

CITY OF INDEPENDENCE, KANSAS

VERDIGRIS RIVER LOW-HEAD DAM INSPECTION & IMPROVEMENTS

GENERAL CONSTRUCTION SPECIFICATIONS AND DOCUMENTS



November 19, 2026

Prepared by:



CITY OF INDEPENDENCE, KANSAS

SPECIFICATIONS AND CONTRACT DOCUMENTS

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CITY OF INDEPENDENCE, KANSAS

NOTICE TO BIDDERS

Sealed bids for VERDIGRIS RIVER LOW-HEAD DAM INSPECTION & IMPROVEMENTS will be received by the City of Independence, at the office of the City Clerk, City Hall, 120 N 6th Street Independence, KS 67301, until 11:00 AM, local time on Thursday February 5th. At that time all sealed bids will be transferred to the City Courtroom, City Hall, where they will be publicly opened and read aloud. Any bid received after the designated closing time will be returned unopened.

All bids shall be submitted in sealed envelopes addressed to the City Clerk of Independence, Kansas, and marked **“VERDIGRIS RIVER LOW-HEAD DAM INSPECTION & IMPROVEMENTS”**. Copies of plans, specifications, bid documents and other contract documents are on file at the office of the City Clerk, 120 N 6th Street, Independence, KS 67301. There is no cost to the bidder for one set of plans and specifications. Plans and Contract Documents are also available in electronic format.

CONTRACTORS SHOULD READ AND BE FULLY FAMILIAR WITH ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. IN SUBMITTING A BID, THE BIDDER WARRANTS THAT HE HAS READ THE CONTRACT DOCUMENTS AND IS FULLY FAMILIAR THEREWITH AND THAT HE HAS VISITED THE SITE OF THE WORK TO FULLY INFORM HIMSELF AS TO ALL EXISTING CONDITIONS AND LIMITATIONS AND SHALL INCLUDE IN HIS BID A SUM TO COVER THE COST OF ALL ITEMS OF THE WORK.

Should a bidder find defects in the Contract Documents, he shall follow the procedures outlined in paragraph GC-3 to bring the same to the attention of City. Changes necessitated thereby shall be in the form of addenda issued by the City Engineer.

All bidders shall verify that they have considered all written addenda. Neither the City nor the City Engineer shall be responsible for oral instructions.

Any written addenda issued during the time of bidding shall be covered and included in the bid. There will be no clarifications or exceptions allowed on bid. Bids are for a total package, total contract price.

Bids shall be made upon the form provided, in ink or typewritten. Numbers shall be stated both in writing and in figures; the signature shall be long hand; and the complete form shall be without alteration or erasure. On alternate items for which a bid is not submitted, a written indication of “no bid” on the bid is required.

No oral, telegraphic, facsimile or telephonic bids or alterations will be considered.

The following items must be included in the sealed envelope with the bid:

- a. Bid
- b. 5% Bid Security—Bid Bond, Cashier’s Check or Certified Check (See Below)

Each bidder shall file with his bid, a cashier’s check or a certified check drawn on any acceptable bank, made payable to the City of Independence, Kansas, in the amount of not less than five percent (5%) of the total bid, which shall be retained by the City of Independence until a Contract for the project has been executed. Bid bonds will be returned to the unsuccessful bidders, with the exception of the second qualifying bidder, at such time as their bids are rejected. The bid deposit of the successful bidder and the second qualifying bidder will be returned when satisfactory bonds in the amount equal to the 100% of the Contract amount, required insurance certificates and other required documents shall have been furnished and the Contract Documents have been executed.

In the event the successful bidder is unable to execute the Contract, for whatever reason, the City may exercise its legal prerogatives, including, but not limited to, enforcement of its rights as to the bid security.

There will be a mandatory Pre-Bid Meeting held for this project on Friday January 16th at 11:00 AM at Independence City Hall at 120 N 6th Street, Independence, Kansas 67301. This Pre-bid meeting will also be available for remote attendance via Microsoft Teams for bidders who cannot attend in person.

[Verdigris River Low-Head Dam Repair - Prebid Meeting | Meeting-Join | Microsoft Teams](#)

For contracts where the total contract price or compensation to be received amounts to more than \$10,000, (1) non-resident corporations that are not already registered with the Kansas Secretary of State, and (2) all non-resident individuals, partnerships and other entities are required by law to register with the Secretary of Revenue (or the Secretary's designee), State Office Building, Topeka, Kansas. Each such non-resident corporation, individual or entity shall file with the Secretary of Revenue an acceptable bond in compliance with the requirements of K.S.A. 79-1010, as amended.

DAVID SCHWENKER
CITY CLERK

INSTRUCTIONS TO BIDDERS

- IB-1. BIDS: All bids shall be made on the forms provided in this bound volume of Contract Documents and shall be in compliance with the Notice to Bidders. All appropriate blanks shall be filled in and shall be signed by the appropriate individual on behalf of him/herself or the entity submitting the bid. Each bid must be enclosed in a sealed envelope plainly marked “**VERDIGRIS RIVER LOW-HEAD DAM INSPECTION & IMPROVEMENTS**”. As per Notice to Bidders, bid shall be addressed to:

CITY OF INDEPENDENCE, KANSAS
Attention: City Clerk
City Hall
120 N. 6th Street
Independence, KS 67301

IB-2. DEFINITIONS:

- a. Bidding Documents include the Advertisement or Notice to Bidders, Instructions to Bidders, the bid, other sample bidding and contract forms and the proposed Contract Documents, including any Addenda issued prior to receipt of bids. The Contract Documents proposed for the work consist of the items enumerated in paragraph GC-1 of the General Conditions of the Contract for Construction.
- b. All definitions set forth in the General Conditions or in other Contract Documents are applicable to the bidding documents.
- c. A bid is a complete and properly signed proposal to do the work or designated portion of thereof for the price stipulated therein, submitted in accordance with the bidding documents.
- d. 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.
- e. An alternative bid (or alternate) is an amount stated in the bid to be added to or deducted from the amount of the base bid if the corresponding change in the work, as described in the bidding documents, is accepted.
- f. A Unit Price is an amount stated in the bid as a price per unit of measurement for materials or services as described in the bidding documents or in the proposed Contract Documents
- g. A bidder is a person or entity who submits a bid.
- h. Successful bidder is the person or entity who is determined and declared by the City to have submitted the lowest and best responsible bid in the conformity with the terms of the bidding documents.
- i. City shall mean the City of Independence, Kansas.
- j. City Engineer shall mean the individual, firm or entity designated in the Contract Documents which has been employed by the City for the performance of professional engineering services in connection with the project; or shall mean the City Administrator if the City acts as its own engineer.

- k. Contractor shall be the bidder that the City has determined and declared to be the successful bidder and which has, following such determination and declaration, thereafter executed a contract for construction with the City to perform the work described therein.

IB-3 BIDDER'S REPRESENTATIONS: Each bidder by making a bid represents that:

- a. He has read and understands the bidding documents and his bid is made in accordance therewith.
- b. He has visited the site, has familiarized himself with the local conditions under which the work is to be performed, has reviewed all published reports, inspections and other documents relating to the project and has correlated his observations with the requirements of the proposed Contract Documents.
- c. His bid is based upon the materials, systems and equipments required by the Bidding Documents without exception.
- d. He has familiarized himself with the state, federal and local ordinances and regulations, which may affect cost, progress or performance of the work.

IB-4 BIDDING DOCUMENTS: Bidders may obtain complete sets of the bidding documents from the City in the number and for the sum stated therein.

Bidders shall use complete sets of bidding documents in preparing bids; neither the City nor the City Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of bidding documents.

The City in making copies of the bidding documents available on the above terms does so only for the purpose of obtaining bids on the work and does not confer a license or grant for any other use.

IB-5 DEFECTS IN BIDDING/ CONTRACT DOCUMENTS: Bidders shall promptly notify the City of any errors, omissions, discrepancies or inconsistencies (hereinafter "defects") which they may discover upon examination of the Bidding/ Contract Documents of the site and local conditions.

Bidders requiring clarification or interpretation of the Bidding/ Contract Documents shall make a written request, which shall reach the City Engineer at least seven days prior to the date for receipt of bids.

Any interpretation, correction or change of the Bidding / Contract Documents will be made by Addendum. Interpretations, corrections or changes of the Bidding / Contract Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections and changes.

As noted in paragraph GC-3 of the General Conditions, bidders will not be permitted to take advantage of any such defect.

IB-6 SUBSTITUTIONS: The materials, products and equipment described in the bidding documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.

No substitution will be considered prior to receipt of bids unless written request for approval has been received by the City Engineer at least seven (7) days prior to the date for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data and other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or other work that incorporation

of the substitute would require shall be included. The burden of proof of the merit of the proposed substitute is upon the bidder. The City Engineer's decision of approval or disapproval of a proposed of a proposed substitution shall be final.

If the City Engineer approves any proposed substitution prior to receipt of bids, such approval will be set forth in a written addendum. Bidders shall not rely upon approvals made in any other manner.

No substitutions will be considered after the Contract award unless specifically provided in the Contract Documents (See GC-58).

IB-7 ADDENDA: Written addenda will be mailed or delivered to all who are known by the City Engineer to have received a complete set of bidding documents.

Copies of the written addenda will be made available for inspection wherever bidding documents are on file for that purpose.

No written addenda will be issued later than four days prior to the date for receipt of bids except an addendum withdrawing the request for bids or one which includes postponement of the date for receipt of bids.

Each bidder shall ascertain prior to submitting his bid that he has received all written addenda issued, and it shall acknowledge its receipt in its bid.

IB-8 INSURANCE:

a) General –

The Contractor shall secure and maintain, throughout the duration of this Contract, insurance (on an occurrence basis unless otherwise agreed to) of such types and in the least such amounts as required in the Bidding Documents. Contractor shall provide certificates of insurance and renewals thereof on forms provided by the City or on forms acceptable to the City. The City shall be notified by receipt of written notice from the insurer or the Contractor at least thirty (30) days prior to material modification or cancellation of any policy listed on the Certificate.

Bidders are referred to paragraph GC-36. of the General Conditions for additional insurance information.

b) Notice of Claim Reduction of Policy Limits –

The Contractor, upon receipt of notice if any claim in connection with the Contract, shall promptly notify the City, providing full details thereof, including an estimate of the amount of loss or liability.

The Contractor shall promptly notify the City of any reduction in limits of protection afforded under any policy listed in the Certificate (or otherwise required by the Contract Documents) in excess of \$10,000.00, whether or not such impairment came about as a result of this Contract.

In the event the City shall determine the Contractor's aggregate limits of protection shall have been impaired or reduced to such an extent that the City shall determine such limits inadequate for the balance of the project, the Contractor shall, upon notice from the City, promptly reinstate the original limits of liability required hereunder and shall furnish evidence thereof to the City.

MINIMUM REQUIREMENTS

COMMERCIAL GENERAL LIABILITY POLICY

Limits –

General Aggregate:	\$2,000, 000
Products/ Completed Operations Aggregate:	\$1,000, 000
Personal & Advertising Injury:	\$1,000, 000
Each Occurrence:	\$1,000, 000

Policy MUST include the following conditions:

- a) Explosion, Collapse & Underground
- b) Independent Contractors
- c) Pollution Liability (Applicable only to contracts involving pollutants such as asbestos & lead abatement, sludge or other waste abatement, etc.)

AND

UMBRELLA/EXCESS LIABILITY

Limits –

Each Occurrence:	\$1,000, 000
General Aggregate:	\$3,000, 000

The Umbrella/ Excess Liability must be at least as broad as the underlying policy.

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c) Automobile Liability –

Policy shall protect the Contractor against claims of bodily injury and/or property damage arising from the ownership or any use of any owned, hired and and/or non-owned vehicle and must include protection for either:

Any Auto

or

All Owned Autos
Hired Autos; and
Non-Owned Autos

Limits –

Combined Single Limits
Bodily Injury and Property Damage – Each Accident

Same as General Liability

d) Worker's Compensation –

This insurance shall protect the Contractor against all claims under applicable state workers' compensation laws. The Contractor shall also be protected against claims for injury, disease or death of employees which for any reason, may not fall within the provisions of workers' compensation law. The policy limits shall not be less than the following:

<u>Workers' Compensation:</u>	Statutory
<u>Employer's Liability:</u>	
Bodily Injury by Accident	\$100,000 each accident
Bodily Injury by Disease	\$500,000 policy limit
Bodily Injury by Disease	\$100,000 each employee

e) Owner's Protective Liability –

The Contractor shall take out, pay for and deliver to the City, an Owner's Protective Liability insurance policy written on an occurrence basis and naming the City and City Engineer as named insured. The policy shall be maintained during the life of this Contract. Limits of protection shall be at least \$1,000,000 Combined Single Limits, Bodily Injury and Property Damage, and shall contain no exclusion relative to any function performed by the City or its employees and agents in connection with the Project.

f) Industry Ratings –

The City will only accept coverage from an insurance carrier who offers proof that it:

- 1) Is licensed to do business in the State of Kansas;
- 2) Carries a Best's policy holder rating of A or better; and
- 3) Carries at least a Class X financial rating.

4) Is a company mutually agreed upon by the City and the Contractor.

g) Subcontractors' Insurance –

If a part of the Contract is to be sublet, the Contractor shall cover all subcontractors in its insurance policy. Contractor shall indemnify and hold harmless the City and the City Engineer as to any and all damages, claims or losses, including attorney's fees, arising out of the acts or omissions of its subcontractors

h) Approval of Insurance –

The Contractor may not begin work of any nature until all insurance requirements are met and approved by the City Attorney.

IB-9 BID SECURITY: Each bid shall be accompanied by a bid bond or a certified cashier's check on an acceptable bank, made payable, without condition, to the City in an amount of not less than five percent (5%) of the total bid. In addition to other legal remedies, the amount of said bid is accepted and the successful bidder fails to enter into a Contract in the form prescribed, within the time specified in the notice of award by the City; provided, however, that the City shall not necessarily be limited in protecting its legal rights to enforcement of its rights under the bid security. Deposits will be returned to unsuccessful bidders, with the exception of the second qualifying bidder at such time as their bids are rejected. The bid deposit of the successful bidder and the second qualifying bidder will be returned when satisfactory insurance certificates, performance bond, and statutory bonds, maintenance bond or labor and other documents required by the General Conditions have been furnished and the Contract Documents have been executed.

IB-10 TAXES: It is the intent of the City to supply the Contractor with a Sales and Compensating Tax Exemption certificate for use in purchasing materials and supplies on the project. The Contractor shall, in preparing its bid, omit from its computed costs all sales and compensation taxes. Two copies of the State of Kansas Project Completion Certification (Form DO-77) will be furnished the City by the Kansas Department of Revenue upon issuance of a tax exemption number. Two copies of the Project Completion Certification will be forwarded to the Contractor and must be signed and returned to the City upon completion of the project. The City will forward one (1) copy of the Project Completion Certification to the Kansas Department of Revenue and retain one copy. All invoices must be retained by the Contractor for a period for five (5) years and are subject to audit by the Kansas Department of Revenue. Final payment will not be made to the Contractor until the City has received the two project Completion Certifications from the Contractor along with a Consent of Surety Company to Final Payment.

IB-11 LIQUIDATED DAMAGES: In case of failure on the part of the Contractor to effect completion within the time specified, the City shall have the right to deduct from the total compensation otherwise due the Contractor as liquidated damages, fixed and agreed to in advance, according to the following schedule:

<u>Contract Amount</u>				<u>Liquidated Damages</u>	
\$	0	to	25, 000	\$	75.00
\$	25,000	to	50, 000	\$	125.00
\$	50,000	to	100,000	\$	200.00
\$	100,000	to	500,000	\$	400.00
\$	500,000	to	1,000,000	\$	600.00
\$	1,000,000	to	2,000,000	\$	925.00
\$	2,000,000	to	5,000,000	\$	1,375.00

\$ 5,000,000	to 10,000,000	\$ 2,000.00
\$ 10,000,000	and up	\$ 3000.00

for each of the 24-hour calendar day, including Sundays and holidays, the work remains incomplete over the specified completion time. **(THE CITY RESERVES THE RIGHT TO ADJUST THE SCHEDULE OF LIQUIDATED DAMAGES, PRIOR TO BIDDING, BASED ON THE SCOPE AND URGENCY OF THE PROJECT.)**

In the event moneys being retained by the City shall not be sufficient to cover the amount of any liquidated damages, City may sue for and recover compensation for damages for nonperformance of this Contract at the time stipulated and provided for.

IB-12. MODIFICATIONS OR WITHDRAWAL OF BIDS: bids may be modified or withdrawn by written request received in the office of the City Clerk, prior to the time and date for bid opening. No bidder may withdraw its bid for a period of thirty (30) days after the date set for the opening thereof.

IB-13. ACCEPTANCE AND REJECTION OF BIDS AND AWARD OF CONTRACT: The City reserves the right to reject any and all Bids; to waive any and all irregularities and informalities; to negotiate contract terms with the successful Bidder; and the right to disregard all nonconforming, nonresponsive or conditional bids.

In evaluating Bids, the City may consider, in addition to the bid amounts, the qualification of Bidders, whether or not the Bids comply with the prescribed requirements, and alternates and unit prices if requested in the Bid forms. The City reserves the right to reject any bid of any Bidder who does not pass the evaluation to the City's satisfaction.

IB-14. BONDS: The Contractor to whom the work is awarded will be required to furnish a Performance Bond, Statutory Bond, and a Maintenance Bond in the forms hereinafter provided in an amount equal to 100 percent of the amount of the Contract to be awarded in each case in addition to any other bonds as may be required by the contract documents. With each bond there shall be filed with the City one copy of "Power of Attorney" certificate to include the date of the bonds.

IB-15. INDEMNIFICATION: The Contractor shall defend, indemnify and save the City and the City Engineer harmless from and against all liability for damages, costs and expenses arising out of any claim, suit, action or otherwise for injuries and/or damages sustained to persons or property by reason of and to the extent of the negligent acts or omissions of the Contractor, his or her sub-contractors, agents or employees in the performance of this contract.

IB-16. BID PREFERENCE: Existing State law (K.S.A. 75-3740a, and amendments thereto) requires that, to the extent permitted by federal law and regulations, the City, when letting contracts for bids, must require any successful bidder-contractor domiciled outside the state of Kansas to submit a bid the same percent less than the lowest bid submitted by a responsible Kansas contractor as would be required of such Kansas domiciled contractor to succeed over the bidding contractor domiciled outside Kansas on a like contract let in the foreign bidder's domiciliary state. All bids are received on this condition, and if it is determined by the City that the apparent lowest and best bidder is a foreign domiciled contractor, such contractor shall be awarded the Contract only if such contractor's bid complies with this state law requirement.

All bidders domiciled outside of the State of Kansas may be requested to furnish the City with a copy of their states' preferential bidding statutes, if any.

