceeds the amount of his bid, or (2) shall pay Obligee the amount of this bond as liquidated damages in the event Principal is a sole bidder and after an attempt to secure other bids by re-advertising none can be obtained, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Surety hereby agrees that its obligation shall not be impaired by any extensions of time for Obligee's acceptance or compliance with post award requirements. Surety hereby waives notice of such extensions.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Surety

BY \_\_\_\_\_ (Seal)

BY \_\_\_\_\_ (Seal)

Attorney-in-Fact

TITLE \_\_\_\_\_

ATTEST:

SECRETARY

\_\_\_\_\_

\_\_\_\_\_

Resident Agent

**END 00410**



## **ARTICLE 1 THE CONTRACT DOCUMENTS**

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement; these form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 9.

## **ARTICLE 2 THE WORK OF THIS CONTRACT**

The Contractor shall execute the entire Work described in the Contract Documents, except to the extent specifically indicated in the Contract Documents to be the responsibility of others, or as follows:

## **ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION**

**3.1** The date of commencement is the date from which the Contract Time of Paragraph 3.2 is measured, and shall be the date of this Agreement, as first written above, unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.

Unless the date of commencement is established by a notice to proceed issued by the Owner, the Contractor shall notify the Owner in writing not less than five days before commencing the Work to permit the timely filing of mortgages, mechanic's liens and other security interests.

**3.2** The Contractor shall achieve Substantial Completion of the entire Work not later than **March 1, 2015**, subject to adjustments of this Contract Time as provided in the Contract Documents.

## **ARTICLE 4 CONTRACT SUM**

**4.1** The Owner shall pay the Contractor in current funds for the Contractor's performance of the Contract the Contract Sum of **XXXXXXXX Dollars and Cents (\$XXXXXXXXXX)** subject to additions and deductions as provided in the Contract Documents.

**4.2** The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

## **ARTICLE 5 PAYMENTS**

**5.1** Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

**5.2** The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

***The period covered by each application for payment shall be one (1) calendar month ending on the fifteenth (15<sup>th</sup>) day of the month.***

**5.3** Provided an Application for Payment is received by the Architect not later than the **Twentieth (20<sup>th</sup>)** day of a month, the Owner shall make payment to the Contractor not later than the **Twentieth (20<sup>th</sup>)** day of the **next** month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than **Sixty (60)** days after the Architect receives the Application for Payment.

**5.4** Each Application for Payment shall be based upon the Schedule of Values submitted by the Contractor in accordance with the Contract Documents. The Schedule of Values shall allocate the entire Contract Sum among the various portions of the Work and be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This Schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.



5.5 Applications for Payment shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

5.6 Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

5.6.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Sum allocated to that portion of the Work in the Schedule of Values, less retainage of **Ten** percent ( **10%** ). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute may be included as provided in Subparagraph 7.3.7 of the General Conditions even though the Contract Sum has not yet been adjusted by Change Order;

5.6.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of **Ten** percent ( **10%** );

5.6.3 Subtract the aggregate of previous payments made by the Owner; and

5.6.4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Paragraph 9.5 of the General Conditions.

5.7 The progress payment amount determined in accordance with Paragraph 5.6 shall be further modified under the following circumstances:

5.7.1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to **Ninety Five** percent ( **95%** ) of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work and unsettled claims; and

5.7.2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Subparagraph 9.10.3 of the General Conditions.

5.8 Reduction or limitation of retain age, if any, shall be as follows: **N/A**

## **ARTICLE 6 FINAL PAYMENT**

Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when (1) the Contract has been fully performed by the Contractor except for the Contractor's responsibility to correct nonconforming Work as provided in Subparagraph 1 2.2.2 of the General Conditions and to satisfy other requirements, if any, which necessarily survive final payment; and (2) a final Certificate for Payment has been issued by the Architect; such final payment shall be made by the Owner not more than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

## **ARTICLE 7 MISCELLANEOUS PROVISIONS**

7.1 Where reference is made in this Agreement to a provision of the General Conditions or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

7.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

***One and one-half percent (1½%) per month (18% A.P.R.)***

7.3 Other provisions: ***None***

## **ARTICLE 8 TERMINATION OR SUSPENSION**

8.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of the General Conditions.

8.2 The Work may be suspended by the Owner as provided in Article 14 of the General Conditions.

**ARTICLE 9**  
**ENUMERATION OF CONTRACT DOCUMENTS**

9.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated as follows:

9.1.1 The Agreement is this executed Standard Form of Agreement Between Owner and Contractor,

9.1.2 The General Conditions are the General Conditions of the Contract for Construction, AIA Document A201, 1987 Edition.

9.1.3 The Supplementary and other Conditions of the Contract are those contained in the Project Manual dated **August 22, 2014**, and are as follows:

*See Table of Contents*

9.1.4 The Specifications are those contained in the Project Manual dated as in Subparagraph 9.1.3, and are as follows:

*See Table of Contents*

9.1.5 The Drawings are as follows, and are dated **August 22, 2014** unless a different date is shown below:

9.1.6 The Addenda, if any, are as follows:

Number	Date	Pages
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Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding requirements are also enumerated in this Article 9.

9.1.7 Other documents, if any, forming part of the Contract Documents are as follows: **None**

This Agreement is entered into as of the day and year first written above and is executed in at least three original copies of which one is to be delivered to the Contractor, one to the Architect for use in the administration of the Contract, and the remainder to the Owner.

OWNER: **Lake Land College**

**Contractor's Name**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
(Printed name and title)

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# Performance Bond

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KNOW ALL MEN BY THESE PRESENTS: that \_\_\_\_\_  
(Here insert full name and address or legal title of Contractor)

as Principal, hereinafter called Contractor, and, \_\_\_\_\_  
(Here insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto **Lake Land College**

as Obligee, hereinafter called Owner, in the amount of \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_),

for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Contractor has by written agreement dated \_\_\_\_\_ 2014, entered into a contract with Owner for the **Diesel Fire Pump & Piping Replacement**

in accordance with Drawings and Specifications prepared by **The Upchurch Group, Inc.**  
123 North 25<sup>th</sup> Street  
Mattoon, IL 61938

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.



# Labor and Material Payment Bond

THIS BOND IS ISSUED SIMULTANEOUSLY WITH PERFORMANCE BOND IN FAVOR OF THE OWNER CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE CONTRACT

**KNOW ALL MEN BY THESE PRESENTS:** that \_\_\_\_\_  
*(Here insert full name and address or legal title of Contractor)*

as Principal, hereinafter called Principal, and, \_\_\_\_\_  
*(Here insert full name and address or legal title of Surety)*

as Surety, hereinafter called Surety, are held and firmly bound unto Lake Land College

as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined, in the

amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_),

for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Principal has by written agreement dated \_\_\_\_\_ 2014 entered into a contract with Owner for **Diesel Fire Pump & Piping Replacement.**

in accordance with Drawings and Specifications prepared by **The Upchurch Group, Inc.**  
123 North 15<sup>th</sup> Street  
Mattoon, IL 61938

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

### LABOR AND MATERIAL PAYMENT BOND

Now, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the. Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light. heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.

2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant. prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.

3. No suit or action shall be commenced hereunder by any claimant:

a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was

done or performed. Such notice shall be served by mailing the same by registered mail or certified mail; postage prepaid, in an envelope ad dressed to the Principal, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

b) After the expiration of one (1) year following the date on which Principal ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_ 2014.

\_\_\_\_\_  
(Witness) {

\_\_\_\_\_  
(Principal) (Seal)  
\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Witness) {

\_\_\_\_\_  
(Principal) (Seal)  
\_\_\_\_\_  
(Title)



**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00700 - General Conditions**

The General Conditions are "General Conditions of the Contract for Construction"; AIA Document A 201 (1987 Edition).

By this reference this document is an integral part of these Contract Documents.

This document is available for review from the Architect.

**END 00700**



**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00800 - Supplementary Conditions**

This section contains modifications to the General Conditions and other Conditions which supplement the General Conditions.

1. **Drawing Index.** The drawings portion of the Construction Documents consists of the drawing sheets: **FP1 Fire Protection Demolition Plan & FP2 Fire Protection Plan.**
2. **Insurance Requirements.** At this writing, the Owner has not made their insurance requirements for this project known to the A/E. If the Owner communicates their insurance requirements during the bidding period, these will be made known via addendum. In the event that no such information is provided, the insurance requirements for this project shall be as outlined in Article 3. below. These insurance requirements do not represent and shall not be construed to represent a recommendation by the Architect/Engineer for types of coverage or limits of liability.
3. **Insurance, General**
  - a. Sole Discretion. The Owner shall exercise sole discretion to determine acceptability of insurance.
  - b. Acceptability of Insurance Companies. In addition to other requirements stated herein, insurance is acceptable when issued by an insurance company that meets all of the following standards:
    - 1) Has a current Best's rating of any level of "A" or better; and has a current Best's financial class of "V" or higher.
    - 2) Is duly licensed in the state of Illinois by the Illinois Department of Insurance, and does not have an unacceptable record of improper conduct or financial problems with the Illinois Department of Insurance.
    - 3) Does not have a history of unacceptable performance related to Owner claims.
    - 4) Is covered by the Insurance Guaranty Fund.
    - 5) Neither the firm nor any of its officers or owners shall have been convicted of a felony unless more than one year has passed since the completion of the felony sentence. The firm is not disqualified from bidding on public works projects by reason of any consent decree or order imposing sanctions upon the company arising out of a civil or criminal action brought against the firm or any of its officers or owners.
  - c. Cut-through Endorsements. Policies with a 100% cut-through endorsement giving all claimants a direct right of recovery against a reinsurer when the primary insurer fails or is unable to pay for any reason, shall be acceptable provided that a proper endorsement and reinsurance treaty is submitted.
  - d. Discretion to Adjust Criteria.
    - 1) The requirements outlined herein shall constitute minimum requirements unless waived prior to bidding by Owner in extraordinary cases that include, but are not limited to the following:
      - a) Insurance that meets the requirements is not available due to market changes or the nature of the project.
      - b) Characteristics of the construction project justify less stringent requirements.
      - c) Available insurance, although not in technical compliance with the requirements, is determined to be as reliable as insurance in technical compliance.
      - d) Insurance policies not covered by the Illinois Insurance Guaranty Fund (215 ILCS 5/532 et seq.) shall not be acceptable unless Owner agrees that the Contractor has satisfactorily demonstrated extraordinary circumstances justifying an exception. Examples of such policies are: Risk Retention Groups and the Illinois Insurance Exchange. The following shall not constitute extraordinary circumstances justifying an exception:
        - The Contractor already has a policy in effect that does not meet the requirements.
        - The Contractor's insurance agent does not represent companies that offer insurance meeting the requirements.