IB-17. NON-DISCRIMINATION, AFFIRMATIVE ACTION AND SEXUAL HARASSMENT: The Contractor shall comply with paragraph GC-65 of the General Conditions.

- IB-18. APPOINTMENT OF SERVICE AGENT: K.S.A. 16-113, and amendments thereto, requires that non-resident contractors appoint an agent for the service of process in Kansas. The executed appointment must then be filed with the Secretary of State, Topeka, Kansas. Any successful bidder-contractor domiciled outside the State of Kansas must comply with these statutory requirements.
- IB-19. SUBCONTRACTING: As provided in paragraph GC-34, the Contractor may utilize the services of subcontractors on those parts of the work which, under normal contracting practices, are performed by subcontractors; provided, however that the Contractor shall not award subcontracts which total more than fifty percent (50%) of the Contract price.
- IB-20. CONFLICT OF INTEREST: 31 U.S.C.S. Section 1352 requires that all subgrantees, contractors, subcontractors and consultants who receive federal funds via the City to certify that they will not use federal funds to pay any person for influencing or attempting to influence a federal agency or Congress in connection with the award of any federal contract, grant, loan or cooperative agreements.

In addition, contract applicants, recipients and subrecipients must file a form disclosing any expenditures they make for lobbying out of non-federal funds during the contract period. Necessary forms are available from the City Engineer and should be returned to the City with other contract documents. It is the responsibility of the general contractor to obtain executed forms from any subcontractors who fall within the provisions of the Code and to provide the City with the same.

CITY OF INDEPENDENCE, KANSAS

AGREEMENT BETWEEN CITY OF INDEPENDENCE
AND CONTRACTOR
FOR
PUBLIC IMPROVEMENT OF
VERDIGRIS RIVER LOW-HEAD DAM INSPECTION & IMPROVEMENTS

This agreement is made and entered into this _____ day of _____, 20____, by and between the City of Independence, Kansas, hereinafter the "City" and

_____,
hereinafter the "Contractor."

WITNESSETH:

WHEREAS, the City has caused to be prepared, in accordance with the law, Instructions to Bidders, Bid, this Agreement, General and Special Conditions, Plans, Specifications and other Contract Documents, as defined in the General Conditions, for the work herein described, and has approved and adopted these said Contract Documents and has invited sealed Bids for furnishing construction materials, labor, tools, equipment and transportation necessary for, and in connection with, the construction of public improvements in accordance with the terms of this Agreement; and

WHEREAS, the Contractor has submitted to the City, in the manner and at the time specified, a sealed Bid in accordance with the terms of this Agreement; and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined and canvassed the Bids submitted, and as a result of this canvass has, in accordance with the law, determined and declared the Contractor to be the lowest and best responsible bidder for the construction of the public improvements, and has duly awarded to the Contractor a contract therefor upon the terms and conditions set forth in this Agreement for the sum or sums named in the Bid attached to and made a part of this Agreement.

NOW, THEREFORE, in consideration of the compensation to be paid the Contractor, and of the mutual agreements herein contained, the parties hereto have agreed, and hereby agree, the City for itself and its successors and the Contractor for itself, himself/ herself or themselves, its, his/ her or their successors and assigns, or its, his/ her or their executors and administrators, as follows:

ARTICLE I. The Contractor will furnish at his own cost and expense all labor, tools, equipment, materials and transportation required to construct and complete the work designated, described and required by the Contract Documents, to wit:

all in accordance with the Notice to Bidders, Instructions to Bidders, Bid, this Agreement, General and Special Conditions, Plans, Specifications and other Contract Documents as defined in paragraph GC-1 of the General Conditions of the Contract for Construction, on file with the City Clerk of Independence, Kansas, all of which Contract Documents form the Contract, and are as fully a part hereof as if repeated verbatim herein; all work to be done in a good, substantial and workmanlike manner to the entire satisfaction of the City, and in accordance with the laws of the City, the State of Kansas and the United States of America. All terms used herein shall have the meanings ascribed to them in the General Conditions unless otherwise specified.

ARTICLE II. The City shall pay to the Contractor for the performance of the work embraced in this Contract, and the Contractor will accept in full compensation therefor, the sum of _____ DOLLARS (\$ _____) (subject to adjustment as provided by the Contract Documents) for all work covered by and included in the Contract award and designated in the foregoing Article I, payment thereof to be made in cash or its equivalent and in the manner provided in the Contract Documents.

ARTICLE III. The Contractor shall commence work upon the date stated in the Notice to Proceed and will complete all work by this Contract by 90 working days. Time is of the essence. Accordingly, liquidated damages shall be assessed against Contractor, as stipulated liquidated damages and not as a penalty, in an amount as set forth in paragraph GC-44 of the General Conditions for each and every calendar day the work remains incomplete over the specified completion time.

ARTICLE IV. The Contractor shall not subcontract, sell, transfer, assign or otherwise dispose of the Contract or any portion thereof without previous written consent of the City. In case such consent is given, the Contractor shall be permitted to subcontract a portion thereof, but shall perform with its own organization work amounting to not less than fifty percent (50%) of the total Contract Price. No subcontracts, or other transfer of Contract, shall release the Contractor of its liability under the Contract and bonds applicable thereto.

ARTICLE V. Contractor specifically acknowledges and confirms that: 1.) he has visited the site, made all inspections he deems appropriate and has read and fully understands the Contract Documents, including all obligations and responsibilities undertaken by he as specified herein and in other Contract Documents and knowingly accepts the same; 2.) he has furnished copies of all Contract Documents to his insurance carrier(s) and his surety(ies); and 3.) his insurance carrier(s) and surety(ies) agree to be bound as specified herein, in the Contract Documents and in the insurance policy(ies) and bonds as to liability and surety coverage.

ARTICLE VI. It is specifically agreed between the parties executing this Agreement that the Contract Documents are not intended to create any third party beneficiary relationship nor authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement. The duties, obligations and responsibilities of the parties to this Agreement with respect to third parties shall remain as imposed by law.

ARTICLE VII. This Agreement, together with the other Contract Documents, constitutes the entire agreement between the parties and supersedes all prior agreements, whether oral or written, covering the same subject matter. This Agreement may not be modified or amended except as provided herein or in the other Contract Documents.

ARTICLE VIII. This Agreement is entered into, under and pursuant to, and is to be construed and enforceable in accordance with the laws of the State of Kansas.

ARTICLE IX. Should any provision of this Agreement or the other Contract Documents be determined to be void, invalid, unenforceable or illegal for whatever reason, such provision(s) shall be null and void; provided, however, that the remaining provisions of this Agreement and/or the other Contract Documents shall be unaffected thereby and shall continue to be valid and enforceable.

WITNESS WHEREOF, the City of Independence, Kansas, has caused this Agreement to be executed on its behalf, thereunto duly authorized, and the said Contractor has executed _____ counterparts of this contract in the prescribed form and manner, the day and year first above written.

CITY OF INDEPENDENCE, KANSAS

By _____
Kelly Passauer, City Manager

ATTEST:

David Schwenker, City Clerk

APPROVED AS TO FORM:

Jeff Chubb, City Attorney

Contractor

By _____

(SEAL)

Title _____

(If the Contract is not executed by the President of the Corporation or general partner of the partnership, please provide documentation, which authorizes the signatory to bind the corporation or partnership. If a corporation, Contractor shall furnish the City a current certificate of good standing, dated within ten (10) days of the date of this Contract.)

CITY OF INDEPENDENCE, KANSAS

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- a. Bid
- b. 5% Bid Security—Bid Bond, Cashier’s Check or Certified Check (See Below)

Each bidder shall file with his bid, a cashier’s check or a certified check drawn on any acceptable bank, made payable to the City of Independence, Kansas, in the amount of not less than five percent (5%) of the total bid, which shall be retained by the City of Independence until a Contract for the project has been executed. Bid bonds will be returned to the unsuccessful bidders, with the exception of the second qualifying bidder, at such time as their bids are rejected. The bid deposit of the successful bidder and the second qualifying bidder will be returned when satisfactory bonds in the amount equal to the 100% of the Contract amount, required insurance certificates and other required documents shall have been furnished and the Contract Documents have been executed.

In the event the successful bidder is unable to execute the Contract, for whatever reason, the City may exercise its legal prerogatives, including, but not limited to, enforcement of its rights as to the bid security.

There will be a mandatory Pre-Bid Meeting held for this project on Friday January 16th at 11:00 AM at Independence City Hall at 120 N 6th Street, Independence, Kansas 67301. This Pre-bid meeting will also be available for remote attendance via Microsoft Teams for bidders who cannot attend in person.

[Verdigris River Low-Head Dam Repair - Prebid Meeting | Meeting-Join | Microsoft Teams](#)

For contracts where the total contract price or compensation to be received amounts to more than \$10,000, (1) non-resident corporations that are not already registered with the Kansas Secretary of State, and (2) all non-resident individuals, partnerships and other entities are required by law to register with the Secretary of Revenue (or the Secretary's designee), State Office Building, Topeka, Kansas. Each such non-resident corporation, individual or entity shall file with the Secretary of Revenue an acceptable bond in compliance with the requirements of K.S.A. 79-1010, as amended.

DAVID SCHWENKER
CITY CLERK

BID PROPOSAL FORM

PROJECT IDENTIFICATION:

Independence, Kansas
VERDIGRIS RIVER LOW-HEAD DAM INSPECTION & IMPROVEMENTS

THIS BID IS SUBMITTED TO:

City of Independence
120 N. 6th Street
Independence, KS 67301

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents within the specified time and for the amount indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents. The specified time stated in the agreement between bidder and Owner shall include a substantial completion date of 100 working days and a final completion date of 120 working days.

2. This Bid will remain subject to acceptance for 90 days after the day of bid opening. Bidder will sign and submit the Agreement with the Bonds and other documents required by the Bidding Documents within 15 days after the date of Owner's Notice to Proceed.

3. In submitting this Bid, Bidder represents that:

a. Bidder has examined copies of all the Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

No. _____ Dated _____

No. _____ Dated _____

No. _____ Dated _____

No. _____ Dated _____

b. Bidder has visited the site and become familiar with and satisfied itself as to the general, local, and site conditions that may affect cost, progress, performance, and furnishing of the Work.

c. Bidder is familiar with and has satisfied itself as to all Federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.

d. Bidder is aware of the general nature of Work to be performed by Owner and others at the site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.

e. Bidder has correlated the information known to Bidder, information and observations

obtained from visits to the site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

- f. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by Engineer is acceptable to Bidder, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
 - g. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm, or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.
4. Bidder will complete the Work for the following price and based upon the following unit prices:

PROPOSAL

Base Bid

Item No.	Item Description	Unit	Quantity	Unit Cost	Total Cost
1	Mobilization	LS	1		
2	Clearing, Grubbing & Site Preparation	LS	1		
3	Erosion & Sediment Control	LS	1		
4	Traffic Control	LS	1		
5	Temporary Cofferdam	LS	1		
6	Concrete Dam Repair	CY	71		
7	Rock Riprap (d50=18")	CY	18		

Base Bid Total =

Bid Alternate

Item No.	Item Description	Unit	Quantity	Unit Cost	Total Cost
1	Miscellaneous Concrete Repair	SF	1		
2	Cofferdam Evacuation	EA	1		

Alternate Bid Total =

5. Communications concerning this Bid shall be sent to Bidder at the following address:

6. The terms used in this Bid, which are defined in the General Conditions included as part of the Contract Documents, have the meanings assigned to them in the General Conditions.

SIGNATURE OF BIDDER

If an Individual

By _____
(signature of individual)

doing business as _____

Business address _____

Phone No. _____

Date _____, 20____

If a Partnership

By _____
(firm name)

(signature of general partner)

Business address _____

Phone No. _____

Date _____, 20____

If a Corporation

By _____
(corporation name)

By _____
(signature of authorized person)

(title)

Business address _____

Phone No. _____

Date _____, 20____

If a Joint Venture (Other party must sign below.)

If an Individual

By _____
(signature of individual)

doing business as _____

Business address _____

Phone No. _____

Date _____, 20____

If a Partnership

By _____
(firm name)

(signature of general partner)

Business address _____

Phone No. _____

Date _____, 20____

If a Corporation

By _____
(corporation name)

By _____
(signature of authorized person)

(title)

Business address _____

Phone No. _____

Date _____

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PERFORMANCE AND TWO YEAR GUARANTEE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____

hereinafter referred to as the "Contractor", and _____

a Corporation organized under the laws of the State of _____

and authorized to transact business in the State of _____ as Surety,

are held and firmly bound unto the City of Independence, Kansas, hereinafter referred to as the "Owner" in the penal sum of

_____ DOLLARS, lawful

money of the United States of America for the payment of which the sum, well and truly to be

made, we bind ourselves and our heirs, executors, administrators, successors, and assigns, jointly

and severally by these presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT:

WHEREAS, the above bonded Contractor has, on the _____ day of _____, 20____, entered into a written contract with the aforesaid Owner for furnishing all materials, equipment, tools, superintendence, labor, and other facilities and accessories, for the construction of certain improvements as designated, defined and described in the said Contract and the Conditions thereof, and in accordance with the Specifications and plans thereof; a copy of said Contract being attached hereto and made a part hereof:

NOW THEREFORE, if the said Contractor shall and will, in all particulars, well, duly and faithfully observe, perform and abide by each and every covenant, condition, and part of the said Contract, and the Conditions, Specifications, Plans and other Contract Documents thereto attached or, by reference, made part thereof, according to the true intent and meaning in each case, and if said contractor shall replace all defective parts, material and workmanship for a period of two years after acceptance by the Owner, then this obligation shall be and become null and void; otherwise it shall remain in full force and effect.

PROVIDED FURTHER, if said contractor fails in all particulars to duly and faithfully observe, perform and abide by each and every covenant, condition and part of the said contract and the conditions, specifications, plans and other contract documents, thereto attached, or, by reference made a part thereof, according to the true intent and meaning in each case, or if said contractor shall fail to replace all defective parts, material and workmanship for a period of two years after acceptance by the owner then the surety will pay the costs to complete the project and/or the costs to repair any defective parts for the period of two years after acceptance, and any other damages incurred by the owner in procuring completion and/or repair, such amount not exceeding the amount of this obligation, together with interest as provided by law.

PROVIDED FURTHER, that if the said Contractor fails to duly pay for any labor, materials, sustenance, provisions, provender, gasoline, lubricating oils, fuel oils, greases, equipment and tools consumed or used in said work, groceries and foodstuffs, and all insurance premiums, compensation liability, and otherwise, or any other supplies or materials used or consumed by such Contractor or his, their, or its

subcontractors in performance of the work contracted to be done, the Surety will pay the same in any amount not exceeding the amount of this obligation together with interest as provided by law.

PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or additional to the terms of the contract, or the work to be performed thereunder, or the specifications accompanying the same, shall in any ways affect this obligation on this bond and it does hereby waive notice of any change, extension of time, or addition to the terms of the contract, or to the work, or to the specifications.

TESTIMONY WHEREOF, the said Contractor has hereunto set his hand, and the said Surety has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed, by its attorney-in-fact duly authorized hereunto so to do, at _____

on this the _____ day of _____, 20____.

BY: _____

By _____ SEAL

By _____ SEAL
(Attorney-in-fact)

By _____ SEAL
(State Representative)

(Accompany this bond with Attorney-in-Fact's authority form the Surety Company certified to include the date of the bond)

STATUTORY PAYMENT BOND

(Pursuant to Kan. Stat. Ann. 60-1111)

Bond No. _____

KNOW ALL MEN BY THESE PRESENTS: That the undersigned, a corporation organized under the laws of the State of Kansas, _____ as Principal, and _____, as Surety and guarantor, are held and firmly bound unto the STATE OF KANSAS in the sum of \$ _____ lawful money of the United States of America, for the payment of which well and truly to be made the said Principal and Surety hereby bind themselves and their respective successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT, Whereas the Principal has on the _____ day of _____, 20____, entered into a written agreement with the City of Independence, Kansas, hereinafter called the Owner, for furnishing all tools, equipment, materials and supplies and performing all labor and incidentals thereto necessary in connection with **VERDIGRIS RIVER LOW-HEAD DAM INSPECTION & IMPROVEMENTS.**

NOW THEREFORE, if the Principal or the subcontractor or subcontractors of the Principal shall pay all indebtedness incurred for labor furnished, materials, equipment or supplies, used or consumed in connection with or in or about the construction of or in making such public improvements, then this obligation shall become null and void; otherwise, it shall remain in full force and effect. If the Principal or the subcontractor or subcontractors of furnished, materials, equipment or supplies, used or consumed in connection with or in or about the construction or in making such public improvements, then the Surety shall pay the same in any amount not exceeding the amount of this obligation, together with any interest and other sums as provided by law.

Surety further agrees that any persons to whom there is due any sum for such public improvements as hereinabove stated, or said person's assigns or successors, may bring action on this bond for the recovery of said indebtedness; provided, that no action shall be brought on this bond after six (6) months from the completion of said public improvements.

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IN WITNESS WHEREOF, the said Principal and the said Surety have executed this bond the _____ day of _____, 20__.

(PRINCIPAL'S NAME)

By: _____

Name: _____

Title: _____

Address: _____

(SURETY'S NAME)

By: _____

Name: _____

Title: _____

Address: _____

STATE of KANSAS)
)
MONTGOMERY COUNTY) ss

20__ This bond taken and approved by me and filed this _____ day of _____,

Clerk of District Court of
Montgomery County, Kansas

CONTRACTOR'S ASSURANCE
OF GOOD TITLE TO
MATERIALS INCLUDED IN PROJECT

The undersigned contractor swears under penalty of perjury that all materials and equipment incorporated in the work performed under the contract for which final payment is now being made are free and clear of all security interests and encumbrances.

Dated: _____

CONTRACTOR

BY _____

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

NOTARY PUBLIC

My appointment expires:

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FOR
GENERAL CONDITIONS

VERDIGRIS RIVER LOW-HEAD DAM INSPECTION & IMPROVEMENTS

The project consists of the temporary diversion of the Verdigris River in order to complete a thorough inspection of all faces of the low-head existing dam and to repair and found damages as well as known damages as shown on the plans.

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GENERAL CONDITIONS
OF THE CONTRACT FOR CONSTRUCTION

GC-1. CONTRACT DOCUMENTS/CONTRACT FOR CONSTRUCTION

The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intention of the Contract Documents is to include all construction, labor, materials, tools, equipment and transportation necessary for the workmanlike construction of the Project in accordance with the Contract Documents.