**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00800 - Supplementary Conditions**

- Insurance meeting the requirements is more expensive than insurance which does not.
  - The Contractor's work performance or financial condition precludes it from obtaining insurance which meets the requirements.
- e) Owner may set more stringent criteria for insurance when determined to be justified by the nature of the construction project.
- e Unacceptable Performance of an Insurance Company. Unacceptable performance of an insurance company related to Owner claims may consist of one or more of the following:
- 1) Failure to respond to Owner communications within a reasonable time.
  - 2) Failure to acknowledge receipt of a claim within thirty calendar days.
  - 3) Failure to investigate and respond to a claim within sixty calendar days;
  - 4) Failure to pay meritorious claims on a timely basis.
  - 5) Failure to work cooperatively and in good faith with Owner.
  - 6) Failure to provide Owner with requested documentation within a reasonable time, including but not limited to, insurance policies, inspection reports, certificates, binders, and general correspondence.
- f. Evidence of Insurance.
- 1) Contractor shall file with Owner evidence of complete coverage of all insurance required by this article, bearing the original signature of the insurance company's authorized agent. Acceptable evidence of insurance is:
    - a) A binder or certificate of insurance accompanied by endorsements as set out below:
    - b) The complete insurance policy, including all required endorsements.
  - 2) Endorsements shall be required on each certificate or policy which include each of the following statements:
    - a) "The coverage and limits conform to the minimums required by Article 3 of Section 00800 of the Project Manual." Any exception or deviation shall be brought to the attention of Owner for a ruling on acceptability.
    - b) Architect/Engineer's project number and name of the project covered by the policy.
    - c) The company agrees to timely provide complete copies of policies upon request by Owner.
    - d) The policy will not be canceled, changed or altered until at least ten calendar days prior written notice has been given to the Contractor and Owner, unless the same is stated in a policy provision.
    - e) Owner and Architect/Engineer are included as additional named insureds for occurrences arising in whole or in part out of the work and operations performed. This endorsement does not apply to Workmen's Compensation Insurance policies.
  3. The contract shall not be executed until acceptable evidence of coverage is on file with Owner. The Contractor shall at its own expense and delay, cease operations if the insurance required is terminated or reduced below the required amounts of coverage.

Owner may stop payment to the Contractor if the insurance required is terminated or reduced below the required amounts of coverage. In no event shall any failure of Owner to receive policies or certificates or to demand receipt be construed as a waiver of the Contractor's obligation to obtain and keep in force the required insurance and to provide the required evidence of insurance.
- g. Reconstruction. The prompt repair or reconstruction of the work as a result of an insured loss or damage shall be the Contractor's responsibility and shall be accomplished at no additional cost to Owner or Architect/Engineer. The Contractor shall furnish proper assistance in the adjustment and settlement of all losses. Loss will be adjustable with and payable to the party purchasing the builder's risk insurance, who shall be responsible for apportioning the loss proceeds to each and every entity involved in the loss to the extent of its interest.

**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00800 - Supplementary Conditions**

h. Insurance shall remain in effect until final acceptance and at all times thereafter when the Contractor may be correcting, removing or replacing defective work or as otherwise adjusted by the Owner depending upon the circumstances of such correction, removal or replacement.

i. Required Minimum Insurance Coverages

1) Comprehensive Automobile Liability:  
a) The policy shall cover owned, non-owned, and hired vehicles. \$1,000,000 Bodily Injury & Property Damage Liability Limit Each Occurrence.

2) Worker's Compensation:

a) Statutory Requirement. Worker's compensation shall be provided in accordance with the provisions of the Illinois Worker's Compensation Act, as amended. Notwithstanding the rating and financial size categories stated in this Article, coverage may be provided by a group self-insurer authorized in Section 4(a) of the Act and approved pursuant to the rules of the Illinois Department of Insurance. The Contractor shall submit an insurance certificate indicating coverage for statutory limits.

b) The Contractor may use a Self-Insured Plan for Worker's Compensation Insurance if the plan is approved by the State of Illinois. For approval, the Contractor shall obtain a certificate from the Illinois Industrial Commission, Office of Self-Insurance Administration, Springfield office.

c) Employers Liability

- Each accident \$500,000
- Disease-policy limit \$500,000
- Disease-each employee \$500,000
- The worker's compensation insurance carrier, or self insurance service agency, where applicable, shall certify that to the best of its knowledge, the Contractor has properly reported wage and workforce data and made premium payments in compliance with Illinois rates and worker classifications.

3) Commercial General Liability. Include coverage for premises and operations, broad form property damage, products completed operations, independent contractor's personal injury liability and contractual obligations.

Coverage shall not be excluded because of the Contractor's negligence. Where the hazard exists, the Contractor shall purchase and maintain insurance to protect against claims due to explosion, collapse or underground damage.

a) The general aggregate limit shall be endorsed on a per project basis.

- \$1,000,000 Bodily Injury Per Person
- \$1,000,000 Bodily Injury Aggregate Limit.
- \$ 500,000 Property Damage per Occurrence.
- \$1,000,000 Property Damage Aggregate Limit.
- \$1,000,000 Combined Single Limit Coverage for bodily injury and property damage per occurrence and in the same aggregate limit will be accepted in lieu of the separate limits specified above.

4) Umbrella or Excess of Loss Coverage. If the limits specified herein are not met, an Umbrella or Excess Liability policy of not less than \$1,000,000 for any one occurrence and subject to the same aggregate over the Comprehensive Automobile Liability, Employers Liability and Commercial/Comprehensive General Liability coverages, is acceptable.

4. **Builder's Risk Insurance** (if applicable)
- a. Purchaser. Builder's Risk Insurance shall be purchased and maintained by the Contractor.
  - b. The policy shall be a Completed Value All Risk Builder's Risk/Installation Floater policy or a combination thereof. The policy shall be written in an amount equal to 100% of the total of the contract.
  - c. Coverage shall include the following work and property:
    - 1) The installed work of all contractors until substantial completion of the entire project.
    - 2) Building materials and supplies, equipment, machinery and fixtures intended to become a permanent part of the project. Coverage shall include on the premises, at temporary storage locations and in transit.
    - 3) Construction forms, scaffolding and temporary structures on the premises.
    - 4) Drawings and specifications used to document as-constructed conditions.
    - 5) Debris removal resulting from a covered peril.
    - 6) Fire or collapse resulting from excluded perils.
  - d. Coverage may only exclude the following property:
    - 1) tools, equipment and other personal property of the contractors and their employees;
    - 2) vehicles of any kind;
    - 3) lawns, trees, shrubs or plants; and,
    - 4) the value of existing buildings prior to renovation under this contract.
  - e. Perils excluded may only include:
    - 1) earth movement, including earthquake, landslide or mud slide;
    - 2) flood, sewer backup, and seepage;
    - 3) dishonest acts of the insured or its employees;
    - 4) trick or fraud;
    - 5) mysterious disappearance;
    - 6) inventory shortage;
    - 7) corrosion, rust, rot, mold, wear and tear, except resulting unexcluded loss;
    - 8) changes or extremes of temperature and humidity;
    - 9) settling, cracking, shrinking, expanding of walls, ceilings, floors, foundations, etc.;
    - 10) operation of building ordinances or laws;
    - 11) loss of use or occupancy;
    - 12) design error, except resulting damage;
    - 13) war, rebellion, insurrection, radioactive contamination, and.
    - 14) pollution clean up, unless the release results from a covered peril.
  - f. Additional Insured. Owner and Architect/Engineer shall, by endorsement, be included as additional named insureds.
  - g. Deductible. A deductible clause of maximum of \$5,000 per loss shall be included.
    - 1) Owner will assume responsibility for the deductible amount for installed work unless responsibility for the loss can be attributed to a negligent act by Contractor.
    - 2) Contractor shall assume responsibility for the deductible amount for losses under .4b.2) and .4b3), above.
  - h. Owner Rights. Owner reserves the right to take over the policy or extend coverage after default, cancellation or termination of coverage for any reason.
  - i. Beneficial Occupancy. The policy by its terms or endorsement shall specifically permit and allow for beneficial or partial occupancy prior to substantial completion of the project by Architect/Engineer.
  - j. Waiver of Damages. Owner, the Architect/Engineer and Contractor waive all rights each against the others for damages caused by fire or any other peril to the extent any loss or claim is covered by

**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00800 - Supplementary Conditions**

Builder's Risk Insurance or any other valid insurance applicable to the project except such rights as they may have to the proceeds of such insurance held by any of the insured as a result of loss. Contractor shall require similar waivers of subrogation from all subcontractors.

5. **Prevailing Wage Information** - See pages immediately following.

# Coles County Prevailing Wage for August 2014

1. (See explanation of column headings at bottom of wages)