The Contract Documents shall consist of (but are not necessarily limited to) the Agreement between the City and the Contractor (sometimes referred to herein as the "Agreement"), these General Conditions, the Special Conditions (including supplementary and other conditions), the plans, the specifications, all addenda issued prior to and all modifications issued after execution of the Contract (modifications consisting of written amendments to the Contract signed by both parties, change orders, written interpretations issued by the City Engineer, written orders for minor changes in the Work issued by the City Engineer, and changes in the Work identified in paragraph GC-23.), drawings and data which may be furnished by the Contractor and approved by the City, additional drawings which may be furnished by the Architect/ Engineer which the City Engineer deems necessary to make clear the intent of the Contract Documents (and, in particular, the specifications), and the bidding documents. It is understood that the Work shall be carried out and the Project shall be constructed fully in accordance with the Contract Documents.

If there is any conflict or discrepancy between the Agreement between the City and Contractor and these General Conditions (or Special Conditions) or between the Agreement between City and Contractor and any other of the Contract Documents, the Agreement between City and Contractor shall prevail. If there is any discrepancy between the General Conditions and any other Contract Documents other than the Agreement between City and Contractor, the General Conditions shall prevail, unless such discrepancy is between the General Conditions and the Special Conditions, if any, in which case the Special Conditions shall prevail. The Contract Documents supercede any and all previous agreements and understandings between the parties, and all such previous agreements and understandings are of no further force or effect.

The Contract Documents as enumerated herein form the Contract for construction. The Contract may not be amended or modified except by a modification as hereinabove defined. These Contract Documents do not, nor shall they be construed to, create any contractual relationship of any kind between the City and any Subcontractor or remote tier Subcontractor.

All limits stated in the Contract Documents are of the essence of the Contract.

GC-2. DEFINITIONS

Whenever any word or expression defined herein, or pronoun used in its stead, occurs in these Contract Documents; it shall have and is mutually understood to have the meaning herein given. Work described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognized standards.

1. The "Bid" shall mean the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed (and the City reserves the right to reject any and all bids).
2. "Bidder" shall mean any individual partnership, corporation, association or other entity submitting a Bid for the Work.
3. "Bidding Documents" shall mean all documents related to a bidder's submitting a Bid, including, but not limited to, the advertisement for bids, if applicable, instructions to bidders, the Bid form, other sample bidding and contract forms and the proposed Contract Documents, including any addenda issued prior to receipt of bids. At the City's option, Bidder may be required to complete and submit a prequalification statement.
4. The "Bonds" shall mean the bid, performance, and statutory or labor and materials payment bonds, together with such other instruments of security as may be required by the Contract Documents.
5. A "Change Order" is a written order issued after the Agreement is executed by which the City, the City Engineer and the Contractor agree to construct additional items of Work, to modify the quantity of a unit listed in the bid, the Contract Time, or, in lump sum contracts, to change the character and scope of Work shown on the Contract plans, or as otherwise provided in paragraph GC-23. Change Orders must be signed by the City and the Contractor to be binding.
6. "City" shall mean the City of Independence, Kansas.
7. "City Engineer" shall mean the individual, firm or entity designated in the Contract Documents which has been employed by the City for the performance of professional engineering services in connection with the Project; or it shall mean the City Administrator if the City acts as its own Engineer.
8. "Contract" and "Contract Documents" shall have the meaning ascribed to them in paragraph GC-1, such terms sometimes being used interchangeably.

9. "Contract Price" shall be the amount identified in the Agreement between City and Contractor as the total amount due to the Contractor for total completion of the Work as per the Contract Documents. Where the Contract provides that all or part of the Work is to be Unit Price Work the Contract Price shall initially be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work multiplied by the estimated quantity of each item required for the Work. It is understood and agreed that estimated quantities of items for Unit Price Work are not guaranteed and are solely for the purpose of comparison of bids and determining an initial Contract Price. Determinations of actual quantities and classifications of Unit Price Work shall be made by the City Engineer. Each unit price shall be deemed to include Contractor's overhead and profit for each separately identified item.
10. The "Contract Time" shall be the number of calendar or working days stated in the Contract Documents for the completion of the Work or shall be a date certain if so designated in the Contract Documents.
11. "Contractor" shall mean the entity entering into the Contract for the performance of the Work covered by this Contract, together with his duly authorized agents or legal representatives. (For purposes of indemnification, see GC-31 for definition of "Contractor".)
12. "Defective Work" shall mean Work which is unsatisfactory, faulty or deficient or not in conformity with the Contract Documents. It shall also include Work damaged prior to approval of final payment unless responsibility for such damage shall have been expressly assumed by the City at Substantial Completion.
13. "Effective Date of the Agreement" shall mean the date indicated in the Agreement on which it becomes effective, but, if no such date is indicated, it shall mean the date on which the Agreement is signed and delivered by the City to the Contractor. For this purpose, delivery shall be accomplished by either hand-delivery to the Contractor or placing a copy in the mail, first class, postage pre-paid.
14. "Field Order" shall mean a written order issued by the City Engineer which orders minor changes in the Work in accordance with paragraph GC-23 but which does not involve a change in the Contract Price or Contract Time.
15. "Final Acceptance" shall mean the date when the City Engineer accepts in writing that the construction of the Project is complete in accordance with the Contract Documents such that the entire Project can be utilized for the

purposes for which it is intended and Contractor is entitled to final payment.

16. "General Requirements" shall mean those provisions of the Specifications which apply to the entire Work.
17. "Inspector" shall mean the engineering or technical inspector or inspectors duly authorized by the City Engineer or the City.
18. "Notice of Award" shall mean the written notice by the City to the apparent successful Bidder stating that upon compliance with the conditions precedent enumerated therein, within the time specified, the City will sign and deliver the Agreement.
19. "Notice to Proceed" shall mean the written notice by the City to the Contractor fixing the date on which the Contract Time is to commence and on which the Contractor shall start to perform its obligations under the Contract Documents. Without the prior express written consent of the City, Contractor shall do no Work until the date set forth in the Notice to Proceed.
20. "Partial Utilization" shall mean placing a portion of the Work to be provided under the Contract Documents to the use intended by the City.
21. "Pay Estimate" or "Final Pay Estimate" shall mean the form to be used by the Contractor in requesting progress and final payments, including supporting documentation required by the Contract Documents.
22. "Plans" or "The Plans" shall mean and include all drawings which may have been prepared by the City and/or the City Engineer on the City's behalf as a basis for bids, all drawings (other than shop drawings, see subpart 23.) submitted by the successful Bidder with its Bid or by the Contractor to the City, if and when approved by the City Engineer, and all drawings submitted by the City to the Contractor during the progress of the Work, all of which show the character and scope of the Work to be performed.
23. The "Shop Drawings" shall mean all drawings, diagrams, illustrations, schedules and other data which are specifically prepared by the Contractor, a Subcontractor, manufacturer, fabricator, supplier or distributor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a manufacturer, fabricator, supplier or distributor and submitted by the Contractor to illustrate material or equipment for some portion of the Work.

24. "The Specifications" shall mean those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction methods, standards and workmanship as applied to the Work and certain administrative details applicable thereto. They may include, but are not necessarily be limited to:
- (1) design specifications, e.g. measurements, tolerances, materials, inspection requirements and other information relative to the Work;
 - (2) performance specifications, e.g., performance characteristics required, if any;
 - (3) purchase description specifications, e.g. products or equipment required by manufacturer, trade name and/or type; provided, however, equivalent alternatives (including aesthetics, warranty and manufacturer reputation) may be substituted upon written request and written approval therefor by the City in accordance with paragraph GC-58.
 - (4) such other information deemed appropriate by the City for inclusion in the Specifications for the proper construction of the Project.
25. "Subcontractor" shall mean an individual, firm or corporation having a direct contract with the Contractor or with another subcontractor for the performance of a part of the Work.
26. "Substantial Completion" shall mean the state of the Project where the Project, or a designated portion thereof, is sufficiently complete in accordance with the Contract, so that the City can occupy or utilize the Project, or the designated portion thereof, for its intended use.
27. "The Work" or "The Project" (used interchangeably) shall mean the Work to be done necessary to complete the construction required of the Contractor by the Contract Documents, and includes all construction, labor, materials, tools, equipment and transportation necessary to produce such construction in accordance with the Contract Documents.
28. "Underground Facilities" shall mean all pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish services or materials including, but not limited to, electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

29. "Unit Price Work" shall mean Work to be paid for on the basis of unit prices (quantity variations).
30. Whenever in these Contract Documents the words "as ordered," "as directed," "as required," "as permitted," "as allowed," or words or phrases of like import are used, it is understood that the order, direction, requirement, permission or allowance of the City and/or the City Engineer is intended.
31. Whenever any statement is made in the Contract Documents containing the expression "it is understood and agreed," or an expression of like import, such expression means the mutual understanding and agreement of the parties hereto.
32. The words "approved," "reasonable," "suitable," "acceptable," "properly," "satisfactory," or words of like effect in import, unless otherwise particularly specified herein, shall mean approved, reasonable, suitable, acceptable, proper or satisfactory in the judgment of the City and/or the City Engineer.

GC-3. DEFECTS IN CONTRACT DOCUMENTS

If Contractor has reasonable cause such that it should, in the exercise of ordinary care of someone in its position, know that any errors, omissions, discrepancies or inconsistencies (hereinafter "defects") appear in the Contract Documents, including but not limited to, the Plans, Specifications and other documents or the Work, Contractor shall notify the City Engineer in writing of such defects. Contractor shall remedy any such defects whether or not disclosed to the City Engineer without any increase in the cost of the Work. The Contract Documents shall be appended to all contracts between the Contractor and any Subcontractor or any more remote tier Subcontractor, and such Subcontractors and remote tier Subcontractors shall, likewise, notify the Contractor in writing of any defects therein, and it shall be the obligation of the Contractor to remedy same as if Contractor had discovered such defects itself. The Contractor will not be permitted to take advantage of any such defect.

GC-4. COPIES OF THE CONTRACT

Unless otherwise provided in the Contract Documents, City will furnish to Contractor a maximum of six (6) copies of the Contract Documents, free of charge, necessary for the execution of the Work.

Sufficient copies of the bidding documents, bonds and Agreement between City and Contractor shall be prepared, each containing an exact copy of the Contractor's Bid as submitted, the Bonds properly executed and the Contract signed by both parties hereto. These executed counterparts shall be filed with the City, Contractor and the Surety Company executing the Bonds. The original Bid submitted by the Contractor will be retained by the City.

Contractor shall keep, and make available to City, at the Project site, one copy of all Contract Documents for the Work at the Project site, in good order and legibly marked to reflect actual construction. Contractor shall also maintain at the site all approved samples and a print of all approved Shop Drawings. Such Documents, samples and Shop Drawings shall be turned over to the City at the completion of the Work if requested by the City.

Contract Documents are the property of the City, and none of the Contract Documents are to be used on other work by Contractor. At City's request, all Contract Documents shall be returned to the City with the exception of one record set for the Contractor. All models and calculations are the property of City.

GC.-5. SCOPE, NATURE AND INTENT OF PLANS AND SPECIFICATIONS

The Plans and Specifications are intended to complement, but not necessarily duplicate each other. Together they shall constitute one complete set of the Plans and Specifications, and any Work exhibited in one but not in the other shall be executed just as if it had been set forth in both in order that the Work shall be completed according to the complete design or designs as decided and determined by the City Engineer.

Should anything be omitted from the Plans and Specifications which is necessary to a clear understanding of the Work, or should it appear that various instructions are in conflict, or in the event the Plans and Specifications are silent as to any detail, then it shall be the duty of the Contractor to secure written instructions from the City Engineer before proceeding with the construction affected by such omissions, discrepancies or silence. In accordance with paragraph GC-3, Contractor's failure to bring any such matter to the attention of the City Engineer shall be at the Contractor's peril, and there shall be no compensation for extra work necessitated thereby.

Dimensions and elevations shown on the Plans shall be accurately followed, even though they may differ from scaled measurements. No work shown on the Plans, the dimensions of which are not indicated, shall be executed until the required dimensions have been obtained from the City Engineer. Contractor shall be responsible for verification of all locations, dimensions and elevations in the field (including, but not limited to verification of location of Underground Facilities and utilities) and shall verify all field dimensions shown on the Contract Documents.

All Work performed under this Contract shall be done to the lines, grades, and elevations shown on the Plans. The Contractor shall keep the City Engineer informed a reasonable time in advance of the times and places at which he wishes to do Work, in order that lines and grades may be furnished and necessary measurements for record and payment may be made with the minimum of inconvenience and delay to the City Engineer and the Contractor.

Any Work done without being properly located and established by base lines, offset stakes, bench marks, or other basic reference points may be ordered removed and replaced at the Contractor's cost and expense.

Contractor, together with his Subcontractors, shall carefully examine the Plans and Specifications for any interferences with the Work and clearances that may be required. Contractor shall be responsible for the proper fitting of materials and equipment without substantial alterations. Contractor shall be responsible for eliminating interferences without additional cost to City. If departures from the Plans and Specifications, or other Contract Documents, are deemed necessary by Contractor, details of such departures and reasons therefor shall be submitted to City Engineer, with drawings (if City Engineer determines that drawings are necessary), for approval as soon as practical. No such departure shall be made except at the peril of the Contractor without the prior written approval of the City Engineer.

GC-6. BEGINNING, PROGRESS AND TIME OF COMPLETION OF WORK

The Contractor shall, within ten (10) days after being instructed to do so in the written "Notice to Proceed" from the City, commence the Work to be done under this Contract; and the rate of progress shall be such that the Work shall have been completed in accordance with the terms of the Contract on or before the termination of the construction period contractually specified, subject to any extensions of such time made as hereinafter provided. The Contractor shall furnish the City Engineer with a schedule giving the dates on which it expects to start and to complete separate portions of the Work, which schedule shall be strictly adhered to unless agreed to in writing by all parties or modified by an extension of extension of time as hereinafter provided.

GC-7. SHOP DRAWINGS

Contractor shall submit, with such promptness as to cause no delay in his own work or in that of any Subcontractor or other contractor, three (3) copies of all shop, fabrication, assembly, foundation and other drawings and schedules required by the specifications, including, but not limited: (1) drawings of equipment and devices offered by the Contractor for approval of the City Engineer in sufficient detail to adequately show the construction and operation thereof; (2) drawings showing essential details of any change in design of construction proposed, for consideration by the City Engineer, by the contractor in lieu of the design or arrangement required by the Contract Documents, or any item of extra work thereunder; (3) all required wiring and piping layouts; and (4) structural and reinforcing fabrication drawings. The City Engineer shall review, respond to, accept or reject such submissions within a reasonable time after receipt thereof. Contractor shall make such revisions as deemed necessary. On Final Acceptance, the City Engineer shall be furnished with a total of not less than five (5) copies, and more when required, of each drawing as finally approved, such number to include any copies of preliminary or revised drawings which are approved as submitted. After due review by the City Engineer, all such drawings shall become a part of the Contract Documents, and the Work or equipment shown by such drawings shall be in

conformity with said drawings unless otherwise required by the City Engineer. No Work shall be performed in connection with the fabrication or manufacture of material or equipment shown by any drawing thereof, nor shall any accessory, appurtenance or device not fabricated or manufactured by the Contractor or its Subcontractors be purchased, until the drawing or drawings therefor have been approved as stipulated, except at the Contractor's own risk and responsibility.

Review for compliance by the City or the City Engineer of drawings or other items submitted by Contractor shall not relieve Contractor from responsibility for errors of any sort in Shop Drawings or other submittals.

GC-8. CONTRACTOR'S RESPONSIBILITIES AS TO AMBIGUITIES

If there is any ambiguity in City Engineer's drawings or instructions, Contractor shall ask the City Engineer for clarification in writing. Upon receipt of written request of Contractor, the City Engineer shall furnish, with reasonable promptness, additional instructions by means of drawings, specifications, or other information necessary for the proper execution of the Work. The Work shall be executed in conformity therewith, and in accordance with paragraph GC-3, Contractor shall do no Work without proper instructions except at his peril. Nothing herein to the contrary shall affect Contractor's responsibilities with regard to defects as set forth in paragraph GC-3.

GC-9. CONCEALED CONDITIONS

The Contractor understands that the City makes no warranty, express or implied, that the various and sundry materials and information, including, by way of example and without limitation, soil tests, bore reports, utility locations and other such data and as-buils in the case of renovation of or addition to existing facilities, reflect actual conditions. The Contractor represents and warrants that it has examined the site and conducted such tests and examinations as it deems necessary and assumes all responsibility for the foregoing. That being the case, should concealed conditions encountered in the performance of the Work below the ground or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions below the surface of the ground, or should concealed or unknown conditions be encountered in an existing structure of an unusual nature, differing materially from those ordinarily encountered or generally recognized as inherent in Work of the character provided for in this Contract, be encountered, there shall be no adjustment in the Contract Price for any extra work necessitated thereby, although, if necessary, in the judgment of the City Engineer, the Contract Time may be adjusted.

GC-10. CONTRACTOR TO FURNISH STAKES AND HELP

The Contractor, unless otherwise instructed, shall stake the Work and shall furnish, without charge, competent personnel from its workforce and such tools, stakes, and other materials as required in properly staking out the Work, in making

measurements and surveys and in establishing temporary or permanent reference marks in connection with said Work. The stakes furnished for the staking of the Work shall be of such type, size and quality as to be acceptable to the City Engineer.

GC-11. PRESERVATION OF MONUMENTS AND STAKES

The Contractor shall carefully preserve all monuments, property corners, bench marks, reference points and stakes, and in case of destruction of the same, will be responsible for proper replacement and for any mistakes or loss of time that may be caused by their unnecessary loss or disturbance. In the event that the loss of stakes, etc., causes a delay in the Work because the Contractor failed to discharge the foregoing obligation, the Contractor shall have no claim for damages or extensions of time. In the case of any permanent monuments, property corners or bench marks which must of necessity be removed or disturbed in the construction of the Work, the Contractor shall carefully protect and preserve the same until they can be properly referenced for relocation. The Contractor shall furnish at its own expense such materials, surveyors and assistance as are necessary for the proper replacement of monuments, property corners or bench marks that have been moved or destroyed.

GC-12. PERMITS AND NOTICES

- (a) All permits and licenses shall be secured and paid for by Contractor, unless otherwise specified.
- (b) Contractor shall give all notices required by and all Work shall be done in accordance with all applicable federal and state laws, City and County laws and ordinances, building codes and rules and regulations bearing on the conduct of the Work.
- (c) Contractor shall notify all affected utilities of the Work and coordinate with the utilities to avoid interruption of utility service and damage to utility lines and property. This notice requirement shall also apply as to the owner/operator of any affected Underground Facility. Any project delay, damages or increase in construction costs due to utility relocation delays shall be the Contractor's responsibility.