Trade Name	RG	TYP	C	Base	FRMAN	M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng
=====	==	===	=	=====	=====	=====	===	===	=====	=====	=====	=====
ASBESTOS ABT-GEN		BLD		29.990	31.240	1.5	1.5	2.0	6.300	10.34	0.000	0.800
ASBESTOS ABT-MEC		BLD		21.500	22.500	1.5	1.5	2.0	6.500	5.700	0.000	0.650
BOILERMAKER		BLD		32.060	34.560	1.5	1.5	2.0	7.070	21.27	1.000	0.350
BRICK MASON		BLD		31.320	32.820	1.5	1.5	2.0	7.100	10.68	0.000	0.630
CARPENTER		BLD		30.700	32.950	1.5	1.5	2.0	8.000	13.65	0.000	0.520
CARPENTER		HWY		31.200	32.950	1.5	1.5	2.0	8.000	13.65	0.000	0.520
CEMENT MASON		BLD		31.010	32.760	1.5	1.5	2.0	7.200	9.050	0.000	0.500
CEMENT MASON		HWY		31.630	33.130	1.5	1.5	2.0	7.200	9.050	0.000	0.500
CERAMIC TILE FNSHER		BLD		28.830	0.000	1.5	1.5	2.0	7.100	8.200	0.000	0.000
ELECTRIC PWR EQMT OP	1	ALL		36.770	0.000	1.5	1.5	2.0	5.760	10.29	0.000	0.370
ELECTRIC PWR EQMT OP	2	ALL		32.820	0.000	1.5	1.5	2.0	5.760	9.190	0.000	0.330
ELECTRIC PWR GRNDMAN		ALL		26.280	45.290	1.5	1.5	2.0	5.790	7.360	0.000	0.260
ELECTRIC PWR LINEMAN		ALL		42.540	45.290	1.5	1.5	2.0	6.280	11.92	0.000	0.430
ELECTRICIAN		BLD		34.680	38.150	1.5	1.5	2.0	5.600	8.240	0.000	0.520
ELECTRONIC SYS TECH		BLD		31.130	32.880	1.5	1.5	2.0	5.350	6.110	0.000	0.400
ELEVATOR CONSTRUCTOR		BLD		41.070	46.200	2.0	2.0	2.0	12.73	13.46	3.290	0.600
FENCE ERECTOR		ALL		32.210	34.110	1.5	1.5	2.0	8.840	10.02	0.000	0.900
GLAZIER		BLD		31.030	33.030	1.5	2.0	2.0	7.050	8.400	0.000	0.430
HT/FROST INSULATOR		BLD		29.990	30.990	1.5	1.5	2.0	5.050	10.09	0.000	0.280
IRON WORKER		ALL		32.210	34.110	1.5	1.5	2.0	8.840	10.02	0.000	0.900
LABORER		BLD		27.990	29.240	1.5	1.5	2.0	6.300	10.34	0.000	0.800
LABORER		HWY		29.550	30.550	1.5	1.5	2.0	6.300	11.79	0.000	0.800
LATHER		BLD		30.700	32.950	1.5	1.5	2.0	8.000	13.65	0.000	0.520
MACHINIST		BLD		44.350	46.850	1.5	1.5	2.0	6.760	8.950	1.850	0.000
MARBLE FINISHERS		BLD		28.830	0.000	1.5	1.5	2.0	7.100	8.200	0.000	0.000
MARBLE MASON		BLD		30.330	0.000	1.5	1.5	2.0	7.100	8.200	0.000	0.000
MILLWRIGHT		BLD		30.720	32.970	1.5	1.5	2.0	8.000	14.09	0.000	0.520
MILLWRIGHT		HWY		31.900	33.650	1.5	1.5	2.0	8.000	15.39	0.000	0.520
OPERATING ENGINEER	1	ALL		37.750	0.000	1.5	1.5	2.0	7.600	9.100	0.000	0.850
OPERATING ENGINEER	2	ALL		24.300	0.000	1.5	1.5	2.0	7.600	9.100	0.000	0.850
PAINTER		ALL		33.560	35.060	1.5	1.5	2.0	7.100	4.480	0.000	0.600
PAINTER SIGNS		ALL		33.560	35.060	1.5	1.5	2.0	7.100	4.480	0.000	0.600
PILEDRIVER		BLD		31.700	33.950	1.5	1.5	2.0	8.000	13.65	0.000	0.520
PILEDRIVER		HWY		32.200	33.950	1.5	1.5	2.0	8.000	13.65	0.000	0.520
PIPEFITTER		BLD		39.400	41.900	1.5	1.5	2.0	7.000	11.45	0.000	1.020
PLASTERER		BLD		31.000	33.000	1.5	1.5	2.0	7.200	10.77	0.000	0.500
PLUMBER		BLD		39.400	41.900	1.5	1.5	2.0	7.000	11.45	0.000	1.020
ROOFER		BLD		29.150	30.650	1.5	1.5	2.0	9.250	8.400	0.000	0.200
SHEETMETAL WORKER		BLD		35.310	37.310	1.5	1.5	2.0	8.600	13.19	0.000	0.520
SPRINKLER FITTER		BLD		37.120	39.870	1.5	1.5	2.0	8.420	8.500	0.000	0.350
STONE MASON		BLD		31.320	32.820	1.5	1.5	2.0	7.100	10.68	0.000	0.630
SURVEY WORKER-> NOT IN EFFECT		ALL		29.550	30.550	1.5	1.5	2.0	6.300	10.34	0.000	0.800
TERRAZZO FINISHER		BLD		28.830	0.000	1.5	1.5	2.0	7.100	8.200	0.000	0.000
TERRAZZO MASON		BLD		30.330	0.000	1.5	1.5	2.0	7.100	8.200	0.000	0.000
TILE LAYER		BLD		30.700	32.950	1.5	1.5	2.0	8.000	13.65	0.000	0.520
TILE MASON		BLD		30.330	0.000	1.5	1.5	2.0	7.100	8.200	0.000	0.000
TRUCK DRIVER	1	ALL		31.230	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TRUCK DRIVER	2	ALL		31.680	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TRUCK DRIVER	3	ALL		31.890	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TRUCK DRIVER	4	ALL		32.180	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TRUCK DRIVER	5	ALL		33.020	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TRUCK DRIVER	1	O&C		24.980	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TRUCK DRIVER	2	O&C		25.340	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TRUCK DRIVER	3	O&C		25.510	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TRUCK DRIVER	4	O&C		25.740	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250

**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00800 - Supplementary Conditions**

TRUCK DRIVER	O&C	5	26.420	0.000	1.5	1.5	2.0	10.30	4.840	0.000	0.250
TUCKPOINTER	BLD		31.320	32.820	1.5	1.5	2.0	7.100	10.68	0.000	0.630

Legend: RG (Region)  
TYP (Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers)  
C (Class)  
Base (Base Wage Rate)  
FRMAN (Foreman Rate)  
M-F>8 (OT required for any hour greater than 8 worked each day, Mon through Fri.  
OSA (Overtime (OT) is required for every hour worked on Saturday)  
OSH (Overtime is required for every hour worked on Sunday and Holidays)  
H/W (Health & Welfare Insurance)  
Pensn (Pension)  
Vac (Vacation)  
Trng (Training)

## Explanations

### COLES COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

### EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

### CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

### ELECTRONIC SYSTEMS TECHNICIAN

**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00800 - Supplementary Conditions**

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

SURVEY WORKER - Operated survey equipment including data collectors, G.P.S. and robotic instruments, as well as conventional levels and transits.

**TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION**

Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vector trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.

Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.

Class 4. Low Boy and Oil Distributors.

Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

**TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.**

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump, service, or oil distributor trucks. The work includes transporting materials and equipment (including but not limited to, oils, aggregate supplies, parts, machinery and tools) to or from the job site; distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

**OPERATING ENGINEERS - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION**

Class 1. Power Cranes, Draglines, Derricks, Shovels, Gradalls, Mechanics, Tractor Highlift, Tournadozer, Concrete Mixers with Skip, Tournamixer, Two Drum Machine, One Drum Hoist with Tower or Boom, Cableways, Tower Machines, Motor Patrol, Boom Tractor, Boom or Winch Truck, Winch or Hydraulic Boom Truck, Truck Crane, Tournapull, Tractor Operating Scoops, Bulldozer, Push Tractor, Asphalt Planer,



**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00800 - Supplementary Conditions**

Finishing Machine on Asphalt, Large Rollers on Earth, Rollers on Asphalt Mix, Ross Carrier or similar Machine, Gravel Processing Machine, Asphalt Plant Engineer, Paver Operator, Dredging Equipment, or Dredge Engineer, or Dredge Operator, Central Mix Plant Engineer, CMI or similar type machine, Concrete Pump, Truck or Skid Mounted, Tower Crane, Engineer or Rock Crusher Plant, Concrete Plant Engineer, Ditching Machine with dual attachment, Tractor Mounted Loaders, Cherry Picker, Hydro Crane, Standard or Dinkey Locomotives, Scoopmobiles, Euclid Loader, Soil Cement Machine, Back Filler, Elevating Machine, Power Blade, Drilling Machine, including Well Testing, Caissons, Shaft or any similar type drilling machines, Motor Driven Paint Machine, Pipe Cleaning Machine, Pipe Wrapping Machine, Pipe Bending Machine, Apsco Paver, Boring Machine, (Head Equipment Greaser), Barber-Greene Loaders, Formless Paver, (Well Point System), Concrete Spreader, Hydra Ax, Span Saw, Marine Scoops, Brush Mulcher, Brush Burner, Mesh Placer, Tree Mover, Helicopter Crew (3), Piledriver-Skid or Crawler, Stump Remover, Root Rake, Tug Boat Operator, Refrigerating Machine, Freezing Operator, Chair Cart-Self-Propelled, Hydra Seeder, Straw Blower, Power Sub Grader, Bull Float, Finishing Machine, Self-Propelled Pavement Breaker, Lull (or similar type Machine), Two Air Compressors, Compressors hooked in Manifold, Overhead Crane, Chip Spreader, Mud Cat, Sull-Air, Fork Lifts (except when used for landscaping work), Soil Stabilizer (Seaman Tiller, Bo Mag, Rago Gator, and similar types of equipment), Tube Float, Spray Machine, Curing Machine, Concrete or Asphalt Milling Machine, Snooper Truck-Operator, Backhoe, Farm Tractors (with attachments), 4 Point Lift System (Power Lift or similar type), Skid-Steer (Bob Cat or similar type), Wrecking Shears, Water Blaster.

Class 2. Concrete Mixers without Skips, Rock Crusher, Ditching Machine under 6', Curbing Machine, One Drum Machines without Tower or Boom, Air Tugger, Self-Propelled Concrete Saw, Machine Mounted Post Hole Digger, two to four Generators, Water Pumps or Welding Machines, within 400 feet, Air Compressor 600 cu. ft. and under, Rollers on Aggregate and Seal Coat Surfaces, Fork Lift (when used for landscaping work), Concrete and Blacktop Curb Machine, One Water Pump, Oilers, Air Valves or Steam Valves, One Welding Machine, Truck Jack, Mud Jack, Gunnite Machine, House Elevators when used for hoisting material, Engine Tenders, Fireman, Wagon Drill, Flex Plane, Conveyor, Siphons and Pulsometer, Switchman, Fireman on Paint Pots, Fireman on Asphalt Plants, Distributor Operator on Trucks, Tampers, Self-Propelled Power Broom, Striping Machine (motor driven), Form Tamper, Bulk Cement Plant, Equipment Greaser, Deck Hands, Truck Crane Oiler-Driver, Cement Blimps, Form Grader, Temporary Heat, Throttle Valve, Super Sucker (and similar type of equipment).