GC-13. GENERAL ADMINISTRATION OF THE CONTRACT

- (a) Unless otherwise stipulated, Contractor shall provide and pay for all Work (including labor, transportation, tools, equipment, machinery, plant and appliances) necessary to produce the results called for by the Contract Documents.
- (b) Unless otherwise specified, all supplies, materials, equipment and other facilities are guaranteed to be new and all Work shall be of good quality and workmanship and free from defects or fault. Contractor shall, if

required, furnish satisfactory evidence as to the kind and quality of the Work.

- (c) The Contractor shall be solely responsible for and have complete control and charge of construction means, methods, techniques, sequences and procedures, and for safety precautions and programs in connection with the Work. Neither the City nor the City Engineer shall be responsible for nor have control or charge over the acts or omissions of the Contractor, Subcontractors, or any of their agents or employees, or any other persons performing any of the Work.
- (d) The Contractor shall, in addition to the schedule required by paragraph GC-6, give to the City Engineer full information in advance as to its plans for carrying on any part of the Work. If at any time before the beginning or during the progress of the Work, any part of the Contractor's plant or equipment or any of its methods of executing the Work, appear to the City Engineer to be unsafe, inefficient or inadequate to ensure the required quality or rate of progress of the Work, the City Engineer may order the Contractor to increase or improve its facilities or methods, and the Contractor shall promptly comply with such orders; but neither compliance with such orders nor failure of the City Engineer to issue such orders shall relieve the Contractor from its obligation to secure the degree of safety, the quality of Work and the rate of progress required by the Contract.
- (e) The approval by the City Engineer of any plan, schedule or method of Work proposed by the Contractor shall not relieve the Contractor of any responsibility therefor, and such approval shall not be considered as an assumption by the City, or any officer, agent or employee thereof, of any risk or liability, and the Contractor shall have no claim under this Contract on account the of failure or inefficiency of any plan or method so approved. Such approval shall be considered and shall mean that the City Engineer has no objection to the Contractor's use or adoption, at the Contractor's own risk and responsibility, of the plan or method so proposed by the Contractor.
- (f) Any plan or method of Work suggested by the City Engineer or the City to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor, and the City Engineer and the City will assume no responsibility therefor.

GC-14. CONTRACTOR'S EMPLOYEES

- (a) Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ on the Work any unfit person or anyone not skilled in the Work assigned to him.

- (b) Contractor shall be responsible for compliance with all state and federal laws, if applicable, pertaining to wages, hours and benefits for workers employed to carry out the Work.

GC-15. SAMPLES

Contractor shall furnish samples for approval if directed by the City Engineer or the Contract Documents. The Work shall be in accordance with approved samples.

GC-16. PROTECTION OF WORK AND PROPERTY

- (a) Contractor shall maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for the protection of life, the Work, supplies, materials and equipment on the Project site not yet incorporated in the Work, City's property and adjacent property.
- (b) Contractor shall comply with any and all instructions from the City Engineer regarding prevention of accidents, fires or for the elimination of any unsafe practice and shall observe all the applicable recommendations of the National Fire Protection Association Standard No. 241 (or other, later revision) "Standards For Safeguarding Building Construction and Demolition Operations".
- (c) Contractor shall post danger signs warning against the hazards created by such features of construction as protruding nails, hod hoists, well holes, elevator hatchways, scaffolding, window openings, stairways, falling materials, open trenches, other excavations, obstructions and similar conditions. It shall designate a responsible member of its organization on the Project whose duty shall be the prevention of accidents. The name and position of the person so designated shall be reported to the City Engineer by Contractor.
- (d) In an emergency affecting the safety of life, the Work, the City's property or of adjoining property, Contractor, without special instruction or authorization from the City Engineer, is hereby permitted to act, at its discretion, to prevent such threatened injury or loss. Any compensation claimed by Contractor on account of emergency work shall be determined by mutual agreement of City and Contractor.
- (e) Contractor shall develop and maintain an up-to-date emergency action plan, taking into account fires, hazardous materials, explosions, adverse weather, floods, etc, which shall be in compliance with all federal, state and local laws and ordinances. The procedures should outline specific action to be taken to protect life and to secure and protect the building materials, constructed work, buildings, equipment and the position of

cranes. Contractor shall be fully responsible for the contents of and procedures outlined in said plan, including deficiencies therein, whether or not City shall have reviewed said plan.

- (f) Contractor shall be solely liable for all damages to the City or the property of the City, to employees of the City or other contractors, to neighboring premises, or to any private or personal property, due to improper, illegal or negligent conduct of the Contractor, its Subcontractors, employees or agents in and about said Work, or in the execution of the Work. The Contractor shall be liable to the City for any damages, whether property damage or personal injury, occasioned by Contractor's use of any scaffolding, shoring, apparatus, ways, works, machinery, plant or any other process or thing that is required for the Work.

GC-17. WORK IN OR ACROSS STREET OR HIGHWAY RIGHT-OF-WAY

All work performed and all preparations of the Contractor or his employees, and Subcontractors, if any, within the limits of street or highway rights-of-way shall be in conformity with the requirements, and be under the control, through the City, of the street or highway authority owning or having jurisdiction and control over such rights-of-way in each case. Any costs incurred to comply with such requirements are the responsibility of the Contractor.

GC-18. MAINTENANCE OF TRAFFIC

Local traffic on all streets shall be carried through construction whenever possible. Detours of traffic will be permitted when necessary and with the prior permission of the City. Streets may be closed for short periods of time under authority of proper permit issued by the City or authority having jurisdiction. However, the Contractor shall conduct its Work so as to interfere as little as possible with public travel, whether vehicular or pedestrian, on such streets. Proper notification to County and City police units and to Fire Districts shall be given by the Contractor before closing any public thoroughfare.

Where construction operations require the closing of private driveways, the Contractor shall give adequate notice to the owner or owners thereof and where necessary shall provide temporary access to given property.

GC-19. BARRICADES AND LIGHTS

All streets, roads, highways and other public thoroughfares which are closed to traffic, under the authority of a proper permit shall be protected, at Contractor's expense, by means of effective barricades on which shall be placed proper warning signs; such barricades being located at the nearest intersecting public highway or street on each side of the blocked section of such public thoroughfare.

All open trenches and other excavations shall be provided with suitable barriers, signs and lights, at Contractor's expense, such that adequate protection is provided to the public against accident by reason of such open construction. Obstructions such as material piles and equipment shall be provided with similar warning lights and signs.

All barricades and obstructions shall be illuminated by means of amber lights at night and all lights used for this purpose shall be at Contractor's expense and shall be kept burning from sunset to sunrise. Materials stored upon or along side public streets and highways shall be so placed, and the Work at all times shall be so conducted, as to cause the minimum obstruction and inconvenience to the traveling public.

All barricades, signs, lights and other protective devices in public rights-of-way shall be installed and maintained in conformity with applicable statutory requirements and as required by the Manual on Uniform Traffic Control Devices, as amended, or any other applicable statutes or ordinances.

GC-20. INSPECTION OF WORK

- (a) City Engineer shall at all times have access to the Work for the observation and inspection thereof wherever it is in preparation or progress, and Contractor shall provide proper facilities for such inspection. The Contractor shall furnish all reasonable aid and assistance required for any such inspection.
- (b) All Work must be inspected, tested, or approved and the Contractor shall give the City Engineer timely notice of its readiness for such inspection, testing or approval and the date fixed for such inspection, testing or approval if the inspection, testing or approval is by an authority other than City Engineer. If any Work should be covered up which is required by the above to be inspected, tested or approved and which, by virtue of being so covered up, is not susceptible to being properly inspected, tested or approved, Contractor shall, if requested by City Engineer, uncover such Work and at Contractor's expense bear the cost of uncovering such Work and redoing same after inspection, testing or approval and redoing such other Work damaged as a result of having to uncover and redo same.
- (c) City Engineer reserves the right to inspect any and all Work before it is covered up; and, accordingly, Contractor must notify City Engineer before covering any Work.

City Engineer shall be given a reasonable time to make its inspection. Contractor shall not cover any Work prior to City Engineer having a reasonable time to inspect. If work to be covered does not conform to the Contract Documents, City Engineer can withhold its consent to covering up Work until such Work is made to conform with the requirements of the Contract Documents at Contractor's expense.

- (d) If any labor, supplies, materials or equipment are found not to be in accordance with the Contract Documents, Contractor shall at his own expense bear the cost of uncovering such labor, supplies, materials or equipment, the cost of removing same, as well as the cost of undoing and redoing the Work and other Work damaged by such nonconforming labor, supplies, materials or equipment.
- (e) The Contractor shall comply with the directions and instructions of the City Engineer.
- (f) The City, the City Engineer and all designated inspectors shall be free at all times to perform their duties, including the observation and inspection of the Work, and intimidation or attempted intimidation of any one of them by the Contractor or by any of its employees shall be sufficient reason, if the City so desires, to terminate the Contract.
- (g) Any inspection, by whomsoever conducted, shall not relieve the Contractor from any obligation to perform the Work strictly in accordance with the plans and specifications, and any of the Work not so constructed shall be removed and made good by the Contractor at its own expense.

GC-21. SUPERINTENDENCE AND SUPERVISION

Contractor shall provide all necessary supervision to the Work using its best skill, care, judgment and attention and shall keep on the Work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to City Engineer. The superintendent shall not be changed except with the consent of the City Engineer unless the superintendent proves to be unsatisfactory to the Contractor and/or ceases to be in its employ; provided however, that the City Engineer retains the right to require that the Contractor replace the superintendent at any time, such right not to be arbitrarily exercised.

The superintendent shall be fully authorized to act for the Contractor and receive whatever orders as may be given for the proper prosecution of the Work or notices in connection therewith. Use of Subcontractors on portions of the Work shall not relieve the Contractor of its obligation to have a competent superintendent directly employed by the Contractor on the Work at all times.

GC-22. CONTRACTOR'S OFFICE AT SITE OF WORK

During the performance of this Contract, the Contractor shall maintain a suitable office at or near the site of the Work which shall be the headquarters of the superintendent authorized to receive drawings, instructions, or other communications or articles from the City Engineer, and any such communication given to the said

superintendent or delivered at the Contractor's office at the site of the Work in his/her absence shall be deemed to have been given to the Contractor.

GC-23. CHANGES IN THE WORK

- (a) Change Orders. City, without invalidating the Contract, may by Change Order direct changes in the Work which may result in an addition to or deduction from the Contract Price and/or changes in the Contract Time. All Change Orders shall be executed under the provisions of the original Contract Documents. If the Change Order consists of a modification to the Contract Price, the value of such change shall be determined as per paragraph (e) below.

Except for Work done as a result of an emergency endangering life or property, no Work resulting in an additional pay item shall be performed unless pursuant to the provision of a Change Order.

- (b) Quantity Variations. Where changes in the Work involve a change in the quantity of any Bid item, the Contract Price shall be revised by extension of the quantities and unit price of all Bid items so changed subject to written approval of the City Engineer.
- (c) Field Orders. City Engineer may order minor changes in the Work through field orders, which in no material or substantial way increase or decrease the Work; and such minor changes in the Work shall not involve an addition or deduction from the Contract Price nor an extension of the Contract Time.
- (d) From time to time the City Engineer may also issue written orders to Contractor for needed clarifications, modifications or corrections. Should a difference of opinion arise as to whether the order constitutes extra work for which additional compensation is due, and the City insists on its performance, the Contractor shall proceed with the work after making a written request for a Change Order, and it shall keep an accurate account of the actual field cost thereof as provided for in (e)(3) below. The Contractor will thereby preserve the right to submit a claim therefor. The failure of Contractor to make a written request for a Change Order shall operate as a waiver of any such claim.
- (e) The value of any change in the Work which results in an addition/deletion to the Contract Price shall be determined in one or more of the following ways, at the option of City:
 - (1) By agreed lump sum.
 - (2) By unit prices named in the Contract or subsequently agreed upon.

- (3) By actual, documented field cost (time and material) plus fifteen percent (15%) and shall include a "Not to Exceed" figure.

In order to arrive at the value for any change, Contractor shall credit City with its projected cost(s), including overhead and fee for any Work which was previously included but which has been excluded by any such change.

- (f) No change in the Work shall entail additional time unless the City Engineer determines that additional time is required and specifically so provides in the Change Order. No change in the Work shall entitle the Contractor to an adjustment in the Contract Price unless the City Engineer determines that a change in the Contract Price is required and specifically so provides in the Change Order.
- (g) Where extra work is performed under (e)(3) above, the term "actual field cost" of such extra work is hereby defined to be and shall include:
- (1) The cost of all workers, such as foremen, timekeepers, mechanics, and laborers, for the time actually employed in the performance of the said extra work;
 - (2) All materials and supplies;
 - (3) Trucks and rental on machinery and equipment for the time actually employed or used in the performance of said extra work;
 - (4) Any transportation charges necessarily incurred in connection with said equipment authorized by the City Engineer for use on said work and similar operating expenses;
 - (5) All incidental expenses incurred as a direct result of such extra work, including payroll taxes and a ratable proportion of premiums on construction bonds and, where the premiums therefor are based on payroll costs, public liability and property damage, worker's compensation, and other insurance required by the Contract; provided, however, Contractor must enumerate and justify to City's satisfaction any such claimed incidental expenses; and provided, further, that without in any way limiting City's right to challenge any individual costs claimed by Contractor, incidental costs shall not include:
 - (a) Payroll costs and other compensation of Contractor's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and

contracting agents, expeditors, timekeepers, clerks and other personnel employed by Contractor whether at the site or in Contractor's principal or a branch office for general administration of the work unless specifically agreed to by City - all of which are to be considered administrative costs covered by the Contractor's overhead and profit.

- (b) Expenses of Contractor's principal and branch offices other than Contractor's office at this site.
- (c) Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- (d) Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.
- (e) Other overhead of general expense costs of any kind and the costs of any item not specifically and expressly agreed to by City.

The City Engineer may direct the form in which accounts of the actual field cost shall be kept and may also specify in writing, before the Work commences, the method of doing the Work and the type and kind of machinery and equipment, if required, which shall be used in the performance of extra work under (e)(3) above. In the event that machinery and heavy construction equipment shall be required for such extra work the authorization and basis of payment for the use thereof shall be stipulated in the written extra work order.

The fifteen percent (15%) of the actual field cost to be paid to the Contractor shall cover, and be full compensation for, the Contractor's profit, overhead, general superintendence, field office expense and all other elements of cost not embraced within the "actual field cost" as herein defined.

- (h) In the event that unit prices are provided for in the Contract Documents as to all or a part of the Work, if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of Work proposed is substantially inequitable to either the City or the Contractor, the unit prices shall be reevaluated and adjusted in accordance with the following:

- (1) If the total cost of a particular item of Unit Price Work amounts to twenty (20) percent or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than thirty-three (33) percent from the estimated quantity of such item indicated in the Contract; and
- (2) If there is no corresponding adjustment with respect to any other item of Work; and
- (3) If Contractor has incurred additional expense as a result thereof; or
- (4) If City believes that the quantity variation entitles it to an adjustment in the unit price and, the parties are unable to agree as to effect of any such variations in the quantity of Unit Price Work performed;

then either City or Contractor may request the City Engineer to make an adjustment in the Contract Price.

- (i) No claim for extra work of any kind will be allowed except as provided herein. If extra work orders are given in accordance with the provisions of this Contract, such work shall be considered a part hereof and subject to each and all of the terms and requirements of this Contract.
- (j) Contractor shall be responsible for notifying his surety(ies) of any modifications to the Contract Price or Time, and said surety(ies) shall not seek discharge as a result of any failure on Contractor's part to notify surety(ies).

GC-24. DEDUCTIONS FOR DEFECTIVE OR NONCONFORMING WORK

If City deems it inexpedient to accept Defective Work or Work which does not conform to the Contract Documents or to have corrected any Work which is not in accordance with the Contract Documents, an equitable deduction from the Contract price shall be made therefor.

GC-25. DELAYS AND EXTENSION OF TIME

- (a) If Contractor shall be delayed at any time in the progress of the Work by an act or omission of City or by any separate contractor employed by City and over which Contractor has no control and which is not a result of the Contractor's acts or the acts of any of its employees, Subcontractors or suppliers, negligent or otherwise, then the Contract Time and the Contract Price may be extended and/or adjusted for such reasonable time and amount as the City Engineer shall decide.

- (b) No such extension shall be made for delay unless Contractor provides written notice to City Engineer of such delay, the reasons therefor and the expected length of delay within seven (7) days of the commencement of such delay. In the case of continuing cause of delay, only one written notice is necessary.
- (c) In executing the Contract, the Contractor expressly covenants and agrees that, in the undertaking to complete the Work within the time therein fixed, it has taken into consideration and made allowances for all hindrances and delays incident to such Work, whether growing out of delays in securing materials, workers, weather conditions or otherwise. No charge shall be made by the Contractor for hindrances or delays from any cause during the progress of the Work, or any portion thereof, included in this Contract, except as provided in subparagraphs (a), (b) or (d).
- (d) The Contractor shall delay or suspend the progress of the Work or any part thereof, whenever it shall be so required by written order of the City Engineer, and for such periods of time as the City Engineer shall require; provided, that in the event of such delay or delays or of such suspension or suspensions of the progress of the Work, or any part thereof, the time for completion of Work so suspended or of work so delayed by such suspension or suspensions shall be extended for a period equivalent to the time lost by reason of such suspension or suspensions; but such order of the City Engineer shall not otherwise modify or invalidate in any way, any of the provisions of this Contract. In the event that the Work shall be stopped by order of the City Engineer, through no fault of the Contractor, its employees, Subcontractors or suppliers, any incidental expenses (see paragraph GC-23 (g) (5)) which, in the opinion and judgment of the City Engineer, are caused thereby shall be paid by the City to the Contractor.

GC-26. WORK STOPPAGES

Contractor warrants to the City that there shall be no work stoppages or interruptions arising out of labor disputes, including, but not limited to, those due to the presence of both union and non-union workforces at the job site. The City may assign to Contractor a separate gate (e.g., union or non-union gate, as applicable). The gate assigned shall be used by Contractor and all Contractor's employees, Subcontractors, visitors, suppliers, vendors and materials deliveries, as applicable. Contractor agrees that Contractor's employees and its Subcontractor's employees will continue to work notwithstanding any dispute that may involve any other contractor or employer at the job site. Anything in this Contract to the contrary notwithstanding, in the event the Contractor fails to continue performance of the Work included herein without interruption or delay, because of such picket or other form of labor dispute, the City may terminate the services of said Contractor after giving 48 hours written notice to Contractor and its sureties of its intent to do so, or the City may invoke any of the rights set forth elsewhere in the Contract Documents.

GC-27. PATENT LIABILITY CLAUSE

Contractor agrees to defend any claim, action or suit that may be brought against City, its governing body, officers, agents or employees for infringement of any patents arising out of the performance of this Contract or out of the use or disposal by or for the account of City of supplies furnished or construction work performed hereunder, and also to indemnify and hold harmless City, its governing body, officers, agents, and employees against all judgments, decrees, damages, costs and expenses recovered against it or them sustained by it or them on account of any such actual or alleged infringement.

It is understood that all royalties and fees for and in connection with patents, or patent infringement, claims for materials, articles, apparatus, devices or equipment used in or furnished for the Work shall be included in the Contract Price. Final payment to the Contractor by the City shall not be made while any suit or claim involving infringement or alleged infringement of any patent remains unsettled.

GC-28. INDEPENDENT CONTRACTOR

The right of general supervision of the City and/or the City Engineer shall not make the Contractor an agent of the City, and the liability of the Contractor for all damages to persons, firms and corporations arising from the Contractor's execution of the Work shall not be lessened because of such general supervision, but as to all such person, firms and corporations, and the damages, if any, to them or their property, the contractor herein is an independent contractor in respect to the Work.

GC-29. SEPARATE CONTRACTS

- (a) City reserves the right to perform with its own forces or let other contracts in connection with the Project. Contractor shall afford reasonable opportunity for the introduction and storage of materials and the execution of work by City or others and shall properly connect and coordinate its Work with the work of City or others.
- (b) If any part of Contractor's Work depends upon the work of the City or others, Contractor shall inspect and promptly report to City any defects in any such work that renders it unsuitable for proper execution or results. Its failure to so inspect and report shall constitute an acceptance by it of such other work as fit and proper for the reception of its work.

GC-30. RELATIONS WITH OTHER CONTRACTORS

The Contractor shall cooperate with all other contractors or workers who may be performing work on behalf of the City or any other entity on any work in the vicinity of the Work to be done under this Contract, and it shall so conduct its operations so as to

interfere to the least possible extent with the work of such contractors or workers. Contractor shall be responsible for any injury or damages that may be sustained by other contractors, workers or their work because of any fault or negligence on Contractor's part, and shall at its own expense repair or pay for such injury or damage. Any difference or conflict which may arise between the Contractor and contractors or between the Contractor and the workers of the City, or any other entity in regard to their work, shall be adjusted and determined by the City Engineer. If the Work of the Contractor is delayed or damaged because of any acts or missions of any other contractor or contractors, the City may, in its discretion, grant an extension of Contract Time and/or an adjustment in the Contract Price as may be appropriate in the circumstances.

When two or more contracts are being executed at one time in such manner that work on one contract may interfere with that on another, the City Engineer shall decide which contractor shall cease work and which shall continue, whether the work on both contracts shall progress at the same time, and in what manner the work is to proceed.

When the work site of one contract is the necessary or convenient means of access for the transportation or movement of workers, materials or appliances required for the execution of another contract, such privileges of access or any other responsible privilege may be granted by City Engineer to the contractor so desiring to the extent which may be reasonably necessary.

In the event that Contractor is performing work at a site or on a project involving City and one or more other private or governmental entities, which have their own contractors on site as well, Contractor shall advise City Engineer when it anticipates that there may be interference with the Contractor's work or with the work of any other contractor. City Engineer shall, to the best of its ability, with input from Contractor as to coordination of the work, seek to schedule work of the various contractors so as to avoid as much inconvenience and delay as possible; provided, however, that in the event Contractor experiences a delay or damage to the Contractor's work as a result of the presence of other such contractors the City may, in its discretion, grant an extension of Contract Time and/or an adjustment in the Contract Price as may be appropriate in the circumstances.

GC-31. INDEMNITY

(a) Definitions

For purposes of indemnification requirements as set forth throughout the Contract, the following terms shall have the meanings set forth below:

- (1) "The Contractor" means and includes Contractor, all of his affiliates and subsidiaries, his Subcontractors and materialmen and their respective servants, agents and employees; and

- (2) "Loss" means any and all loss, damage, liability or expense, of any nature whatsoever, whether incurred as a judgment, settlement, penalty, fine or otherwise (including attorney's fees and the cost of defense), in connection with any action, proceeding, demand or claim, whether real or spurious, for injury, including death, to any person or persons or damages to or loss of, or loss of the use of, property of any person, firm or corporation, including the parties hereto, which arise out of or are connected with, or are claimed to arise out of or be connected with, the performance of this Contract whether arising before or after the completion of the Work required hereunder.

(b) The Indemnity

For purposes of this Contract, and without in any way limiting indemnification obligations that may be set forth elsewhere in the Contract, and to the greatest extent permitted by applicable law, Contractor hereby agrees to indemnify, defend and hold harmless the City from any and all Loss to the extent such Loss is caused or incurred by, on account of or as a result of the negligence or other actionable fault of the Contractor, his employees, agents, Subcontractors and suppliers or any other party for whom he is responsible.

It is agreed as a specific element of consideration of this Contract that this indemnity shall apply notwithstanding the joint, concurrent or contributory or comparative fault or negligence of the City or any third party and, further, notwithstanding any theory of law including, but not limited to, a characterization of the City's or any third party's joint, concurrent or contributory or comparative fault or negligence as either passive or active in nature.

(c) General Limitation

Nothing in this section shall be deemed to impose liability on the Contractor to indemnify the City for Loss to the extent that the City's negligence or other actionable fault is the cause of Loss.

(d) Waiver of Statutory Defenses

With respect to the City's rights as set forth herein and to the greatest extent permitted by applicable law, the Contractor expressly waives all statutory defenses, including, but not limited to, those under workers compensation, contribution, comparative fault or similar statutes to the extent said defenses are inconsistent with or would defeat the purposes of this section.

GC-32. PROTECTION OF PROPERTY/LIABILITY

Without in any manner limiting Contractor's responsibilities as provided elsewhere in the Contract Documents, the Contractor shall assume full responsibility for the protection of all public and private property, structures, sewers and utilities, both above the ground and Underground Facilities, along, beneath, above, across or near the site or sites of the Work being performed under this Contract, or which are in any manner affected by the prosecution of the Work or the transportation of workers or materials in connections therewith. Barriers shall be kept placed at all times to protect persons other than those engaged on or about the Work from accident, and the Contractor will be held responsible for all accidents to persons or property resulting from the acts of Contractor or its employees.

The Contractor shall give reasonable notice to the affected owner or owners when any such property is liable to injury or damage through the performance of the Work and shall make all necessary arrangements with such owner or owners relative to the removal and replacement or protection of such property and/or utilities.

The Contractor shall satisfactorily shore, support and protect any and all structures and all excavations, pipes, sewers, drains, conduits and other facilities and shall be responsible for any damage resulting thereto. The Contractor shall not be entitled to any additional Contract Time on account of any postponement, interference or delay caused by any such structures and facilities being on the line of the Work, whether they are shown on the plans or not.

GC-33. PROVISION FOR EMERGENCIES

Whenever, in the opinion of the City Engineer, the Contractor has not taken sufficient precaution for the safety of the public or the protection of the Work to be constructed under this Contract, or of adjacent structures or property which may be injured by process of construction, and whenever, in the opinion of the City Engineer, an emergency shall arise and immediate action shall be considered necessary in order to protect property interests and to avoid personal injury and/or death, then the City Engineer, with or without notice to the Contractor, shall, upon notification to the City, provide suitable protection to the said interests by causing such work to be done and materials to be furnished at places as the City Engineer may consider necessary and adequate. The cost and expense of such work and material so furnished shall be borne by the Contractor and, if the same shall not be paid on presentation of the bills therefor, such costs shall be deducted from any amounts due or to become due the Contractor. The performance of such emergency work shall in no way relieve the Contractor of responsibility for damages which may occur during or after such precaution has been duly taken.

GC-34. ASSIGNMENT AND SUBLETTING OF CONTRACT

In case the Contractor assigns all, or any part, of the monies due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due the Contractor shall be subject to all prior claims of all persons, firms, and corporations for services rendered or materials supplied for the performance of the Work called for in this Contract and that no money shall be paid assignee on behalf of the Contractor by the City until such time as the Contractor has discharged his obligations to the City under the Contract. It is expressly understood and agreed that no assignment shall be effective as against the City unless it complies with the foregoing.

The Contractor shall not award subcontracts which total more than fifty percent (50%) of the Contract and shall perform within its own organization work amounting to not less than fifty percent (50%) of the total Contract Price. Should any Subcontractor fail to perform in a satisfactory manner, the Work undertaken by such Subcontractor shall be immediately terminated by the Contractor. The Contractor shall be as fully responsible to the City for the acts and omissions of its Subcontractors, and of persons either directly or indirectly employed by them, as Contractor is for the acts and omissions of persons directly employed by him. Approval by the City of any Subcontractor shall not constitute a waiver of any right of the City to reject Defective Work, material or equipment not in compliance with the requirements of the Contract Documents. The Contractor shall not make any substitution for any Subcontractor accepted by the City unless the City so agrees in writing.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the work of the Subcontractor and to give the Contractor the same power to terminate any subcontract as the City has to terminate the Contractor under any provisions of the Contract Documents.

Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the City, nor shall anything contained in the Contract Documents create any obligation on the part of the City to pay to or to see to the payment of any sums due any Subcontractor.

Prior to the City's approval of the Contract Bid, the successful Bidder shall submit to the City Engineer or the City's designated representative for City acceptance a list of the names of all Subcontractors proposed for portions of the Work and shall designate which Work each is to perform.

The City Engineer or the City's designated representative shall, prior to City's approval of the Contract Bid, notify the successful Bidder, in writing, if the City, after due investigation, has reasonable objection to any Subcontractor on such list, and the Contractor shall substitute a Subcontractor acceptable to the City at no additional cost

to the City or shall be allowed to withdraw its Bid, and the City shall either rebid the Project or accept the next best lowest and responsible Bidder. The failure of the City to make objection to a Subcontractor shall constitute an acceptance of such Subcontractor but shall not constitute a waiver of any right of the City to reject Defective Work, material or equipment not in conformance with the requirements of the Contract Documents.

The Contractor shall not make any substitution for any Subcontractor who has been accepted by the City unless the City Engineer or the City's designated representative determines that there is a good cause for doing so. The City's disapproval of any Subcontractor shall not, under any circumstance, be the basis for an increase in the Contract Price or a claim for extension of Contract Time.

GC-35. DISPUTE RESOLUTION

City and Contractor agree that disputes relative to the Work shall first be addressed by negotiations between the parties. If direct negotiations fail to resolve the dispute, the party initiating the claim that is the basis for the dispute shall be free to take such steps as it deems necessary to protect its interests; provided, however, that notwithstanding any such dispute Contractor shall proceed with the Work as per the Contract Documents as if no dispute existed.

In order to preserve its rights to dispute a matter hereunder, the complaining party must submit a written notice to the other party setting forth the basis for its complaint within twenty (20) calendar days following receipt of the decision of the City Engineer as to such matter as per paragraph GC-37. No dispute resolution steps outlined herein shall be a condition precedent to any legal action.

GC-36. INSURANCE

The Contractor shall secure and maintain through the duration of this Contract insurance (on an occurrence basis unless otherwise agreed to) of such types and in such amounts (but not less than the amounts set forth in paragraph IB-8 of the Instructions to Bidders) as may be necessary to protect the Contractor and the City and agents of the City against all hazards or risks of loss as hereinafter specified. The form and limits of such insurance, together with the underwriter thereof in each case, shall be approved by the City, but regardless of such approval it shall be the responsibility of the Contractor to maintain adequate insurance coverage at all times. Failure of the Contractor to maintain adequate coverage shall not relieve it of any contractual responsibility or obligation, including but not limited to, the indemnification obligation.

Satisfactory certificates of insurance shall be filed with the City prior to Contractor's starting any construction Work on this Contract. The Certificates shall state that thirty (30) days written notice will be given to the City before any policy covered thereby is changed or cancelled. Failure by the Contractor to furnish the required insurance within the time specified in the notice of award of the Contract by the City

may, at the City's option, be the basis for the City's exercising its right to terminate the Contract pursuant to paragraph GC-40.

- (a) General Liability - This insurance shall protect the Contractor against all claims arising from the injuries to members of the public (including death) or damage to property of others arising out of any act or omission of the Contractor or its agents, employees or Subcontractors. In addition, this policy shall specifically insure the contractual liability assumed by the Contractor under paragraph GC-31.

The property damage liability coverage shall contain no exclusion relative to blasting, explosion, and collapse of building or damage to underground property and/or facilities.

The liability limits shall be as stated in the Instructions to Bidders or in the Special Conditions. In all cases, the specified General Aggregate limit shall apply separately to each Project.

- (b) Automobile Liability - This insurance shall protect the Contractor against all claims for injuries to members of the public (including death) and damage to property of others arising from the use of motor vehicles, and shall cover operation on and off the site of all motor vehicles licensed for highway use, whether they are owned, non-owned or hired.

The liability limits shall be as stated in the Instructions to Bidders or in the Special Conditions.

- (c) Worker's Compensation and Employer's Liability - This insurance shall protect the Contractor against all claims under applicable state worker's compensation laws. The Contractor shall also be protected against claims for injury, disease or death of employees which, for any reason, may not fall within the provisions of a worker's compensation law. This policy shall include an "all states" endorsement.

The liability limits shall be as stated in the Instructions to Bidders or in the Special Conditions.

- (d) Additional Insurance -

- (1) The Contractor shall be required to purchase an Owner's Protective Liability Insurance Policy, issued on an occurrence basis and covering bodily injury (including death) and property damage, naming the City as Named Insured. The liability limits shall be as stated in the Instructions to Bidders or in the Special Conditions. The original policy shall be placed on file with the City and maintained during the life of the Contract. Such policy shall contain

no exclusion relative to any function performed by the City or its employees and agents in connection with the Work.

- (2) The Contractor shall add the City, the City Engineer, the City's agents, servants and employees and _____ as additional insureds to the Contractor's General Liability and Automobile Liability policies to the greatest extent permitted by applicable law.
 - (3) Additional insurance covering special hazards may be required on certain projects. Such additional insurance requirements shall be as specified in Instructions to Bidders or Special Conditions.
- (e) Subcontractor's Insurance - If a part of the Contract is to be sublet, the Contractor shall cover all Subcontractors in its insurance policies.

GC-37. AUTHORITY AND DUTY OF THE CITY ENGINEER

It is mutually agreed by and between the parties to this Contract that the City Engineer shall observe and inspect all Work included herein (provided, however, that any such observations and inspections shall not alter the rights, responsibilities and obligations of the parties as set forth in paragraph GC-20. Anything in the Contract Documents to the contrary notwithstanding, in order to prevent delays and disputes and avoid the necessity of litigation, it is further agreed by and between the parties to this Contract that the City Engineer shall in all cases determine the amount and quantities of the several kinds of Work which are to be paid for under this Contract; that City Engineer shall determine all questions relating to the Plans and Specifications for the Project; that City Engineer shall issue promptly any written clarifications or interpretations of the requirements of the Contract Documents (in the form of drawings or otherwise) which City Engineer may determine are necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents; that City Engineer's decisions and findings shall be a condition precedent to the right of the parties to submit any proper matter and to any rights of the Contractor to receive any money under this Contract; provided, however, that should the City Engineer render any decision or give any direction which, in the opinion of either party hereto, is not in accordance with the meaning and intent of this Contract, either party may file with the other, within twenty (20) days a written objection to the decision or direction so rendered and, by such action, may reserve the right to submit the question so raised as herein provided, except as otherwise provided in paragraph GC-35. It is the intent of the Contract that there shall be no delay in the execution of the Work, and the decisions or directions of the City Engineer as rendered shall be promptly carried out.

GC-38. CORRECTION OF LABOR, ETC.- BEFORE FINAL PAYMENT

At City Engineer's request, Contractor shall, at Contractor's expense, promptly remove from the job site all labor, supplies, materials, equipment and/or other facilities condemned by City Engineer as not in accordance with the Contract Documents, whether incorporated or not; and the Contractor shall, at Contractor's expense, promptly replace and re-execute all labor, supplies, materials, equipment and/or other facilities in accordance therewith and, at Contractor's expense, restore all work of other contractors and Subcontractors destroyed or damaged as a result of such removal, replacement and re-execution.

GC-39. CORRECTION OF LABOR, ETC.-AFTER FINAL PAYMENT

- (a) Contractor guarantees to City that all Work performed under this Contract shall be free from defects in material and workmanship for a period of two (2) years from the date of final payment by City; provided, however, that whenever any provision of the Contract Documents requires a guarantee for a period in excess of two (2) years to be furnished by Contractor, Contractor shall promptly execute same in writing and shall promptly deliver same to City.
- (b) Contractor shall promptly procure from each Subcontractor a written guarantee that all Work performed by such Subcontractor shall be free from defects in material or workmanship for a period of two (2) years from the date of final payment by City to Contractor and shall promptly deliver same to City; provided, however, that wherever any provision of the Contract Documents requires a guarantee for a period in excess of two (2) years to be furnished by a Subcontractor, Contractor shall promptly procure same in writing from the appropriate Subcontractor and shall promptly deliver same to City.
- (c) Whenever any provision of the Contract Documents requires a guarantee for a period in excess of two (2) years but does not specify who is to give such a guarantee, it shall be given by the Contractor regardless of who is performing the Work for which the guarantee is required. All such guarantees shall be in writing and shall be promptly delivered to City.
- (d) The furnishing of guarantees by Subcontractors and materialmen shall not relieve Contractor of his obligations under guarantees required of Contractor under the Contract Documents. In addition to the above guarantees, Contractor will (1) obtain and assign to City all available manufacturer and supplier warranties; and (2) at City's sole option, assign to City any rights Contractor may have against any Subcontractor and/or supplier for Defective Work, materials or equipment.

- (e) Any provision of the Contract Documents to the contrary notwithstanding, all guarantees provided for in the Contract Documents shall begin to run from the date of final payment by City to Contractor.
- (f) Neither the issuance of the final certificate, payment nor any provision in the Contract Documents shall relieve the Contractor of responsibility for Work determined by City not to be in accordance with the Contract Documents. If, within two (2) years of the date of final payment to Contractor or within any longer period of time as may be prescribed by applicable law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found by City to be defective or not in conformance with the Contract Documents then, at City's request, Contractor shall, at Contractor's expense, promptly remove from the premises all Work determined by the City to be defective or not in accordance with the Contract Documents; and Contractor shall, at Contractor's expense, promptly replace and re-execute all Work in accordance therewith and, at Contractor's expense, restore all Subcontractors' Work and Work of other contractors and subcontractors damaged as a result of such removal, replacement and re-execution. City shall with reasonable promptness give notice of any Work condemned by City as not in accordance with the Contract Documents. If, within ten (10) days after the mailing of such notice, the Contractor shall fail or neglect to make, or undertake to make, with due diligence any required repairs or corrections, the City may make such repairs at Contractor's expense; provided, however, that, in case of an emergency which, in the judgment of City, would cause serious loss, hazard or damage if not corrected immediately, such repairs may be made without prior notice being sent to the Contractor, and Contractor shall nevertheless be liable to the City for the cost thereof.