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

**BIDDING & CONTRACT REQUIREMENTS**  
**Section 00800 - Supplementary Conditions**

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

END 00800

***The General Conditions, Supplementary Conditions and Division 1, General Requirements are hereby made a part of each division and section of the project specifications.***

**1. GENERAL.**

**1.01 REQUIREMENTS INCLUDE.**

- A. Work covered by contract documents is delineated on the Drawings and specified in the Project Manual, consisting generally of the following: Removing the existing diesel engine, fire pump, and associated valves and piping, and reinstalling a new diesel engine, fire pump, with new piping and valving.

**1.02 DEFINITIONS.** The following terms are used throughout the contract documents. The work will be governed in accord with the definitions.

- A. Fabricated: Fabricated pertains to items specifically assembled or made of selected materials or components to meet individual design requirements.
- B. Manufactured: Manufactured means standard units, usually mass produced by an established manufacturer of the respective item.
- C. Provide: Provide means furnish and install.
- D. Shop fabricated or shop made: Shop fabricated or shop made refers to item made by the Contractor in his own shop.

**1.03 PERMITS.** Contractor shall apply for and pay for all permits relating to the construction of the project.

**1.04 PRODUCTS**

- A. No Asbestos Containing Materials or Other Hazardous Materials Shall be Furnished.
- B. No paint containing lead shall be furnished.

**1.05 CONTRACTOR USE OF PREMISES.**

- A. Confine operations at site to area permitted by:
  - 1. Law.
  - 2. Permits.
  - 3. Contract.
  - 4. Owner's representative.
    - a. Confer with Owner's representative and obtain full knowledge of all sites rules and regulations affecting work.
    - b. Conform to site rules and regulations while engaged in project construction.
    - c. Site rules and regulations take precedence over others that may exist outside such jurisdiction.
    - d. Employee list: The Owner's representative may examine Contractor's list of employees, including those of his subcontractors and their agents.
    - e. Vehicle use: Rigidly enforce the following:
      - 1) Keep all vehicles, mechanized or motorized equipment locked at all times when parked and unattended on Owner's premises.
      - 2) Do not, under any circumstances, leave any vehicle unattended with motor or engine running, or with ignition key in place.
      - 3) Parking: Permitted only in areas designated by Owner's representative.
      - 4) All traffic control subject to Owner's representative's approval.
- B. Do not unreasonably encumber site with materials or equipment.

**BIDDING AND CONTRACT REQUIREMENTS**

**Document 01010 - Project Summary**

- C. Do not load structure with weight that will endanger structure.
- D. Assume full responsibility for protection and safekeeping of products stored on premises.
- E. Move all stored products or equipment which interfere with operations of Owner.
- F. Obtain and pay or use of additional storage or work area needed for operations.
- G. Contractors and A/E's will provide reasonable access to the site and shall not prohibit nor interfere with lawfully conducted inspections or site visits by properly identified representatives of regulatory agencies or collective bargaining units.
  - 1. Notwithstanding the above, Owner's regulations governing site security shall be observed.
  - 2. All site visitors shall comply with personal protection regulations, including hard hats.
  - 3. Reasonable proof of identification and signature to the visitor's log may be required of the visitors by the contractor's site superintendent.
- H. Fire Protection:
  - 1. Fires: Each Contractor shall prohibit the lighting of fires about the premises and use due diligence to see that such prohibition is enforced. Debris and waste materials shall not be burned at the construction site but shall be promptly removed to prevent the accumulation of combustibles on the site or within the building.
  - 2. Welding and Cutting: It shall be the responsibility of each Contractor to take precautionary measures to prevent fire.
  - 3. Flammables: Gasoline and other fuels shall be kept and handled in accord with NFPA and in UL Listed and Labeled safety cans and shall be stored away from hazardous work areas.

1.06 USE OF TOBACCO.

Per State of Illinois the use of any tobacco is prohibited from property.

**END 01010**

**1. GENERAL**

1.01 REQUIREMENTS INCLUDE

- A. Payment to Contractor(s) will be made monthly in accordance with the progress of the work and the terms of the Contract Documents.
- B. Pay application documents shall be submitted to the Architect/Engineer no later than ten days after the end of the work period.
- C. Within five days of receipt the A/E will review the Contractor's pay application documents for correctness; and either return them for corrections or approve and submit them to the Owner for payment.

1.02 APPLICATION FOR PAYMENT

- A. The values claimed by the Contractor on each progress payment shall be equal to the Work completed and Materials Stored during the period covered by the application and shall not include the value such work or materials anticipated beyond the end of the period.
- B. The Contractor shall submit his application for payment using the forms provided by the A/E (or *reasonable facsimiles of these forms*). (See the sample forms which follow.)
- C. The format of the application shall follow that which appears on the approved Schedule of Values. (See Section 01300).
- D. The A/E will verify that the amounts requested in each category of work are appropriate to the stage of construction in evidence at the end of the work period defined in the Owner/Contractor Agreement.

1.03 STORED MATERIALS

A. DEFINITION

- 1. Stored Materials are items which have been appropriated for use on this specific project.
- 2. Stored Materials consists of items which become a permanent part of the project, including:
  - a. Materials
  - b. Equipment
  - c. Fixtures

- B. The Owner will pay for all material stored for future use on its project. It is in fact encouraged in order that the construction schedule can be maintained or, in some instances, accelerated.

- C. STORED ON-SITE: Materials stored on-site are not subject to any special provisions (except proper storage practices - See Section 01600).

D. STORED OFF-SITE

- 1. Materials stored off-site must be clearly tagged, identifying that they are for use on this project.
- 2. Pay Applications for such materials must be accompanied by a Certificate of Insurance.
- 3. Materials stored off-site are subject to the same protection requirements as those stored on-site (See Section 01600).

**1. GENERAL**

1.01 DEFINITION

A Contract consists of a scope of work or service to be performed within a definite period of time for a specified compensation. Upon execution of the Owner/Contractor Agreement, the Contract may not be changed except as specified herein. When it becomes necessary to modify any of the elements of the contract (scope, time or compensation) a Change Order will be issued. The exception to this is detailed in article 1.06

1.02 REQUESTS FOR CHANGE

- A. Requests for change may be either verbal or written.
- B. The Contractor or Owner should make their requests to the Architect/Engineer.
- C. Subcontractors, suppliers and others should make requests through the Contractor.
- D. Requests should be made in a timely manner to allow for proper execution of Change Orders. Article 1.07 addresses the procedure when a change is needed more quickly than the normal procedure allows.

1.03 PROPOSAL REQUEST: The A/E will issue a Request for Proposal (sample form follows) to the Contractor.

1.04 CONTRACTOR'S PROPOSAL

- A. The Contractor shall respond to the request by providing a Proposal to the A/E. In order for the Proposal to be properly evaluated, it shall include backup data in the form of detailed breakdown of all direct costs and markups. Quotations from subcontractors and/or suppliers may also be required as backup data.
- B. If a change affects work which is covered by unit prices in the Contract, such prices shall be used as the basis for adjustments to the contract sum.
- C. Material:
  - 1. Material is a direct cost that may be reduced, increased or remain unchanged as a result of a change in the Work. Material costs (both reductions and increases) shall be described in the Contractor's Proposal.
  - 2. Material costs shall be listed as follows:
    - a. Material type
    - b. Quantity
    - c. Unit cost
    - d. Total cost
    - e. Miscellaneous cost(s) associated with a material.
  - 3. If applicable, taxes associated with materials may be included.
- D. Labor:
  - 1. Labor is a direct cost that may be reduced, increased or remain unchanged as a result of a change in the Work. Labor costs (both reductions and increases) shall be described in the Contractor's Proposal.
  - 2. Labor costs can include:
    - a. Wages
    - b. Benefits
    - c. Workman's Compensation Insurance

d. Other statutory requirements (FUTA, SUTA, etc.)

E. Equipment

1. Equipment needed to accomplish the Work is a direct cost that may be reduced, increased or remain unchanged as a result of a change in the Work. Equipment costs (both reductions and increases) shall be described in the Contractor's Proposal.
2. Equipment costs can include:
  - a. Cost of equipment at a reasonable rate (hourly, daily, weekly, etc, as appropriate).
  - b. Cost of mobilization of equipment.
  - c. Cost of consumables associated with use of equipment.

F. Maximum allowable markup for Overhead and Profit

1. Prime Contractor:
  - a. If work is performed is performed by own forces: 18% of the direct costs (Materials + Labor + Equipment).
  - b. If work is performed is performed by a subcontractor: 6% of the subcontractor's direct costs (Materials + Labor + Equipment).
2. Subcontractor:
  - a. If work is performed is performed by own forces: 18% of the direct costs (Materials + Labor + Equipment).
  - b. If work is performed is performed by a sub-subcontractor: 6% of the sub-subcontractor's direct costs (Materials + Labor + Equipment).

1.04 EFFECT ON GUARANTEE/WARRANTY

- A. When a proposed change may affect material, equipment, systems or other assemblies which have a specified guarantee or warranty other than the one year warranty described in Article 13.2.2 of the General Conditions, the Contractor shall submit to the A/E written evidence of the effect the proposed change would have on such guarantee or warranty. This evidence shall be written by an authorized representative of the entity which will be guaranteeing or warranting the material, equipment, system or other assembly. A form which can be used for this purpose is available from the A/E. A sample is included in this section.
- B. Proposed changes which negatively affect such guarantees or warranties will not be approved.

1.05 EXECUTION OF CHANGE ORDER

- A. The A/E will initiate a Change Order (sample form follows).
- B. The A/E's signature expresses his approval of the change and its terms.
- C. The Contractor's signature expresses his willingness to make the change and acceptance of the terms of the change.
- D. The Owner's signature expresses his approval of the change, acceptance of the terms of the change and authorization to execute the change.

1.06 MINOR CHANGES

- A. The Architect/Engineer may direct the Contractor to make a minor change which does not affect the contract sum, contract time or any guarantee/warranty.
- B. Such supplemental instructions will be processed using written communication (sample form follows).

1.07 CONSTRUCTION CHANGE AUTHORIZATION

**DIVISION 1 - GENERAL REQUIREMENTS**  
**Section 01028 - Change Order Procedures**

- A. In order to expedite the work and avoid or minimize delays in the work which may affect the contract sum or contract time, the A/E may amend the contract documents (sample form follows).
- B. The A/E's signature acknowledges the issuance of the directive and approval of the change.
- C. The Contractor's signature expresses his willingness to make the change and confirms the cost and time data contained thereon.
- D. The Owner's signature expresses his approval of the change, acceptance of the cost and time data and authorization to execute the change.