GC-40. RIGHT OF CITY TO TERMINATE CONTRACT

Without in any manner limiting the right of the City to terminate the Contract or declare the Contractor in default thereof for any reason set forth in the Contract Documents, if the Work to be done under this Contract shall be abandoned by the Contractor; or if this Contract shall be assigned by Contractor otherwise than as herein provided; or if the Contractor should be judged as bankrupt; or if a general assignment of its assets should be made for the benefit of its creditors; or if a receiver should be appointed for the Contractor or any of its property; or if at any time the City Engineer shall certify in writing to the City that the performance of the Work under this Contract is being unnecessarily delayed, that the Contractor is violating any of the conditions or covenants of this Contract or the specifications therefor, that it is executing the same in bad faith or otherwise not in accordance with the terms of said Contract; or if all Bid items of the Project are not completed within the time named for their completion or within the time to which such completion date may be extended; then, in addition to other rights the City may choose to exercise, the City may, at its option, serve written

notice upon the Contractor and its surety of City's intention to terminate this Contract, and unless within five (5) days after the serving of such notice upon the Contractor, a satisfactory arrangement be made for the continuance thereof, this Contract shall cease and terminate. In the event of such termination, the City shall immediately serve notice thereof upon the surety and the Contractor, and the surety shall have the right to take over and complete the Work; provided, however, that if the surety does not commence performance thereof within thirty (30) days from the date of said notice of termination, the City may take over the Work and prosecute same to completion, by contract or otherwise, for the amount and at the expense of the Contractor, and the Contractor and its surety shall be liable to the City for any and all excess cost sustained by the City by reason of such prosecution and completion; and in such event the City may take possession of, and utilize in completing the Work, all such materials, equipment, tools and plant as may be on the site of the Work and necessary therefor. When Contractor's services have been so terminated, such termination shall not affect any rights or remedies of City against Contractor then existing or which may later accrue. Similarly, any retention or payment of monies due Contractor shall not release Contractor from liability.

City reserves the right, in its sole discretion and for its convenience and without cause or default on the part of Contractor, to terminate the Contract by providing written notice of such termination to Contractor. Upon receipt of such notice from City, Contractor shall: (1) immediately cease all work; or (2) meet with City and, subject to City's approval, determine what Work shall be required of Contractor in order to bring the Project to a reasonable termination in accordance with the request of City. If City shall terminate for its convenience as herein provided, City shall: (1) compensate Contractor for all purchased materials and actual cost of work completed to date of termination; and (2) release and indemnify Contractor against any liability Contractor may have to any third parties as the result of any contracts, commitments, purchase orders or any other such liabilities Contractor may have incurred as a result of its obligations under the provisions of the Contract. Contractor agrees that it shall minimize such potential liabilities by, where practical, informing third parties of City's right to terminate and attempting to obtain from such third parties a waiver of any liability in the event of such termination.

Any termination of the Contract for alleged default by Contractor that is ultimately determined to be unjustified shall automatically be deemed a termination for convenience of the City.

GC-41. CITY'S RIGHT TO DO WORK

Without otherwise limiting City's rights under the Contract Documents, if Contractor should neglect to prosecute the work properly or fail to perform any provision of the Contract Documents, City, after three (3) days' written notice to Contractor may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due Contractor.

GC-42. PAYMENTS

- (a) Before the first application for payment, the Contractor shall submit to the City Engineer a schedule of values allocated to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the City Engineer may require. This schedule, unless objected to by the City Engineer, shall be used only as a basis for the Contractor's applications for payment and does not constitute approval by the City Engineer of the method or performance by the Contractor.
- (b) Payment will be made to Contractor monthly from funds available within thirty (30) days of the City's receipt of a proper undisputed pay request from the Contractor on the basis of a duly certified estimate of the value of all labor and materials delivered on the site and accepted by the City Engineer during the preceding month, calculated in proportion to the Contract price, but to ensure the proper performance of the Contract, ten percent (10%) of the amount of each estimate will be retained, which retainage will be paid thirty (30) days after Substantial Completion of all work covered by the Contract unless the City is otherwise allowed by law to continue to retain said funds.
- (c) Each payment made to the Contractor shall be on account of the total amount payable to the Contractor by or for the City, and all materials and Work covered by the partial payments made shall therefore become the sole property of the City. This provision shall not be construed as relieving the Contractor from the responsibility imposed by the Contract Documents for the care and protection of materials and Work upon which payments have been made, for the restoration of any damaged Work, or as a waiver of the right of the City to require the fulfillment of all the terms of the Contract. Progress payments in respect to materials will be made only for materials delivered on the site and accepted by the City Engineer, all calculated in proportion to the Contract Price.
- (d) In general, no allowance will be made in estimates for materials delivered on the site and not incorporated in the Work except in case of those items considered by the City Engineer to be major items of considerable magnitude, which will be allowed in estimates on the basis on ninety percent (90%) of invoices, the value calculated in proportion to the Contract Price.
- (e) The retained percentages herein provided for are to be retained and held for the sole protection and benefit of the City, and no other person, firm or corporation shall have or assert any lien, claim, right or priority therein, thereon or thereto, or be entitled to receive any part thereof, except as herein expressly provided.

- (f) The City shall require at intervals as it shall determine and at any time before final payment is made for the Work specified herein that the Contractor furnish the City with written acknowledgements (to the extent of payment made) by all Subcontractors and vendors who have done Work or performed labor on, or who have furnished materials for, this Project that they have been paid in whole or in part by the Contractor for such Work or labor performed or materials furnished by them. Contractor's failure to furnish said list or to include all such Subcontractors and vendors shall not relieve Contractor or its surety of any obligation assumed under this Contract, nor shall the City's request for such list create any obligation on City's part to verify accuracy. City may require, at its option, lien waivers on forms supplied by City.
- (g) The Contractor has, per the Instructions to Bidders, bid this job net of all sales and compensation taxes. No application for payment shall include any amount for reimbursement of such taxes paid by Contractor resulting from Contractor's failure to use City's tax exemption certificate for any purchase in connection with the Work. Final payment will not be made to Contractor until the City shall have received two Project Completion Certifications from the Contractor along with a Consent of Surety to final payment.
- (h) The Contractor shall be responsible for the return and /or exchange of surplus materials, and all credits for returned or exchanged materials shall be first submitted to the City Engineer for approval. Applications for payment shall reflect any such credits, and the Contract Price shall be adjusted as necessary to reflect such credits. Unreturnable excess materials shall be turned over to the City, or, at its option, be removed from the Project site at Contractor's expense.
- (i) The acceptance by the Contractor of final payment shall be and shall operate as a release to the City of all claims and all liability to the Contractor other than written claims in stated amounts as may be specifically excepted by the Contractor for all things done or furnished in connection with this Contract and for every act and neglect of the City and others relating to or arising out of this Contract. Any payment, however, final or otherwise, shall not release the Contractor or its sureties from any obligations under the Contract Documents, the Bonds or insurance coverage.

GC-43. PAYMENTS WITHHELD

City may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any application for payment to the extent necessary to protect City from loss on account of:

- (1) Incomplete Work or Defective Work not remedied;
- (2) A reasonable doubt that the Work can be completed from the balance of the Contract Price then paid;
- (3) Damage to City; or
- (4) A breach of this Contract.

GC-44. LIQUIDATED DAMAGES

It is mutually understood and agreed by and between the parties to this Contract that time is of the essence of this Contract, and that in the event that the Contractor shall fail in the performance of the Work specified and required to be performed within the period of time stipulated therefor in the Contract, after due allowance for any extension or extensions of time which may be granted under the Contract, the said Contractor shall pay to City, as stipulated liquidated damages and not as a penalty, the sum stipulated herein for each and every day that the Contractor shall be in default.

In the case of joint responsibility for any delay in the final completion of the Work covered by this Contract, where two or more separate contracts are in force at the same time and cover work on the same Project and at the same site, the total amount of liquidated damages assessed against all contractors under such contracts, for any one day of delay in the final completion of the Work will not be greater than the approximate total of the damages sustained by the City by reason of such delay in completion of the Work as set forth in the table below, and the amount assessed against any one contractor for such one day of delay will be based upon the individual responsibility of such contractor for the aforesaid delay as determined by, and in the judgment of, the City.

In case of failure on the part of the Contractor to effect completion within the time specified the City shall have the right to deduct from the total compensation otherwise due the Contractor as liquidated damages, fixed and agreed to in advance, an amount according to the following schedule:

<u>Contract Amount</u>		<u>Liquidated Damages</u>	
\$0	to	\$25,000	\$75.00
\$25,000	to	\$50,000	\$125.00
\$50,000	to	\$100,000	\$200.00
\$100,000	to	\$500,000	\$400.00
\$500,000	to	\$1,000,000	\$600.00
\$1,000,000	to	\$2,000,000	\$925.00
\$2,000,000	to	\$5,000,000	\$1,375.00
\$5,000,000	to	\$10,000,000	\$2,000.00
\$10,000,000	and up		\$3,000.00

for each of the 24-hour calendar day, including Sundays and holidays, the work remains incomplete over the specified completion time. **(THE CITY RESERVES THE RIGHT TO ADJUST THE SCHEDULE OF LIQUIDATED DAMAGES, PRIOR TO ADVERTISING FOR BIDS, BASED ON THE SCOPE AND URGENCY OF THE PROJECT.)**

The City shall have the right to deduct said liquidated damages from any moneys in its hands, otherwise due or to come due, to the Contractor, or to sue for and recover compensation for damages for nonperformance of this Contract.

GC-45. BONDS

Contractor shall after notice of award furnish City the Performance Bond and the Statutory or Labor and Material Payment Bond as required by the Instructions to Bidders. Failure to furnish such Bonds within the time specified in the notice of award may, at the City's option, be the basis for declaring Contractor in default and pursuing such legal rights as the City deems in its best interest, including, but not limited to, enforcement of the City's rights as to bid security.

GC-46. EASEMENTS AND RIGHTS-OF-WAY

Permanent and temporary (construction) easements and rights-of-way will be provided by the City as shown on the Plans. The Contractor shall confine its operations to the easements provided and shall carefully note where buildings, structures or other obstructions will limit its working space. In the event that easements and rights-of-way are not available or if they have not been secured, or if entry to property is denied by court order, injunction, litigation or any other reason, the Contractor shall cease operations in such area and confine its work to other area approved by the City. In the event of any delay arising from delays in securing easements and rights-of-way, the Contractor may request an extension of time under paragraph GC-25.

GC-47. USE OF PREMISES

- (a) Contractor shall confine its operations to limits indicated by law, ordinances, rules, regulations, and permits of City or directions of City Engineer and shall not unreasonably encumber the premises and/or site.
- (b) Contractor shall not load or permit any part of any structure, street or highways to be loaded with a weight that exceeds load limits which that will endanger their safety.
- (c) Contractor shall comply with federal, state and local laws and ordinances, as well as any specific instructions regarding signs, advertisements, fires and smoking from City Engineer.

- (d) A laydown area or staging area will be provided at the site and shall be chosen by City Engineer. Contractor will furnish its own weather protection if required.
- (e) No City equipment will be taken out of service or put into service without approval of City.

GC-48. ALLOWANCES

Contractor agrees that the Contract Price includes all allowances required by the Contract Documents. Contractor declares that the Contract Price includes all other sums for expenses and overhead and fee on account of allowances as it deems proper. No demand for expenses or overhead and fee other than those included in the Contract Price shall be allowed.

GC-49. CUTTING, PATCHING AND DIGGING

- (a) Contractor shall do all cutting, fitting or patching of its work that may be required to make its several parts come together properly and fit it to receive or be received by work of others shown upon or reasonably implied by the Contract Documents.
- (b) Contractor shall not endanger any property of City or any other individual or entity, or the Work by cutting, digging or otherwise and shall not cut or alter the work others except with the written consent of City.
- (c) Contractor shall assume responsibility for the patching or repairs, by the proper trade, of damages caused by work under this Contract.
- (d) Contractor shall comply with all local ordinances dealing with cutting, patching and digging and shall obtain all necessary permits.

GC-50. CLEANING UP

Contractor shall at all times keep the premises/site free from accumulations of waste material or rubbish caused by its employee or Work; and at the completion of the daily Work it shall remove all its rubbish from and about the premises/site and all its tools, scaffolding and surplus materials, and shall leave its work "broom clean" or its equivalent unless more exactly specified. In case of dispute, City may remove the rubbish and charge the cost to Contractor.

GC-51. TEMPORARY FACILITIES

- (a) Except where special permission has been granted by City to use existing toilet facilities belonging to the City, Contractor shall provide and maintain sanitary temporary toilet facilities located where directed by City Engineer

for accommodation of all persons engaged on the Work. Temporary toilets shall be enclosed and weatherproof and kept in sanitary and an approved condition at all times. After use for same has ceased, Contractor shall remove the temporary toilet facilities from City's premises and disinfect and fill any vaults. All temporary toilet facilities shall comply with paragraph GC-52.

- (b) Contractor shall provide and maintain any necessary temporary offices, storerooms, roadways, etc., as may be required for its Work. Same shall be located and constructed in an approved manner acceptable to City Engineer. Upon completion of Work or when requested by City Engineer, Contractor shall remove same from City's premises and leave the area in a clean and orderly condition.
- (c) Contractor shall provide and maintain temporary heat as required to protect all Work and material against injury from dampness and/or cold to the satisfaction of City Engineer.
- (d) Unless otherwise specified in the Contract Documents, Contractor shall provide, at its cost and expense, temporary power, wiring and lights from City's provided source as may be required for its operations.

GC-52. SANITARY REGULATIONS AND WATER

The operations of the Contractor shall be in full conformity with all of the rules and regulations of boards and bodies having jurisdiction with respect to sanitation. The Contractor shall supply safe and sufficient drinking water to all of its employees. The Contractor shall obey and enforce all sanitary regulations and orders, and shall take precautions against infectious diseases and the spread of same.

All water used in the course of the Work shall be hauled in or purchased from the local Water Company's distribution system at the Contractor's own cost and expense.

GC-53. LAWS AND ORDINANCES

The Contractor shall comply with all City, County, State and Federal laws, ordinances or regulations which would in any way control the actions or operations of those engaged in the Work under this Contract or which would affect the materials supplied to or by them. It shall at all times observe and comply with all ordinances, laws and regulations and shall protect and indemnify and defend the City and the City's officers and agents against any claims or liability arising from or based on any violation of same.

GC-54. UNFAVORABLE CONSTRUCTION CONDITIONS

During unfavorable weather, or other unfavorable conditions for construction operations, the Contractor shall pursue only such portions of the Work as will not be damaged thereby. No portions of the Work, the satisfactory quality or efficiency of which will be affected by any unfavorable conditions, shall be constructed while these conditions exist, unless, by special means or precautions approved by the City Engineer, the Contractor shall be able to perform the Work in a proper and satisfactory manner.

GC-55. CONTRACTOR'S RISK

The Contractor shall assume full responsibility for the Work and shall bear any loss and repair any damage at his/her own cost occasioned by neglect, accident, vandalism or natural cause, whether foreseen or unforeseen, during the progress of the Work and until the Work is completed and accepted by the City.

GC-56. SAFETY RULES

- (a) Contractor shall be responsible for enforcing safety rules to assure protection of the employees and property of City, to assure uninterrupted production and to assure safe working conditions for Contractor and Subcontractors and their employees and to assure the safety of the general public. In addition to any other rights the City might exercise, Contractor and/or any Subcontractor failing to follow safety rules shall be subject to eviction from the job site and may be refused reentry.
- (b) Contractor is expected to establish and enforce a comprehensive safety program on this Project for the protection of its personnel, its Subcontractor's personnel, City's employees and all other persons exposed to hazards resulting from Contractor's operations. As a minimum requirement, Contractor shall review and discuss the details of its program with City Engineer at the first project meeting. The items to be covered shall include, but not necessarily be limited to,
 - 1. Personal protective equipment;
 - 2. First aid-personnel and facilities;
 - 3. Arrangements for medical attention;
 - 4. Sanitary facilities;
 - 5. Fire protection;
 - 6. Signs, signals, and barricades;
 - 7. Security regulations;
 - 8. Safety inspections;
 - 9. Designation of persons responsible for the program;
 - 10. Reporting forms and procedures;
 - 11. Material handling and storage;

12. Lines of communication;
13. Determination of potential hazards;
14. Personnel safety meetings and education;
15. Access to work areas;
16. Subcontractors involvement in the program;
17. Inspections and corrective action.

GC-57. WEEKENDS, HOLIDAY AND NIGHT WORK

No Work shall be done between the hours of 6:00 p.m. and 8:00 a.m., nor on weekends or City holidays, without the written approval or permission of the City Engineer 48 hours in advance in each case, except such Work as may be necessary for the proper care, maintenance and protection of Work already done or of equipment, or in the case of an emergency.

Night Work may be established by the Contractor, as a regular procedure, with the written permission of the City Engineer; such permission, however, may be revoked at any time by the City Engineer.

GC-58. APPROVAL OF EQUALS

"Approved Equals", where permitted by the Contract Documents or otherwise made feasible by market conditions, shall be considered for approval as follows:

- (1) Contractor shall notify City in writing if it wishes to use an approved equal specifically named in the Contract Documents.
- (2) If Contractor desires to use an "equal" not specifically named in the Contract Documents, it must first inform City and receive written approval for such substitutions. City has no obligation to approve such request and is not responsible for any delay or cost incurred or caused by Contractor's making such request.

The Contractor shall be solely responsible for design risks, delays and other claims arising out of any approved alternates.

GC-59. TEST OF MATERIALS OFFERED BY CONTRACTOR

All specified and required tests for approval of material shall be made at the expense of the Contractor by a properly equipped laboratory of established reputation, whose work and testing facilities shall be approved by the City Engineer. Approval of materials based on acceptable tests will apply only while such materials as furnished equal or exceed the tested samples or test specimens in quality and minimum requirements. Any change in origin, method of preparation or manufacture of such materials will require new test and approval thereof. Reports of all tests shall be

furnished to the City Engineer in as many certified counterparts as may be required by the City Engineer.

GC-60. TESTING OF COMPLETED WORK

Before Final Acceptance, all installed and constructed equipment, devices and other Work which is to be tested under the Contract Documents shall be tested and each part shall be in good condition and working order or shall be placed in such condition and order at the expense of the Contractor. All tests of such completed Work required under this Contract shall be made under the direction of the City Engineer.

GC-61. BORROW AND WASTE AREAS

All borrow materials shall be obtained by the Contractor at its own cost and expense. The borrow area and materials shall be approved by the City Engineer and shall be friable material suitable for compaction.

All waste areas shall be located off the site and arrangements and payment for use for such areas shall be the sole responsibility of the Contractor. All waste disposal shall be in compliance with federal, state, and local laws, ordinances and regulations.

GC-62. PARKING AREAS, DRIVES AND WALKS

All existing parking areas, drives and walks within the Project limits shall be adjusted to conform to the lines and grades shown on the plans. Any of the above structures that are removed or damaged during construction shall be reconstructed, at Contractor's expense, of materials that will create a quality equal to or better than the condition of the existing facility prior to construction operation.

GC-63. STREET SIGNS AND TRAFFIC AIDS

The Contractor shall be responsible for all preexisting traffic control devices at the Project site, including installation, maintenance, removal and storage of such devices. All temporary and permanent traffic control devices supplied by the Contractor shall comply with and be installed in accordance with the Manual on Uniform Traffic Control Devices, current edition as revised, and the Traffic Control Devices Handbook.

GC-64. PLACING WORK IN SERVICE/PARTIAL UTILIZATION

If desired by the City, portions of the Work may be placed in service when completed for partial utilization by the City, and the Contractor shall give proper access to the Work for this purpose; but such use and operation shall not constitute an acceptance of the Work, and the Contractor shall be liable for defects due to faulty construction until the entire Work under this contract is finally accepted and for such periods of time as designated in the Contract Documents or otherwise permitted by law.

GC-65. NON-DISCRIMINATION/OTHER LAWS

(A) The Contractor agrees that:

- (1) The Contractor shall observe the provisions of the Kansas Act Against Discrimination and shall not discriminate against any person in the performance of Work under the present contract because of race, religion, color, sex, disability, national origin, ancestry or age;
- (2) In all solicitations or advertisements for employees, the Contractor shall include the phrase, "equal opportunity employer," or a similar phrase to be approved by the Kansas Human Rights Commission (Commission);
- (3) If the Contractor fails to comply with the manner in which the Contractor reports to the Commission in accordance with the provisions of K.S.A 44-1031 and amendments thereto, the Contractor shall be deemed to have breached the present contract and it may be cancelled, terminated or suspended, in whole or in part, by the contracting agency;
- (4) If the Contractor is found guilty of a violation of the Kansas Act Against Discrimination under a decision or order of the Commission which has become final, the Contractor shall be deemed to have breached the present Contract and it may be cancelled, terminated or suspended, in whole or in part, by the contracting agency; and
- (5) The Contractor shall include the provisions of subsections (1) through (4) in every subcontract or purchase order so that such provisions will be binding upon such Subcontractor or vendor.

The provisions of this section shall not apply to a contract entered into by a Contractor:

- (a) Who employs fewer than four employees during the term of such contract; or
 - (b) Whose contracts with the City cumulatively total \$5,000 or less during the fiscal year of the City.
- (B) The Contractor further agrees that the Contractor shall abide by the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and the applicable provision of the Americans With Disabilities Act (42 U.S.C. 1201 et seq.) as well as all other federal, state and local laws, ordinances and regulations applicable to this project and to furnish any

certification required by any federal, state or local governmental agency in connection therewith.

GC-66. FEDERAL LOBBYING ACTIVITIES

31 U.S.C.S. Section 1352 requires all subgrantees, contractors, subcontractors and consultants who receive federal funds via the City to certify that they will not use federal funds to pay any person for influencing or attempting to influence a federal agency or Congress in connection with the award of any federal contract, grant, loan or cooperative agreements.

In addition, contract applicants, recipients and subrecipients must file a form disclosing any expenditures they make for lobbying out of non-federal funds during the contract period.

Necessary forms are available from the City Engineer and must be returned to the City with other Contract Documents. It is the responsibility of the Contractor to obtain executed forms from any Subcontractors who fall within the provisions of the Code and to provide the City with the same.

GC-67. RECORDS

Contractor shall maintain copies of records pertaining to the construction of this Project for a period of five (5) years from the date of final payment. Such records shall be made available to the City for audit and review purposes upon written request therefor from City or its authorized agent(s) during the construction period and the five (5) year period following final payment.

GC-68. TITLES AND SUBHEADS

Titles and subheadings as used herein and other Contract Documents are provided only as a matter of convenience and shall have no legal bearing on the interpretation of any provision of the Contract Documents.

GC-69. NO WAIVER OF RIGHTS

No waiver of any breach of this Contract shall be construed to be a waiver of any other subsequent breach.

GC-70. SEVERABILITY

The parties agree that should any provision of the Contract Documents be determined to be void, invalid, unenforceable or illegal for whatever reason such provision(s) shall be null and void but that the remaining provisions of the Contract Documents shall be unaffected thereby and shall continue to be valid and enforceable.

GC-71. GOVERNING LAW

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Kansas.

GC-72. VENUE

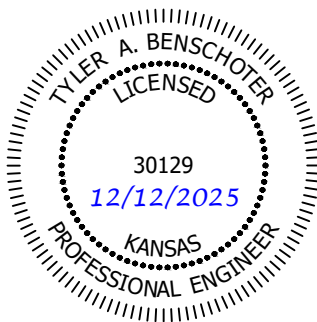
Venue of any litigation arising in connection with this Agreement shall be the state courts of Montgomery County, Kansas.

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City of Independence, Kansas

Verdigris River Low Water Dam Inspection & Improvements

TECHNICAL SPECIFICATIONS



Water Resources Solutions, LLC
5000 W. 95th Street, Suite 290
Prairie Village, Kansas 66207
Tel: (913) 302-1030
www.WRS-rc.com



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FOR
TECHNICAL SPECIFICATIONS
VERDIGRIS RIVER LOW WATER DAM INSPECTION & IMPROVEMENTS

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SECTION 01001 – GENERAL REQUIREMENTS

PART 1 – GENERAL

1.1 GENERAL

- A. These General Requirements are incorporated herein to clarify and expand the provisions previously set forth in the Contract Documents which these specifications and drawings are a part thereof.
- B. In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities:
 - 1. The Agreement
 - 2. Addenda, with those of later date having precedence over those of earlier date
 - 3. The Supplemental General Conditions
 - 4. The General Conditions of the Contract for Construction
 - 5. Drawings and Specifications
- C. In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the more stringent condition shall be provided in accordance with the Engineer's interpretation.
- D. The quality of workmanship shall be an important consideration in acceptance or rejection of work. It is expected that the Contractor shall provide qualified workmen who can produce a first quality project, as defined by approved samples. Work that fails to achieve a first quality standard may be considered defective and rejected. Such work shall be removed and replaced with new work of first quality, as defined by approved samples.
- E. The Contractor, being experienced in his trade, prior to submitting his bid, having made an inspection of the existing facilities and conditions; a thorough review of the Contract Documents; understanding that all systems are new; acknowledges that the installation of these systems must be complete and operational. Accordingly, all necessary parts, equipment, accessories and components must be supplied and installed, and must pass all final testing and operations. If a system component is missing in the Contract Documents, notify Engineer for clarification.

1.2 DRAWINGS AND SPECIFICATIONS

- A. Do not scale drawings for dimensions. Accurately layout such work from dimensions indicated on engineering drawings or by use of field verified dimensions. Consult the Engineer for interpretations concerning locations of equipment.

- B. Where drawings indicate a portion of the work and the remainder is shown in outline, the parts drawn out apply to other like portions of the work. Where detail is indicated by starting only, such detail shall continue to apply throughout the courses or parts in which it occurs and apply to similar parts of work unless otherwise indicated.
- C. Unless otherwise indicated, a detail indicates the general application of work at all locations where it logically applies, and other related work incident thereto shall be provided as required to fully complete the work in a manner consistent in the detail and other related details, and as approved by Engineer.

1.3 ENGINEER'S SELECTION AND APPROVAL OF MATERIALS

- A. Where approval of Engineer for material or equipment is required, secure such approval prior to bidding in a written request.
- B. The aesthetic values of every material and installation, such as shape, proportion, texture, finish and color, will be an important consideration to Engineer and his decisions concerning same shall be final, within the scope of the Contract Documents.

1.4 APPROPRIATE MATERIALS AND INSTALLATIONS

- A. Furnish materials and equipment that have been properly inspected and tested in accordance with accepted industry standards. Make field laboratory test where specified herein, the cost of such being paid for by the Contractor, unless otherwise specified.
- B. Before submitting any bids, the Contractor, and the Contractor's subcontractors and material suppliers shall observe the drawings and project manual and should any material and/or its installation be indicated or specified in a manner not approved by the material manufacturer, notify the Engineer and receive his instructions.

1.5 SITE ACCESS

- A. Contractor shall provide adequate access to the site at the locations shown on the attached map, or other access routes that may be negotiated with individual landowners by the contractor with approval of the City or Contracting Officer.

1.6 USE OF SITE

- A. Site storage shall be confined to areas as directed by City.

- B. The Contractor shall obtain and pay for any additional storage or work areas needed for construction operations.
- C. The Contractor shall be responsible for site maintenance within the construction area. Site maintenance includes trash pickup, and other actions that are required to maintain a neat and orderly site.
- D. The Contractor shall be responsible for maintenance beyond the construction area for areas affected by construction operations. Maintenance includes removal of trash, mud, gravel, and other debris.
- E. The Contractor is responsible for the security of the work area and for any building materials and equipment stored on the site. Maintain security of existing buildings where affected by work of this Contract.

1.7 PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall take charge of and assume full responsibility for proper protection of the construction areas.
- B. Protect previously placed work by suitable coverings or other protections during installation of subsequent work. Clean off any foreign materials accidentally deposited on finish surfaces and, where such would stain, corrode or otherwise disfigure, clean it immediately with material that will not damage finished work.
- C. Protect work in place requiring job finishing until such finishing has been completed. In cold weather, protect work from damage from frost and freezing. In hot weather, protect work from rapid drying.
- D. Dumping on site of any liquid wastes including oils, fuels, concrete or mortar cleaning activities, paint, etc., is prohibited.

1.8 INSTALLATION

The Contractor shall:

- A. Furnish, apply, install, connect, erect, clean and condition manufactured articles, materials and equipment per manufacturer's printed directions, unless otherwise indicated or specified.
- B. The manufacturer's printed directions must be on job prior to and during installation of materials and equipment.
- C. Make field check of actual dimensions before fabricating products.

- D. Install materials only when conditions of temperature, moisture, humidity, and condition of adjacent components are conducive to achieving best installation results.
- E. Handle materials in a manner to prevent scratching, abrading, distortion, chipping, breaking or other disfigurement.
- F. Fabricate and install materials true to line, plumb and level, unless indicated otherwise. Leave finished surfaces smooth and flat or of smooth contour where indicated, free from wrinkles, warps, scratches, dents and other imperfections.
- G. Conduct work in a manner to avoid injury to previously placed work.

1.9 CLOSING-IN WORK

- A. Notify the Engineer to inspect any work when placing of subsequent work would prevent observation of previous work.

1.10 DEFECTIVE WORK

- A. Unless the Engineer grants permission to repair any defective work, remove defective work from project and replace with new work in accordance with Contract Documents. If permission is granted, repair according to Engineer's direction. Permission to repair any such work shall not constitute a waiver of Engineer's right to require complete replacement of defective work if repair operation does not restore quality and appearance of member or surface to Engineer's satisfaction.

1.11 UNSUITABLE CONSTRUCTION CONDITIONS

- A. During unfavorable weather, wet ground, or other unsuitable construction conditions, the Contractor shall confine operations to work which will not be affected adversely thereby. No portion of the work shall be constructed under conditions which would adversely affect the quality of efficiency thereof, unless special means of precautions are taken by the Contractor to perform the work in a proper and satisfactory manner.

1.12 PERFORMANCE

- A. Where Drawings and/or Specifications designate a standard of performance, the completed installation shall perform at least to the designated standard.

1.13 TESTS OF MATERIALS

- A. Furnish materials and equipment that have been properly inspected and tested in accordance with accepted industry standards. Make field or laboratory tests where specified herein, the costs of such being paid for by Contractor, unless otherwise specified.
- B. Should such tests or visual observation indicate failure of materials or construction to meet requirements of the Drawings and/or Specifications, Contractor shall make and pay for additional tests, as directed by Engineer until compliance has been proven, and should such work fail to comply, Contractor shall replace it at his expense.

1.14 RECEIVING AND STORING MATERIALS

- A. On receipt of materials, check for in-transit damage in ample time to replace any damaged materials prior to installation time.
- B. Store materials in a manner to prevent deterioration, staining, soiling and intrusion of foreign materials. Provide waterproof, well-ventilated enclosures for materials subject to deteriorating by dampness. Adequately protect those materials subject to damage by freezing and frost.
- C. Remove from premises and replace with new, any materials showing deterioration or damage.

1.15 EXISTING UNDERGROUND INSTALLATIONS

- A. Existing underground installations such as water mains, gas mains, oil pipelines, sewers, telephone lines, power lines, and buried structures in the vicinity of the work to be done hereunder are indicated on the drawings only to the extent such information has been made available to or discovered by the Engineer in preparing the Drawings. There is no guarantee as to the accuracy or completeness of such information, and all responsibility for the accuracy or completeness thereof is expressly disclaimed. Generally, service connections are not indicated on the Drawings.
- B. It is the Contractor's responsibility to contact 1-800-DIG-SAFE. The Contractor shall be solely responsible for contacting all utility companies and locating all existing underground installations, including service connections, in advance of excavating or trenching, by contacting the owners thereof and prospecting. The Contractor shall use his own information and shall not rely upon any information shown on the drawings concerning existing underground installations.

- C. Any delay, additional work, or extra cost to the Contractor caused by existing underground installations shall not constitute a claim for extra work, additional payment, or damages.

1.16 PRESERVATION OF MONUMENTS AND STAKES

- A. The Contractor shall carefully preserve all monuments, benchmarks, property markers, reference points, and stakes. In case of his destruction thereof, the Contractor will be charged with the expense of replacement and shall be responsible for any mistake or loss of time that may be caused. In the cases of permanent monuments or benchmarks which must be removed or disturbed, the Contractor shall furnish material and assistance for the proper replacement of such monuments or benchmarks.

1.17 APPROPRIATE MATERIALS AND INSTALLATIONS

- A. Before submitting bid, Contractor, his subcontractors, and material suppliers shall observe existing conditions, Specifications, Drawings, and Addenda thereto and should any material and/or its installation be indicated or specified in a manner not approved by the material manufacturer, notify Engineer and receive his instructions. Failing to do so, Contractor shall provide other equivalent materials, suitable for the installation, as selected by Engineer or if not discovered until after installation, Contractor shall replace materials with such other equivalent suitable materials as approved by Engineer, and in either event at no added cost. If additional or other types of work are required for desired satisfactory results and specified guarantee, the additional or other work shall be included in bid amount and shall not constitute a basis of claim for “extra work” during or upon completion of this project.

1.18 CONSTRUCTION REQUIREMENTS

- A. Staking: A survey control point and benchmark are included in Drawings for Contractor’s use. All other surveying and staking will be the responsibility of the Contractor at his own expense.
- B. Geotechnical Reports: Subsurface data has not been obtained for design purposes. The bidder shall make his own interpretations of existing conditions and shall be expected to obtain additional data at his own expense if required to satisfy himself as to the conditions to be encountered.
- C. Storage: All equipment and materials to be incorporated into the work shall be stored in a manner to prevent damage from the elements, work, or handling. No damaged or deteriorated materials will be accepted. All storage, to include Owner-provided items, will be at the expense of the Contractor.

1.19 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: The Contractor shall perform the activities necessary to properly coordinate the material and equipment procurement and the work provided by him and his subcontractors. The Contractor also shall coordinate his work with the City when required for the best overall coordination of the project.
- B. Progress Meetings: The Contractor shall hold progress meetings on the site with the City and Engineer, to discuss job-related problems. Persons designated by the Contractor to attend and participate in the meetings shall have all required authority to commit the Contractor to solutions agreed upon in the project meeting.
- C. Progress Schedule: The Contractor shall submit to the City, prior to construction, a progress schedule. The schedule shall be detailed enough to reasonably allow the City to follow the progress of the work. The schedule shall be updated periodically as required by the work and as requested by the City.
- D. All materials resulting from clearing and grubbing activities shall be removed and disposed of in an acceptable manner at an acceptable facility conforming to all applicable regulations.

END OF SECTION 01001

SECTION 01002 – SPECIAL CONDITIONS

PART 1 – GENERAL

1.1 RELATIONSHIP TO GENERAL CONDITIONS

- A. Should conflict occur between these Special Conditions and the General Requirements, these Special Conditions shall take precedence. When these Special Conditions modify a portion of the General Conditions, the unaltered portions of the General Conditions shall remain in effect.

1.2 LOCATIONS, LINES AND LEVELS

- A. Contractor shall establish location of new work on property and establish and maintain all other grades, lines, levels, and benchmarks; check and compare all drawings, verifying grades, lines, levels, and dimensions indicated thereon, and report all inconsistencies to Engineer and receive Engineer's instructions before commencing work.

1.3 DOCUMENTS FURNISHED

- A. Contractor will be responsible for obtaining all necessary Drawings and Project Manuals, including all modifications thereof, as required, including distribution to subcontractors and suppliers.
- B. Contractor shall pay the actual cost of reproduction for all additional sets requested by him.

1.4 LAWS TO BE OBSERVED

- A. The Contractor shall at all times observe and comply with all federal and state laws, local laws, ordinances, orders, decrees and regulations existing or enacted subsequent to the execution of the Contract, which in any manner affect the prosecution of the work. The Contractor and his Surety shall indemnify and save harmless the City, the City's Architects, Engineers, and their representatives, agents, and employees against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself, his employees or his subcontractors.

1.5 CONSTRUCTION OBSERVATION

- A. The undertaking of periodic site visits by the Engineer or representative shall not be construed as supervision of actual construction nor make him responsible for providing a safe place for the performance of work by contractors or contractor's employees, or those of suppliers or subcontractors, or for access, visits, use, work, travel, or occupancy by any person.

1.6 CONSTRUCTION COORDINATION

- A. Before starting any construction, a meeting shall be held with City, Contractor, Subcontractors, and Engineer to plan and coordinate the schedule of construction and to review intent of Contract Documents. Contractor and Subcontractor shall follow instructions received at this meeting in prosecuting the work.

1.7 ADDITIONAL INSURED

- A. The Contractor shall add Water Resources Solutions, LLC, as an additional insured on all insurance policies allowed by law.

1.8 KDWP ACTION PERMIT REQUIREMENTS

- A. Contractor shall determine a Start date and Completion date at the time of bid. This date may be modified no later than 90 days prior to the start of construction in order to facilitate the application for and compliance with a KDWP Action Permit.
 - 1. This site is Designated Critical Habitat for five state-listed freshwater mussel species, and two of those species have been documented along the downstream side of the dam. As such, the City will be required to file an Action Permit for the project. Permit conditions will primarily consist of requirements to survey the downstream side of the dam to collect and translocate native mussels.
 - 2. The City must contract a qualified third party capable of performing surveys and properly identifying native freshwater mussels to species to survey and translocate native mussels. This survey must be completed within 2 months of the start of construction.