1.08 FORMS: The following pages are copies of the forms referenced in this section. Copies are available from the A/E.

**END 01028**



# Request for Proposal

Number:

---

Project Name:

Project No:

Name & Address of Contractor:

Contract for:

Date Submitted:

Name & Address of Owner:

Name & Address of A/E:

The Upchurch Group, Inc.  
123 North 15<sup>th</sup> Street  
Mattoon, Illinois 61938  
Phone: 217/235-3177; FAX 217/258-6115

This is a request for a proposal. Please submit an itemized proposal for changes in the Contract Sum and/or Time as required to effect the proposed modifications to the Contract Documents as described below.

***This document is not an authorization to proceed with the work described below.***

---

**Description of the proposed modifications:**

**Attachments:**

# Change Order

Number:

Project Name:

Project No:

Name & Address of Contractor:

Contract for:

Date Initiated:

Name & Address of Owner:

Name & Address of A/E:

The Upchurch Group, Inc.  
123 North 15<sup>th</sup> Street  
Mattoon, Illinois 61938  
Phone: 217/235-3177; FAX 217/258-6115

***The Contract is changed as follows:***

***This Change Order is not valid until signed by the Owner, A/E and Contractor***

Original Contract Sum ..... \$  
Net change by previously executed Change Orders. .... \$  
Contract Sum prior to this Change Order..... \$  
Change in Contract Sum due to this Change Order..... \$  
Contract Sum resulting from this Change Order. .... \$

Change in length of Construction Period. .... days  
Date of Substantial Completion as a result of this Change Order is .....

**Architect**

**Contractor**

**Owner**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Date signed

# A/E's Supplemental Instructions

---

Project Name:

Project No:

Name & Address of Contractor:

Contract for:

Date Initiated:

Name & Address of Owner:

Name & Address of A/E:

The Upchurch Group, Inc.  
123 North 15<sup>th</sup> Street  
Mattoon, Illinois 61938  
Phone: 217/235-3177; FAX 217/258-6115

The Work described below shall be accomplished in accordance with the Contract Documents. The efforts required to carry out these instructions shall be done without any modifications to the Contract with regard to Contract Sum or Contract Time. Before proceeding with these instructions, the Contractor shall indicate acceptance of these minor changes to the Work as being consistent with the Contract Documents.

---

## Description of the proposed modifications:

## Attachments:

*Issued by Architect*

*Accepted by Contractor*

---

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

# Construction Change Directive

Number:

Project Name:

Project No:

Name & Address of Contractor:

Contract for:

Date Initiated:

Name & Address of Owner:

Name & Address of A/E:

The Upchurch Group, Inc.  
123 North 15<sup>th</sup> Street  
Mattoon, Illinois 61938  
Phone: 217/235-3177; FAX 217/258-6115

***The Contractor is hereby directed to make the following modification(s) to the Contract:***

### ***Proposed Adjustments***

Change in Contract Sum due to this Change Directive. .... \$  
Basis of proposed modification to the Contract Sum is:

- |  |  |
|--|--|
| <input type="checkbox"/> Lump sum change                   | <input type="checkbox"/> By unit price: \$ _____ per _____ |
| <input type="checkbox"/> As provided in General Conditions | <input type="checkbox"/> As follows:                       |

Proposed change in length of Construction Period. .... days

***Architect***

***Contractor***

***Owner***

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Date signed

\_\_\_\_\_  
Date signed

# Effect on Guarantee/Warranty

---

Project Name:

Project No:

Contract for:

Date Initiated:

Name & Address of Contractor:

Name & Address of Guarantor/Warrantor:

Name & Address of Owner:

Name & Address of A/E:

The Upchurch Group, Inc.  
123 North 15<sup>th</sup> Street  
Mattoon, Illinois 61938  
Phone: 217/235-3177; FAX 217/258-6115

The entity identified above as **Guarantor/Warrantor** is furnishing or providing:

---

*Identify the material, equipment, systems or other assemblies being furnished or provided for this project.*

The Guarantor/Warrantor has examined Request for Proposal No. \_\_\_\_ and has determined that:

- The proposed change will not have any effect on the guarantee or warrantee specified for this project.
- The proposed change is not acceptable with regard to the guarantee or warrantee specified for this project for the following reason(s):

**Representing the Guarantor/Warrantor:**

---

Signature

---

Printed Name

---

Printed Name

**1. GENERAL**

**1.01 REQUIREMENTS INCLUDE**

- A. Contractor comply with all laws, rules and regulations governing the work:
  - 1. When Contractor observes that contract documents are at variance with specified codes, notify A/E in writing immediately. Architect/Engineer will issue all changes in accord with General Conditions.
  - 2. When Contractor performs any work knowing or having reason to know that the work is contrary to such laws, rules and regulations and fails to so notify the Architect/Engineer, Contractor shall pay all costs arising therefrom. However, it is not be the Contractor's primary responsibility to make certain that the contract documents are in accordance with such laws, rules and regulations.
  
- B. Related Requirements:
  - 1. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to work of this Section.

**1.02 DEFINITIONS & ABBREVIATIONS**

- A. Definitions:
  - 1. Dates: Reference Codes, Regulations and Standards are the issue current at date of bidding documents unless otherwise specified.
  - 2. Codes: Codes are rules, regulations or statutory requirements of government agencies.
  - 3. Standards: Standards are requirements set by authorities, custom or general consent and established as accepted criteria.
  
- B. Abbreviations:
  - 1. ADA Americans with Disabilities Act.
  - 2. AGCI Associated General Contractors in Illinois.
  - 3. ANSI American National Standards Institute.
  - 4. ASHRAE American Society of Heating, Refrigeration and Air-Conditioning Engineers.
  - 5. ASTM American Society for Testing and Materials.
  - 6. AWWA American Waterworks Association.
  - 7. IBC International Building Code.
  - 8. CDB Capital Development Board.
  - 9. FM Factory Mutual Engineering Corporation.
  - 10. ICC International Code Council.
  - 11. ICCB Illinois Community College Board.
  - 12. IDOT Illinois Department of Transportation.
  - 13. IDPH Illinois Department of Public Health.
  - 14. IDPR Illinois Department of Professional Regulation.
  - 15. NFPA National Fire Protection Association.
  - 16. OSFM Office of State Fire Marshal.
  - 17. SOS Secretary of State.

**1.03 QUALITY ASSURANCE**

- A. Architect/Engineer has designed the project with full knowledge of code requirements and has copies of all specified codes available for Contractor's inspection.
  
- B. Contractor:
  - 1. Ensure that copies of specified codes and standards are readily available to Contractor's personnel. Copies are available at Contractor's expense from source or publisher.
  - 2. Ensure that Contractor's personnel are familiar with workmanship and installation requirements of specified codes and standards.

**1. GENERAL**

1.01 REQUIREMENTS INCLUDE

A. Contractor:

1. Attend specified meetings.
2. Ensure attendance of subcontractors, suppliers and manufacturer's representatives when specified or directed.

1.02 PRE-CONSTRUCTION CONFERENCE:

A. Will be scheduled by A/E within fifteen (15) days after notice of award.

B. Attendance:

1. Owner's Representative(s)
2. Contractor.
3. A/E

C. Minimum Agenda:

1. Distribute contract documents
2. Submit pertinent information about subcontractors & suppliers
3. Designate responsible personnel
4. Discuss chain of authority
5. Discuss construction schedule
6. Discuss coordination with Building Occupants
7. Set date, time, location and purpose of next meeting.
8. Walk-through inspection.

1.03 PAY/PROGRESS MEETINGS:

A. Attendance:

1. Owner's Representative(s)
2. Contractor
3. Subcontractor(s), as appropriate.
4. A/E

B. Minimum agenda:

1. Review work progress.
2. Discuss field observations, problems, and decisions.
3. Identify problems which may impede planned progress.
4. Compare actual progress with construction schedule.
5. Discuss corrective measures to regain construction schedule or consider revising schedule.
6. Discuss progress anticipated for next work period.
7. Discuss any other business relating to work.
8. Set date, time, location and purpose of next meeting.

1.04 Substantial Completion Meeting

A. Attendance:

1. Owner's Representative(s)
2. Contractor

**1. GENERAL**

1.01 REQUIREMENTS INCLUDE

- A. Contractor:
1. **Construction Schedules.** Submit projected construction schedule for work to A/E within twenty (20) business days after preconstruction meeting. Maintain, coordinate and distribute schedule. Revise schedule(s) monthly.
  2. **Shop Drawings, Product Data & Samples:** Submit shop drawings, product data, installation instructions, samples, etc. as specified in the individual specification sections.
  3. **Schedule of Values:** Submit Schedule of Values to Architect/Engineer at least 15 business days prior to submitting first application for payment. Support values given with date to substantiate their correctness upon request by the A/E. Use Schedule of Values as only basis for application for payment. Payment for materials stored on or off site will be limited to those materials listed in Schedule of Values.

1.02 CONSTRUCTION SCHEDULE

- A. Form. Prepare a standard horizontal bar chart.
1. Provide separate horizontal bar for each class of work, activity or long-lead equipment item.
  2. Columns should follow table of contents for Project Manual.
- B. Content. Indicate complete sequence of construction by activity.
1. Shop drawings, product data and samples: Submittal dates and dates when reviewed copies will be required.
  2. Decision dates for: Selection of finishes.
  3. Product procurement date, fabrication time and delivery dates.
  4. Dates for beginning, and completion of, each element of construction.
- C. Updating. Update monthly. Indicate:
1. Progress of each activity since previous submission.
  2. Projected completion dates for all activities.
  3. Activities modified since previous submission.
- D. Submission Requirements. Submit initial schedules within ten (10) business days after date of preconstruction meeting.
1. A/E will review schedules and return reviewed copy within ten (10) business days after receipt.
  2. When required, re-submit within five (5) business days after return of reviewed copy.
  3. Submit monthly updated schedules accurately depicting progress to first day of each month.
- E. Distribution. Distribute copies of reviewed schedules to:
1. Owner
  2. Architect/Engineer.
  3. Job site file.
  4. Subcontractors and suppliers on as needed-basis.

1.03 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC - DEFINITIONS

- A. Shop drawings: Shop drawings are original drawings prepared by Contractor, subcontractor, sub-subcontractor, supplier or distributor, which illustrate some portion of the work, showing fabrication, layout, setting or erection details.
1. Prepared by qualified detailer.
  2. Identify details by reference to sheet and detail numbers - shown on contract drawings.
  3. Minimum sheet size: 8 1/2" x 11"
  4. Reproductions for submittals: Opaque diazo or photocopy



**DIVISION ONE - GENERAL REQUIREMENTS**  
**Section 01300 - Submittals**

- B. Product data:
  - 1. Manufacturer's standard schematic drawings:
    - a. Modify to delete information which is not applicable to project.
    - b. Supplement standard information to provide additional information applicable to project.
  - 2. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
    - a. Clearly mark each copy to identify pertinent materials, products or models.
    - b. Show dimensions and clearances required.
    - c. Show performance characteristics and capacities.
    - d. Show wiring diagrams and controls.

1.04 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - SPECIFIED PRODUCTS LIST:

- A. Within 15 business days after date of Notice of Award, submit to the Architect/Engineer 6 copies of complete list of all products which are proposed for installation.
- B. Tabulate list of each specification section.
- C. For products specified under reference standards, include with listing of each product:
  - 1. Name and address of manufacturer.
  - 2. Trade name.
  - 3. Model or catalog designation.
  - 4. Manufacturer's data.
    - a. Performance and test data.
    - b. Reference standards.

1.05 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - EXHIBIT SUBMITTAL:

- A. Submit all exhibits within 15 business days after the preconstruction meeting.
- B. Submit number of copies of shop drawings, product data and samples which contractor requires for distribution plus one copy which will be retained by Architect/Engineer.
- C. Accompany submittals with transmittal letter, in duplicate, containing:
  - 1. Date.
  - 2. Project title and number.
  - 3. Contractor's name and address.
  - 4. The number of shop drawings, product data and samples submitted.
  - 5. Notification of deviations from Contract.
  - 6. Other pertinent data.
- D. Submittals shall include:
  - 1. Date and revision dates.
  - 2. Project title and number.
  - 3. Names of:
    - a. Architect/Engineer.
    - b. Subcontractor.
    - c. Supplier.
    - d. Manufacturer.
    - e. Separate detailer when pertinent.
  - 4. Identification of product or material.
  - 5. Relation to adjacent structure or material.
  - 6. Field dimensions, clearly identified as such.
  - 7. Specification section and page number.
  - 8. Applicable standards, such as ASTM number or ANSI.
  - 9. A blank space, 5" x 3", for Architect/Engineer's stamp.
  - 10. Identification of previously approved deviation(s) from contract documents.

**DIVISION ONE - GENERAL REQUIREMENTS**  
**Section 01300 - Submittals**

- 11. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract.

1.06 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - RESUBMISSION REQUIREMENTS:

- A. Shop drawings:
  - 1. Revise initial drawings as required and resubmit in accordance with submittal procedures.
  - 2. Indicate on drawings all changes which have been made in addition to those requested by Architect/Engineer.
- B. Product data and samples: Submit new data and samples as required for initial submittal.
- C. Make all resubmittals within ten business days after date of Architect/ Engineer's previous review.

1.07 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC - DISTRIBUTION OF SUBMITTALS AFTER REVIEW:

- A. Contractor will distribute copies of shop drawings and product data which carry Architect/Engineer's stamp to:
  - 1. Contractor's file.
  - 2. Job site file.
  - 3. Record documents file.
  - 4. Other contractors.
  - 5. Subcontractors.
  - 6. Suppliers.
  - 7. Fabricators.
- B. Distribute samples as directed in accordance with contract documents.

1.08 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - CONTRACTOR RESPONSIBILITIES:

- A. Review shop drawings, product data and samples prior to submission to the next level of authority.
- B. Verify:
  - 1. Field dimensions.
  - 2. Field construction criteria.
  - 3. Catalog numbers and similar data.
- C. Coordinate each submittal with requirements of:
  - 1. The work.
  - 2. The contract documents.
- D. Contractor's responsibility for errors and omissions in submittals is not relieved by Architect/Engineer's review of submittals.
- E. Prior to submission notify Architect/Engineer in writing of all proposed deviations in submittals from contract requirements.
- F. Contractor's responsibility for deviations in submittals from contract document requirements is not relieved by Architect/Engineer's review of submittals.
- G. Do not begin any work which requires submittals without having Architect/Engineer's stamp and initials or signature indicating approval.
- H. After Architect/Engineer's review, make response required by Architect/Engineer's stamp and distribute copies. Indicate by transmittal that copy of approved data has been distributed to installer.

1.09 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - ARCHITECT/ENGINEER'S DUTIES:

- A. Review submittals within 10 business days.
- B. Review for:
  - 1. Design concept of project.
  - 2. Compliance with contract documents.
- C. Review all request for proposed deviations.
- D. Review of separate item does not constitute review of an assembly in which item functions.

**DIVISION ONE - GENERAL REQUIREMENTS**  
**Section 01300 - Submittals**

- E. Affix stamp, date and initials or signature certifying to review of submittal, and with instructions for contractor response.
- F. Return submittals to Contractor for response or distribution.

1.10 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - SPECIFIED EXHIBIT SUBMITTALS: See individual specification sections (NOTE: the Architect/Engineer may require additional submittals which they deem necessary.)

1.11 SCHEDULE OF VALUES - FORM OF SUBMITTAL

- A. Submit typewritten or computer generated Schedule of Values.
- B. Use the CSV form provided by the A/E (*or reasonable facsimiles of these forms*). (See the sample forms which follow.)
- C. Use Project Manual Table of Contents as basis of format for listing costs of all work.

1.12 SCHEDULE OF VALUES - PREPARATION.

- A. Itemize separate line item cost for each of following cost items:
  - 1. Overhead and profit.
  - 2. Bonds.
  - 3. Insurance.
  - 4. General Requirements.
- B. Each work category shall appear as a separate line item. Identify work of:
  - 1. Contractor's own labor forces.
  - 2. All subcontractors.
  - 3. All major suppliers of products or equipment.
- C. Break down installed costs into:
  - 1. Delivered cost of product (with taxes paid, if applicable)
  - 2. Labor cost, excluding overhead and profit.
- D. Each item of work which has an installed value of more than \$5,000 shall be a separate line item.
- E. Round off figures to nearest dollar.
- F. Make sum of total costs of all items listed in Schedule equal to total contract sum.

1.13 SCHEDULE OF VALUES - SUBMISSION REQUIREMENTS

- A. Review and resubmittal. After review by Architect/Engineer, revise and resubmit Schedule as required. Follow original submittal procedure.
- B. Update. Update Schedule of Values when directed by A/, change of subcontractor or supplier occurs or change of product or equipment occurs.
- C. Forms. Following are sample forms to be used for the Schedule of Values. The second form is a continuation sheet to be used if required. They are available from the A/E.

**END 01300.**

# Contractor's Schedule of Values

---

Project Name:

Project Number:

Name & Address of Contractor:

Contract for:

Date Submitted:

Name & Address of Owner:

Name & Address of A/E:

The Upchurch Group, Inc.  
 123 N. 15<sup>th</sup> Street  
 Mattoon, Illinois 61938  
 Phone: 217/235-3177; FAX 217/258-6115

Contractor, Subcontractor or Material Supplier	Description of Work or Material	Scheduled Value	% of Contract
Total (or Subtotal if Continuation page(s) is required)			

## ***Contractor Section***

Submitted by Contractor listed above in accordance with the provisions of the Contract Documents. Upon request by the A/E, contracts and other relevant documentation will be provided to substantiate this schedule of values.

For the Contractor:

\_\_\_\_\_

Signature

\_\_\_\_\_

Printed name and title

## ***Architect/Engineer Section***

Reviewed and approved for certifying payment for work completed and materials stored. Approval of this schedule by the A/E in no way relieves the Contractor of his responsibility for the performance of the Work in accordance with the Contract Documents.

For the A/E:

\_\_\_\_\_

Signature

\_\_\_\_\_

Date of approval

# Contractor's Schedule of Values - Continuation Sheet

Contractor, Subcontractor or Material Supplier	Description of Work or Material	Scheduled Value	% of Contract
Subtotal brought forward			
Total (or Subtotal if additional Continuation page(s) is required)			

**DIVISION ONE - GENERAL REQUIREMENTS**  
**Section 01500 - Construction Facilities & Temporary Controls**

**1. GENERAL**

1.01 REQUIREMENTS INCLUDE

A. Contractor:

1. **Temporary Utilities:** Provide and maintain specified temporary utilities for specified times during construction period. Contractor provide all utilities required by him which are in excess of those specified or exceed capacity of existing or permanent systems. Provide hoses and fittings from existing water service connection to his work.
  - a. Utilities for field offices, except those specifically identified as the provided by others.
  - b. Toilets.
  - c. Telephone service and telephones.
  - d. Payment of all utility, telephone, and fuel bills, except charges specifically identified as provided by others.
  - e. Temporary power, extend from Owner's electrical system.
  - f. Temporary lighting (work, security, safety, and lamps).
  
2. **Construction Aids:** Provide and maintain construction aids and equipment for personnel use and to facilitate execution of the work:
  - a. Chutes.
  - b. Cranes.
  - c. Hoists.
  - d. Platforms.
  - e. Railings.
  - f. Ramps.
  - g. Runways.
  - h. Stairs.
  - i. Ladders
  - j. Temporary Enclosure

Provide and maintain for his own forces all other construction aids required to complete his work.
  
3. **Barriers:** Provide and maintain suitable barriers to:
  - a. Prevent unauthorized entry to the construction area, including students and staff.
  - b. Protect the work
  - c. Protect adjacent facilities and utilities from construction operations.
  - d. Do not interfere with existing traffic adjacent to the site.

Remove when no longer needed, at completion of the work or as directed.
  
4. **Temporary Environmental Controls:** Provide controls over environmental conditions at the construction site and related areas under the Contractor's control. Remove physical evidence of temporary controls at completion of work or as directed.
  
5. **Construction Cleaning:** Provide cleaning and disposal of waste materials, debris and rubbish during construction.

1.02 TEMPORARY UTILITIES

A. Furnished by others: Owner will authorize use of existing facilities for temporary use:

1. Electrical power
2. Telephone for toll-free calls only. (Toll calls paid for by caller, credit card only.)

**1. GENERAL**

1.01 REQUIREMENTS INCLUDE

A. Contractor provide:

1. ***Materials and equipment***

1. Specified materials and equipment.
2. Transportation and delivery.
3. Equipment and personnel at site.

2. ***Storage and protection***

1. Storage for materials and equipment to be installed in Project.
2. Protection and security for stored materials and equipment, on and off site.

3. ***Product Substitutions***

1. Base all bids on providing all products exactly as specified.
2. For products specified only by reference or performance standards, select any product which meets or exceeds standards, by any manufacturers, subject to the Architect/Engineer's approval.
3. For products specified by naming several products or manufacturers, select any product and manufacturer named.

1.02 MANUFACTURER'S INSTRUCTIONS

- A. When contract documents require that installation shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to all parties involved in the installation, including 1 copy to the Architect/Engineer for their files plus copies required by section 01700.
- B. Maintain one set of complete instructions with the Project Record Documents at the jobsite during installation and until completion.

1.03 STORAGE OF MATERIALS OFF-SITE AUTHORIZATION. Off-site storage will be permitted only on Owner's prior written authorization in accordance with General Conditions.

1.04 SUBSTITUTIONS, BIDDER/CONTRACTOR OPTIONS **No substitutions allowed.**

- A. **PRIOR TO BID OPENING:** The Architect/Engineer will consider written requests to amend the bidding documents to add products not specified provided such requests are received at least 10 calendar day prior to bid opening date. Requests received after that time will not be considered. When a request is approved, the Architect/Engineer will issue an appropriate addendum not less than seven calendar days prior to bid opening date.
- B. **WITH BID:** A bidder may propose substitutions with his bid by completing the Proposed Product Substitution List in the Bid Form, subject to the provisions stated thereon. Architect/Engineer will review Proposed Product Substitution List of low bidder and recommend approval or rejection by Owner prior to award of contract.
- C. **AFTER AWARD OF CONTRACT:** No substitutions will be considered after Notice of Award except under one of more of the following conditions:
1. Substitutions required for compliance with final interpretations of code requirements or insurance regulations.
  2. Unavailability of specified products, through no fault of Contractor.
  3. Subsequent information discloses inability of specified product to perform properly or to fit in designated space.
  4. Manufacturer/fabricator refusal to certify or guarantee performance of specified product as specified.
  5. When a substitution would be substantially to Owner's best interests.

1.05 SUBSTITUTION REQUIREMENTS

- A. Submit 3 copies of each request for substitution. Include in request:
1. Complete data substantiating compliance of proposed substitution with contract documents.
  2. For products:
    - a. Product identification, including manufacturer's name and address.
    - b. Manufacturer's literature:
      - 1) Product description.
      - 2) Performance and test data.
      - 3) Reference standards.
    - c. Samples.
    - d. Name and address of similar projects on which product was used and date of installation.
  3. For construction methods:
    - a. Detailed description of proposed method.
    - b. Drawings illustrating methods.
  4. Itemized comparison of proposed substitution with product or method specified.
  5. Data relating to changes in construction schedule.
  6. Identify:
    - a. Changes or coordination required.
  7. Accurate cost data on proposed substitution in comparison with product or method specified.
- B. In making request for substitution, bidder/contractor represents:
1. It has personally investigated proposed product or method and determined that it is equal or superior in all respects to that specified.
  2. It will provide the same guarantee for substitution as for product or method specified.
  3. It will coordinate installation of accepted substitutions into work, making all changes as may be required for work to be complete in all respects.
  4. Cost data is complete and includes all related costs under its contract, but excludes:
    - a. Architect/Engineer's redesign.
    - b. Administrative costs of Architect/Engineer.
    - c. Costs under separate contracts.
  5. It will pay all additional costs and expenses for Owner, Architect/Engineer and other contractors.
- C. Substitutions will not be considered when:
1. They are indicated or implied on shop drawings or product data submittals without formal request submitted in accordance with Paragraph 1.04.
  2. Acceptance will require substantial revision of contract documents.

**2. PRODUCTS**

2.01 MATERIALS & EQUIPMENT INCORPORATED INTO THE WORK

- A. Conform to project specifications and standards.
- B. Comply with size, make, type and quality specified.
- C. Manufactured and fabricated products:
1. Design, fabricate and assemble in accord with best engineering and shop practices.
  2. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
  3. Two or more items of the same kind shall be identical from the same manufacturer.
  4. All parts of systems shall be from the same manufacturer to the greatest extent practicable.
  5. Adhere to equipment capacities, sizes and dimensions shown or specified unless variations are specifically approved by Change Order.



2.02 STORAGE & PROTECTION METHODS AND MATERIALS

- A. Materials, equipment may be new or used, but shall be serviceable, adequate for required purpose, and shall not create unsafe conditions nor violate specified codes.
- B. Protective materials
  - 1. For duration of storage period, provide materials which will provide proper protection against the elements or other harmful environmental conditions. Materials may be new or used at Contractor's option, but shall be:
    - a. Of sufficient strength and durability for proposed use.
    - b. Recommended by manufacturer of products or equipment to be protected.
    - c. Non-staining.
    - d. Non-hazardous.

**3. EXECUTION**

3.01 TRANSPORTATION, DELIVERY & HANDLING

- A. Arrange for transportation and deliveries of materials and equipment in accord with approved current construction schedules and in ample time to facilitate inspection prior to installation.
- B. Coordinate deliveries to avoid conflict with work and conditions at site:
  - 1. Work of Owner, or their use of premises.
  - 2. Limitations of storage space.
  - 3. Availability of equipment and personnel for handling products.
- C. Deliver products in undamaged condition in original containers or packaging, with identifying labels intact and legible.
- D. Clearly mark partial deliveries of component parts of assemblies or equipment to permit easy identification of parts and to facilitate assembly.
- E. Immediately on delivery, inspect shipment to assure:
  - 1. Product complies with Contract documents and Architect/Engineer approved submittals.
  - 2. Quantities are correct.
  - 3. Containers and packages are intact, labels are legible.
  - 4. Products are properly protected and undamaged.
- F. Provide equipment and personnel to handle products and equipment. Leave alone those furnished by Owner. Prevent damage to products or packaging.
- G. Provide additional protection during handling to prevent scraping, marring or otherwise damaging products, equipment or surrounding surfaces.
- H. Handle products and equipment in a manner to prevent bending or overstressing.
- I. Lift packages, equipment or components only at designated lift points.

3.02 STORAGE & PROTECTION

- A. Location: where authorized by Owner.
- B. Installation
  - 1. Mount fire extinguishers in prominent location with clear access to use.
  - 2. Mount identifying signs adjacent to entrance doors, in conspicuous locations.
- C. Limitations
  - 1. Do not exceed capacity of structure.
  - 2. Do not inhibit use of:

**DIVISION ONE - GENERAL REQUIREMENTS**  
**Section 01600 - Product Requirements**

- a. Fire exits.
  - b. Fire lanes.
  - c. Parking.
  - d. Owner's operations.
3. Store combustible materials in accordance with Fire Marshall's regulations.

D. Protection

1. Protect all products and equipment from damage.
2. Methods:
  - a. Store moisture or water vulnerable materials off grade.
  - b. Store finished products and equipment in an enclosed building, on or off site.
  - c. Maintain integrity of shipping cartons until ready for installation
  - d. Provide separate storage of combustible and non-combustible products.
  - e. Follow storage recommendations of product and equipment manufacturers.
  - f. Other methods shall be subject to Architect/Engineer's prior written approval.

**END 01600**

**1. GENERAL**

1.01 REQUIREMENTS INCLUDE

- A. **Final Cleaning.** Contractor provide final cleaning, including:
  - 1. Supervise and coordinate the cleaning operations of all subcontractors on this project.
  - 2. At Project completion, leave Project clean and ready for occupancy.
  
- B. **Project Record Documents.** Contractor:
  - 1. At project site, maintain one copy of:
    - a. Contract drawings.
    - b. Project Manual.
    - c. Interpretations and supplemental instructions.
    - d. Addenda.
    - e. Reviewed, approved shop drawings and product data.
    - f. Other modifications to Contract.
    - g. Field test records.
    - h. All schedules.
    - i. Correspondence file.
  - 2. Store documents apart from documents used for field construction.
  - 3. Maintain documents in clean, dry, legible condition.
  - 4. Do not use record documents for field construction purposes.
  - 5. Make documents available at all times for inspection by Architect/Engineer and Owner.

1.02 SAFETY REQUIREMENTS DURING CLEANING OPERATIONS

- A. Standards: Maintain project in accord with following safety and insurance standards:
  - 1. Federal and State regulations.
  - 2. National Fire Protection Association (NFPA).
  
- B. Hazards Control:
  - 1. Store volatile wastes in covered metal containers and remove from premises daily.
  - 2. Prevent accumulation of wastes which create hazardous conditions.
  - 3. Provide adequate ventilation during use of volatile or noxious substances.
  
- C. Conduct cleaning and disposal operations to comply with Federal and State anti-pollution laws.
  - 1. Do not burn or bury rubbish and waste materials on project site.
  - 2. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.
  - 3. Do not dispose of wastes into streams or waterways.

1.03 PROJECT RECORD DOCUMENTS

- A. Marking Devices. Provide felt tip marking pens for marking. Conform to the following color code.
  - 1. Red - General Work.
  - 2. Orange - Mechanical Work.
  - 3. Green - Electrical Work.
  
- B. Recording
  - 1. Label each document "PROJECT RECORD DOCUMENTS" in 2" high printed letters.
  - 2. Keep record documents current.
  - 3. Do not permanently conceal any work until specified information has been recorded.
  
  - 4. Contract Drawings: Legibly mark to record actual construction:
    - a. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
    - b. Field changes of dimension and detail.

**1. GENERAL**

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide paint to new piping and valving including surface preparation, priming, and finishing. Color: red.

1.02 REFERENCES

- A. ANSI/ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.

1.03 DEFINITIONS: Conform to ANSI/ASTM D16 for interpretation of terms used in this Section.

1.04 QUALITY ASSURANCE

- A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with 3 years experience.
- B. Applicator: Company specializing in commercial painting and finishing with 2 years experience.
- C. Product Labels: Include manufacturer's name, type of paint, stock number, color and label analysis on label of containers.

1.05 SUBMITTALS

- A. Submit product data, color selection samples and manufacturer's application instructions under provisions of Section 01300.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store and protect products under provisions of Section 01600.
- B. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.
- C. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing.
- D. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F , in well ventilated area, unless required otherwise by manufacturer's instructions.
- E. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.07 ENVIRONMENTAL REQUIREMENTS

- A. Provide continuous ventilation and heating facilities to maintain surface and ambient temperatures above 45 degrees F for 24 hours before, during, and 48 hours after application of finishes, unless required otherwise by manufacturer's instructions.
- B. Do not apply exterior coatings during rain or snow, or when relative humidity is above 75 percent, unless required otherwise by manufacturer's instructions.
- C. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- D. Minimum Application Temperature for Varnish and Finishes: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.

**1. GENERAL**

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide fire pump, diesel driver, and accessories.

1.02 REFERENCES

- A. NFPA 20 - Standard for the Installation of Stationary Pumps for Fire Protection.
- B. Underwriters Laboratories (UL) Listed for Fire Protection Services.
- C. Factory Mutual Research Corporation (FM) approved.

1.03 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in packaged fire pump systems with minimum ten (10) years documented experience.
- B. Supplier: Authorized distributor of engine manufacturer with service facilities within 200 miles of project site.

1.04 SUBMITTALS

- A. Submit product data including dimensions, weights, capacities, ratings, pump performance, and driver characteristics.
- B. Submit shop drawings showing plan views with overall and interconnection point dimensions, fuel consumption rate curves at various loads, ventilation and combustion air requirements, and electrical diagrams including schematic and interconnection diagrams.
- C. Submit manufacturer's installation instructions.

1.05 OPERATION AND MAINTENANCE DATA

- A. Submit three copies of operation and maintenance manual. The O&M manual shall contain at least the following:
  - 1. Instructions for operating equipment.
  - 2. Instructions for operating equipment under emergency conditions when engine generator is running.
  - 3. Identification of operating limits which may result in hazardous or unsafe conditions.
  - 4. Document ratings of equipment and each major component.
  - 5. Routine preventive maintenance and lubrication schedule.
  - 6. List of special tools, maintenance materials, and replacement parts.
  - 7. Technical data sheets.
  - 8. Wiring diagrams.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in factory-fabricated protective containers, with factory-installed shipping skids and lifting lugs.
- B. Store in clean dry place and protect from weather and construction traffic. Handle carefully to avoid damage to components, enclosures, and finish.

**1. GENERAL**

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide valves, supports and anchors.

**2. PRODUCTS**

2.01 VALVES

A. General:

1. Provide valves of same manufacturer throughout where possible.
2. Provide valves with manufacturer's name and pressure rating clearly marked on outside of body.

B. Valve Connections:

1. Provide valves suitable to connect to adjoining piping as specified for pipe joints. Use pipe size valves.
2. Thread pipe sizes 2 inches and smaller.
3. Flange pipe sizes 2-1/2 inches and larger.
4. Solder or screw to solder adaptor for copper tubing.

C. Gate Valves:

1. Iron body, bronze trim, rising stem, OS&Y, solid wedge, flanged ends.

D. Check Valves:

1. Iron body, bronze trim, swing disc, renewable disc and seat, flanged ends.

E. Pressure Relief Valves:

1. Iron body, bronze control body, stainless steel seat, internals stainless steel or ductile iron epoxy coated, elastomer diaphragm, copper control tubing, brass fittings, flanged, relief service.

F. Pressure Ratings: Use valves for fire protection suitable for 250 psig WOG.

G. Valve Operators:

1. Provide suitable operators for all valves.
  - a. Handwheels for gate valves.

H. Drain Valves:

1. Bronze compression stop with nipple and cap or hose thread.

2.02 PIPE HANGERS AND SUPPORTS

- A. Hangers for Pipe Sizes ½ to 1-1/2 Inch: Malleable iron or Carbon steel, adjustable swivel, split ring.

**1. GENERAL**

1.01 WORK INCLUDES

A. Base Bid: Contractor provide pump for fire loop system.

1.02 QUALITY ASSURANCE: Manufacturer: Company specializing in manufacture, assembly, and field performance of pumps with minimum 10 years experience.

1.03 SUBMITTALS

A. Submit product data under provisions of Section 01300.

B. Submit certified pump curves showing performance characteristics with pump and system operating point plotted. Include NPSH curve when applicable.

C. Submit manufacturer's installation instructions under provisions of Section 01300.

1.04 OPERATION AND MAINTENANCE DATA

A. Submit operation and maintenance data under provisions of Section 01700.

B. Include installation instructions, assembly views, lubrication instructions, and replacement parts list.

1.05 DELIVERY, STORAGE, AND HANDLING: Store and protect products under provisions of Section 01600.

1.06 WARRANTY: Provide one year labor and material guarantee.

**2. PRODUCTS**

2.01 GENERAL CONSTRUCTION REQUIREMENTS

A. Balance: Rotating parts, statically and dynamically.

B. Construction: To permit servicing without breaking piping or motor connections.

C. Pump Motors: Operate at 1750 (1760) rpm unless specified otherwise.

D. Pump Connections: Flanged.

2.02 BASE MOUNTED PUMPS

A. Type: Centrifugal, single stage, direct connected.

C. Casing: Cast iron, split volute, single or double suction, rated for 1.25 times actual working discharge pressure, renewable bronze wearing rings, flanged suction, and discharge.

D. Impeller: Bronze, fully enclosed, keyed directly to motor shaft or extension.

D. Shaft: High grade alloy steel with copper, bronze or stainless steel shaft sleeves.

E. Bearings: Oil lubricated roller or ball bearings with oil reservoirs. Provide oil seal and integral dirt and water seal at each end of reservoir.

F. Drive: Flexible coupling with coupling guard.

**1. GENERAL**

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide pipe, fittings, and connections for fire pump piping.

1.02 REFERENCES

- A. ANSI/ASME B16.1 - Cast Iron Pipe Flanges and Flanged Fittings, Class 25, 125, 250, and 800.
- B. ANSI/ASME B16.3 - Malleable Iron Threaded Fittings, Class 150 and 300.
- C. ANSI/ASME B16.4 - Cast Iron Threaded Fittings, Class 125 and 250.
- D. ANSI/ASME B16.5 - Pipe Flanges and Flanged Fittings.
- E. ANSI/ASME B16.9 - Factory made Wrought Steel Butt-welding Fittings.
- F. ANSI/ASME B16.11 - Forged Steel Fittings, Socket-welding and Threaded.
- G. ANSI/ASME B16.25 - Butt-welding Ends.
- H. ANSI/ASME B36.10 - Welded and Seamless Wrought Steel Pipe.
- I. ANSI/ASME Section 9 - Welding and Brazing Qualifications.
- J. ANSI/ASME A135 - Electric-Resistance-Welded Steel Pipe.
- K. ANSI/ASME A47 - Malleable Iron Castings.
- L. ANSI/AWWS C110 - Ductile Iron and Gray Iron Fittings.
- M. ANSI/AWWS C151 - Ductile Iron Pipe, Centrifugally Cast.
- N. ASTM A53 - Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless.
- O. ASTM A120 - Pipe, Steel, Black and Hot-Dipped, Zinc-Coated (Galvanized) Welded and Seamless, for Ordinary Uses.
- P. AWS D10.9 - Specifications for Qualification of Welding Procedures and Welders for Piping and Tubing.
- Q. NFPA 20 - Standard for the Installation of Stationary Pumps for Fire Protection.

1.03 QUALITY ASSURANCE

- A. Welding Materials and Procedures: Conform to ASME Code.
- B. Employ certified welders in accordance with ANSI/ASME Section 9.
- C. Valves: Bear UL label or marking. Provide manufacturer's name and pressure rating marked on valve body.

1.04 SUBMITTALS

- A. Submit product data indicating pipe materials used, jointing methods, and supports.



**1. GENERAL**

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide raceway and wiring shown including electrical power distribution, and communications system.

1.02 SYSTEM DESCRIPTION

- A. Basic materials include:
  - 1. Raceways.
  - 2. Fittings.
  - 3. Wire and Cables.
  - 4. Boxes.
  - 5. Wiring Devices.
  - 6. Supporting Devices.
- B. Provide all new materials, without blemish or defect, in accord with standards specified and listed or labeled by a nationally recognized independent testing lab.

1.03 REFERENCES

- A. ANSI C80.1 - Specification for Rigid Steel Conduit, zinc coated.
- B. ANSI C80.3 - Specification for Electrical Metallic Tubing, zinc coated.
- C. ANSI C80.4 - Specification for Fittings for Rigid Metal Conduit and EMT.
- D. ANSI/NEMA FB1 - Fittings and Supports for Conduit and Cable Assemblies.
- E. ANSI/NEMA OS-1 - Sheet Steel Outlet Boxes, Device Boxes, Covers and Box Supports.
- F. NEMA TC-2 - Electrical Conduit.
- G. NEMA WC-3 - Rubber Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.
- H. NEMA WC-5 - Thermoplastic insulated wire and cable for the transmission and distribution of electrical energy.
- I. UL44 - Rubber-Insulated Wires and Cables.
- J. UL83 - Thermoplastic-Insulated Wires and Cables.
- K. UL493 - Thermoplastic-Insulated Underground Feeder and Branch Circuit Cables.
- L. UL884 - Underfloor Raceways and Fittings
- M. NEMA 250 Enclosures for Electrical Equipment.
- N. UL50 - Cabinets and Boxes.
- O. UL514 - Outlet Boxes.
- P. NEMA WD-1, WD-5 - General Purpose Wiring Devices.
- Q. NEMA WD-5 - Specific-Purpose Wiring Devices.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Material shall be suitably packaged by manufacturer to prevent damage during shipment. Damaged materials will not be acceptable for use.
- B. Store materials on site in clean, dry storage area; when outside, elevated above grade and enclosed with durable watertight wrapping.
- C. Handle all materials carefully to prevent damage. Minor scratches, marks or blemishes to finish shall be repaired to satisfaction of Architect/Engineer.

**2. PRODUCTS**

2.01 RACEWAYS

**1. GENERAL**

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide electrical connections to equipment shown on drawings.

**2. PRODUCTS** Not used

**3. EXECUTION**

3.01 INSPECTION: Verify that equipment is ready for electrical connection, wiring, and energization.

3.02 PREPARATION: Review equipment submittals prior to installation and electrical rough-in. Verify location, size, and type of connections. Coordinate details of equipment connections with supplier and installer.

3.03 INSTALLATION

- A. Use wire and cable with insulation suitable for temperatures encountered in heat-producing equipment.
- B. Make conduit connections to equipment using flexible conduit. Use liquid-tight flexible conduit in damp or wet locations.
- C. Install pre-finished cord set where connection with attachment plug is indicated or specified, or use attachment plug with suitable strain-relief clamps.
- D. Provide suitable strain-relief clamps for cord connections to outlet boxes and equipment connection boxes.
- E. Make wiring connections in wiring compartment of pre-wired equipment in accordance with manufacturer's instructions. Provide interconnecting wiring where indicated.

**END 16180**