1.9 SOIL BORROW

- A. If required, approximately 1.5 acres of borrow area is available for 5 ft of excavation along the project reach and north of the nearby railroad. Topsoil must be stripped and replaced. Contractor is to coordinate with the city and leaseholder when filling and replacing borrowed soil.

1.10 SITE ACCESS

- A. Contractors shall negotiate access routes through farmland not owned by the City of Independence. Contractor shall coordinate with farmers on all farmland as not to impede farm operations.
- B. Locked gates exist on Pine Street and Montgomery County Rd 4600. Coordinate access visits with John Garriss via Text Message at 620-926-0976 or email Engineer@independeceks.gov.
- C. 24-hour access will be available during construction with contractor key. Staging can remain withing controlled access gates.
- D. Contractor shall provide a final construction access map for approval to the City. An example access map is included as an attachment to the Bid Documents.

1.11 ELECTICAL AVALIABILITY

- A. Electrical hookup is available to city power for a job trailer near the City wastewater facility directly west of the project location.

1.12 KDHE NPDES CONSTRUCTION STORMWATER PERMITTING

- A. Contractor shall provide a plan showing the total extents of construction staging areas, borrow areas, Erosion and sediment control measures and project footprint.
- B. If this total area exceeds 1 acre, a construction stormwater permit must be obtained under the KDHE. The City will apply for and hold the permit. The City and Contractor must comply with the conditions of this permit and have joint responsibility for ensuring these conditions are fulfilled.

END OF SECTION 01002

SECTION 01003 – SUMMARY

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Work covered by the Contract Documents
 - 2. Type of Contract
 - 3. Use of premises
 - 4. Owner's occupancy requirements
 - 5. Work restrictions
 - 6. Specification formats and conventions
- B. Related Sections include the following:
 - 1. Division 1 Section "General Requirements" for limitations and procedures governing temporary use of Sponsor's facilities.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work consists of the following:
 - 1. The site work including construction of a temporary cofferdam, repair of damaged concrete, and repair of any issues found during the inspection of the structure.

1.4 TYPE OF CONTRACT

- A. Project will be constructed under one prime contract.

1.5 USE OF PREMISES

- A. General: Contractor shall have limited use of premises for construction operations as indicated on Drawings.

- B. Use of Site: Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1.6 OWNER'S OCCUPANCY REQUIREMENTS

- A. Partial Owner Occupancy: Landowners will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Landowners during construction operations to minimize conflicts and facilitate Landowner's usage. Perform the Work so as not to interfere with Landowners' operations.

- 1. Provide not less than 72 hours' notice to homeowner of activities that will affect Landowner's operations.

1.7 WORK RESTRICTIONS

- A. On-Site Work Hours: Contractor's normal working hours are acceptable. Any work expected during evenings or weekends should be coordinated with Landowner's schedule.

- 1. Provide not less than 72 hours' notice to Landowners of activities outside normal working hours.

- B. Existing Utility Interruptions:

- 1. Notify Engineer and Sponsor not less than three days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Engineer's written permission.

1.8 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

- 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.

2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
3. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

END OF SECTION 01003

SECTION 01004 – MOBILIZATION

PART 1 - GENERAL

1.1 Description:

- A. Mobilization shall include all activities associated with transportation of all construction equipment, materials, supplies, appurtenances, facilities, and the like, staffed and ready for commencing and prosecuting the Work; and the subsequent demobilization and removal from the jobsite of said equipment, appurtenances, facilities, and the like upon completion of the Work.
- B. Mobilization shall also include assembly and delivery to the jobsite of equipment, tools, materials, and supplies necessary for the prosecution of work which are not intended to be incorporated in the Work; the clearing of and preparation of the Contractor's work area; the complete assembly, in working order, of equipment necessary to perform the required work; personnel services preparatory to commencing actual work; and all other preparatory work required to permit commencement of the actual work on construction items for which payment is provided under the Contract.
- C. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site; including the disassembly, removal and site cleanup, of offices, buildings and other facilities assembled on the site specifically for this contract.
- D. This work includes mobilization and demobilization required by the contract at the time of award. If additional mobilization and demobilization activities and costs are required during the performance of the contract as a result of changed, deleted, or added items of work for which the Contractor is entitled to an adjustment in contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

1.2 WORK COVERED BY THIS SECTION:

- A. Organization and mobilization of the Contractor's forces.
- B. Transporting construction supplies and equipment to the jobsite.
- C. Transporting various tools, materials, and equipment to the jobsite.

- D. Erection of temporary buildings and facilities as required for field offices, staging, storage, and construction operations.
- 1.3 RELATED SECTIONS:
 - None
- 1.4 DELIVERY:
 - A. Delivery to the jobsite of construction tools, equipment, plant, temporary buildings, materials, and supplies shall be accomplished in conformance with local governing ordinances and regulations.
- 1.5 TOOLS AND SUPPLIES:
 - A. Provide construction tools, equipment, materials, and supplies of the types and quantities necessary to facilitate the timely execution of the Work.
 - B. Provide personnel, products, construction materials, equipment, tools, and supplies at the jobsite at the time they are scheduled to be installed or utilized.
- 1.6 SITE ACCESS
 - A. Contractor shall provide adequate access to the site at the locations shown on the attached map, or other access routes that may be negotiated with individual homeowners by the contractor with approval of the Sponsor or Contracting Officer.
- 1.7 CLEAN UP
 - A. Upon completion of the Work, remove construction tools, apparatus, equipment mobile units and buildings, unused materials and supplies, plant, and personnel from the jobsite.
 - B. Restore all areas utilized for mobilization, storage, and construction access to their original, natural state or, when called for in the Contract Documents, complete such areas indicated.
- 1.8 MEASUREMENT AND PAYMENT
 - A. Measurement: The work of this Section will not be measured separately for payment.

- B. Payment: Mobilization will be paid for at the Contract Lump Sum price, and will include accumulating tools, apparatus, equipment, materials, and personnel, and performing final removal and demobilization.

END OF SECTION 01004

SECTION 01410

TESTING AND INSPECTION SERVICES

PART 1 – GENERAL

1.1 SCOPE

- A. This section covers the requirements for testing and inspection of the work required and the information that is to be submitted and approved before the City of Independence will approve completed work.

1.2 SECTION INCLUDES

- A. General Requirements.
- B. Certification of Materials.
- C. Tests Prior to Construction.
- D. Material Tests During Construction.
- E. Approval

1.3 RELATED SECTIONS

- A. Section 02300 Earthwork
- B. Section 03050 Portland Cement Concrete
- C. Section 02811-Concrete Dam Repair
- D. Section 02812-Miscellaneous Concrete Repair

1.4 GENERAL

- A. No contractor shall commence construction without first calling the office of the City for an inspection.
- B. The provisions of the ACI Standard Specification for Cold Weather Concreting (306.1-90) are incorporated, as summarized in Section 01411.1.4.D.1
 - 1. Summary of Cold Weather Concreting Procedures
 - a. General. This procedure may be used as the basis for the acceptance or rejection of any concrete element of infrastructure which is to be maintained by the City, summarizes the ACI Standard Specification for Cold Weather Concreting (306.1-90)

- b. Cold Weather Defined. The provisions that follow apply to Cold Weather, which is defined as a period of three consecutive days where the average temperature is below 40 degrees F, and not above 50 degrees F for more than half of any one of those three days. A “Cold Weather” situation exists solely based upon previous temperatures, and not upon forecasted temperatures. Concrete protection as outlined is only necessary (with the exception of the paragraph entitled “Protection Against Freezing”) when previous temperatures have created a “Cold Weather” situation. The months of December, January and February will be considered “Cold Weather” and will require concrete protection, regardless of temperature.
- c. Daily Cold Weather Requirements available on the web: **stormwatch.com/weather/coldweatherconcrete.asp**
- d. Protection. Insulated blankets are required as cover for the concrete.
- e. Protection Against Freezing. For the first 24 hours following placement, concrete should not be allowed to freeze. This can be checked using a high-low thermometer under the insulating blanket, or where the concrete is uncovered, by checking air temperatures for the 24-hour period. Where concrete has frozen in the first 24 hours, it shall be rejected.
- f. Protection During Cold Weather. If “Cold Weather” conditions exist, concrete temperatures must be maintained at 55 degrees for three days (two days if an approved accelerator is used, the cement content is increased by 100 lbs per CY, or Type III Portland Cement is used). Protection may be removed when the average of three field-cured cylinder breaks show that the concrete has reached a compressive strength of 3000 psi.
- g. Protection Deficiency. If the temperature requirements during the three days are not met, the concrete must continue to be protected until twice the deficiency in degree days is made up. For example, if the average temperature for the three days was maintained at 50 degrees (5 degrees below the requirement), the concrete would need to be maintained at 65 degrees (twice the deficiency) for an additional three days, or at 55 degrees for an additional 6 days. In practice, if the contractor is unable to maintain 55 degrees F, he may also be unable to provide the increased protection requirement, three days after placement, without the use of heat generating equipment. Failure to provide the additional protection

required, after first failing to provide the three days at 55 degrees F, shall be grounds for rejecting the concrete.

- h. Subgrade. Concrete shall not be placed on frozen subgrade.
- i. Backfilling Requirements. This procedure does not address the strength of the concrete necessary for backfilling or form removal. Generally, concrete should reach 75% of its design strength prior to backfilling. This strength can be determined through the use of field-cured cylinders. Concrete must have 5 days where the average daily temperature is above 50 degrees F prior to backfilling unless field-cured cylinders are taken. These days do not need to be consecutive. In practice, this policy gives the contractor a guarantee that concrete that is placed in the winter, but which is not "Cold Weather" are defined above 1, will not be rejected for lack of protection so long as it is protected from freezing for 24 hours.

1.5 REFERENCES

- A. KDOT Standard Specifications Section 2600 Materials Certifications

1.6 CERTIFICATIONS

- A. Certificates of Compliance. When requested by the City, certificates of compliance shall be submitted by the contractor. Certificates of compliance shall cover materials and construction methods used.
- B. Certification of materials and equipment.
 - 1. When requested by the City, the contractor shall furnish certifications in accordance with section 2600 of the KDOT Standard Specifications for the following materials and equipment:
 - a. Concrete structures components
 - b. Reinforcing steel, plain and epoxy coated
 - c. Paving brick
 - d. Fly-ash
 - e. Grass seed
 - f. Fertilizer
 - g. Landscape tree and shrub stock
 - h. Riprap
 - i. Other items to be incorporated into the work, not specifically indicated herein, but requested by the City.

2. The Type of Certification required for each item shall be as per the Standard Specifications, except as approved by the City.
- C. Tests prior to construction. When requested by the City, the contractor shall furnish test results from an approved testing laboratory for any of the following:
1. Aggregate for Portland cement concrete, base course, plant mix bituminous intermediate course, or surface course;
 2. Portland cement concrete properties.
- D. Material tests during construction.
1. Tests of materials being used in construction shall be taken as necessary to ensure compliance to quality standards.
 2. In construction projects neither financed in whole or part by the City nor administered by the City, the Contractor will select the testing laboratory and pay for all sampling and testing deemed necessary by the City, subject to approval of the testing laboratory by the City.
 3. In the event that any test indicates non-compliance, additional testing will be paid for by the Contractor to determine acceptability of the material or methods.
 4. The City shall be provided with documentation of all tests, showing compliance, prior to acceptance of the construction.
 5. Each test report shall be certified by a qualified person accredited by the American Association of State Highway and Transportation Officials (AASHTO), the American Association for Laboratory Accreditation (A2LA), the American Society of Testing Materials (ASTM), or the Kansas Department of Transportation (KDOT) in the test being performed.
 6. Test reports shall be prepared in at least three copies and shall be distributed directly by the testing agency to the City, contractor, and the owner.
- E. Approval.
1. Other inspections may be made as deemed necessary by the City.
 2. Approval of the work by the City shall give the contractor the right to proceed with the succeeding operations, but shall in no way indicate complete approval of prior work if later inspection discloses any deficiency in the prior inspections.
 3. Any inspection conducted shall not relieve the contractor from any obligation to perform the work in accordance with the approved plans. Any

of the work not so constructed shall be removed and replaced according to the plans.

PART 2 – PRODUCTS NOT USED

PART 3 – EXECUTION NOT USED

PART 4 – MEASUREMENT AND PAYMENT NOT USED

END OF SECTION

SECTION 01510

TRAFFIC CONTROL

PART 1 – GENERAL

1.1 SCOPE

- A. This work shall consist of the installation of construction and traffic control signs in accordance with these Specifications and as established by the City.

1.2 SECTIONS INCLUDES

- A. General
- B. References
- C. Ordinances
- D. References
- E. Certifications
- F. Materials
- G. Erection Installation

1.3 GENERAL

- A. All work performed in the right-of-way or which in any way impacts vehicular or pedestrian traffic shall be properly signed, barricaded, and otherwise protected at the permittee's expense. Such signage shall be in conformance with the latest edition of the Federal Highway Administration's Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), unless otherwise agreed to by the City.
- B. Whenever there is an excavation by the permittee, the permittee shall be responsible for providing adequate traffic control to the surrounding area as determined by the City of Independence. The permittee shall perform work on the right-of-way at such times that will allow the least interference with the normal flow of traffic and the peace and quiet of the neighborhood. In the event the excavation is not completed in a reasonable period of time, the permittee may be liable for actual damages to the City for delay caused by the permittee pursuant to this Standard.
- C. The permittee responsible for the excavation who leaves debris in the right-of-way shall be responsible for providing safety protection in accordance with the latest edition of the Manual of Uniform Traffic Control Devices and any applicable federal and state requirement.

- D. Traffic Control. Reasonable access to and egress from property adjacent to the project shall be maintained at all times throughout the duration of this project. If a traffic control plan is not included in the plans for the project, the following will apply:
1. During non-working hours, all lanes of traffic in all directions shall be maintained. During non-peak traffic hours, the Contractor may, with the authorization of the City, close such traffic lanes at the project location(s), as approved, using appropriate channelizing devices, or any other traffic control devices the City may designate.
 2. The Contractor shall provide proper signing and protective devices as required by the City. The Contractor shall place the required signing and protective devices prior to beginning construction activity each day and patrol the work area as frequently as needed during the day and at the end of each working day. All traffic cones, signs, barricades, drums, and other devices shall be immediately and properly reset if they are accidentally moved.

1.4 REFERENCES

- A. Federal Highway Administration Manual on Uniform Traffic Control Devices for Streets and Highways, latest edition (MUTCD)
- B. ASTM A 153 Specifications for Zinc Coating (Hot Dip) on Iron and Steel Hardware
- C. National Cooperative Highway Research Program 350 (NCHRP) Recommended Procedures for the Safety Performance Evaluation of Highway Facilities

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Signs. Signs shall conform to the requirements of the MUTCD, unless otherwise directed by the City or specified herein. Signs shall be .080-inch thick sheet aluminum alloy 6061-T6. Legend, border, and background other than black, shall have a microencapsulated prismatic retro-reflective coating. The physical and optical properties shall conform to the Specifications written by the Federal Highway Administration (FP-74). The colors of the reflective sheeting shall conform to Table II of Standard Specification Section 2201. Construction signs and traffic control devices shall be retro-reflective sheeting, microencapsulated prismatic or an approved equal.
- B. Posts. Posts shall be of the dimensions necessary to provide a seven-foot clearance from the sign bottom to the ground, and be secured appropriately or be supported by breakaway devices as approved by NCHRP350.

- C. Construction Signs. Construction signs shall conform to the details shown in the MUTCD and shall be micro encapsulated prismatic retro-reflectorized sheeting. The construction signs furnished shall remain the property of the Contractor and shall be removed from the site upon completion of the work.
- D. Hardware. All bolts, nuts, washers, etc., required for the items specified herein shall be zinc-coated in accordance with ASTM Standard A 153.

PART 3 – EXECUTION

3.1 ERECTION INSTALLATION

- A. Signs of the various types shall be constructed and installed in conformance with the MUTCD or as directed by the City. Posts shall be set vertical at locations as shown on the Construction Plans or as designated by the Engineer.
- B. Flagmen shall be furnished by the Contractor and used when the roadway is partially or wholly blocked by equipment or men and where equipment is crossing a road that is open to through traffic. Flagmen shall be properly attired with retro-reflective garments as outlined in the MUTCD and be courteous and use an approved stop and slow sign to control the traffic.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT AND PAYMENT

- A. No measurement for “Traffic Control” will be made.
- B. Payment shall be made on a lump sum basis for “Traffic Control” as listed on the Bid Proposal Form-Unit Prices. Such payment shall constitute full compensation for all labor, material, tools, and machinery necessary to complete the item.

END OF SECTION

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SECTION 02102 – CLEARING, GRUBBING AND DEMOLITION

PART 1 – GENERAL

1.1 WORK INCLUDED IN THIS SECTION:

- A. Clearing, grubbing and demolition required for this work includes, but is not necessarily limited to:
 - 1 Removal of trees, stumps, debris, and brush.
 - 2 Trimming and cutting of trees into sections and the satisfactory disposal of the trees and other vegetation designated for removal.
 - 3 Removal and disposal of miscellaneous abandoned subsurface structures and debris that may be discovered during the work.

1.2 RELATED WORK IN OTHER SECTIONS:

- A. Excavating, Filling and Grading

1.3 JOB CONDITIONS:

- A. Dust Control:
 - 1. Use all means necessary to control dust on and near the work and on and near all borrow areas.

1.4 LINES AND GRADES:

- A. All clearing and grubbing shall be done within the lines and grades shown on the drawings.

PART 2 – INSTALLATION

2.1 CLEARING:

- A. Contractor shall only clear trees, stumps, brush, snags and other vegetation when necessary for the installation of the overall project. All other trees and vegetation shall be left standing. Trees and vegetation to be left standing shall be protected from damage during the completion of the work.

2.2 GRUBBING:

- A. In areas requiring excavation, Contractor shall grub and remove material to a depth necessary to complete excavation to the limits indicated and complete required work. Material to be grubbed shall include stumps, roots larger than one inch in diameter, matted roots, and any miscellaneous subsurface structures and debris that may be encountered. Trees shall be Trees and plants to be relocated: Any tree or plants moved shall be done in a timely manner so as not to delay construction progress. The Contractor shall take extra measures to protect trees during the relocation by erecting barricades, staking, trimming, etc. as required. Trees shall be completely removed with stump ground down to a minimum depth below the grade of six (6) inches.

2.3 DEMOLITION:

- A. Contractor shall demolish and remove concrete, metal, wood, rock and masonry structures as indicated on the plans and as necessary to complete required work. The Contractor shall take extra measures to protect trees during demolition by erecting barricades, staking, trimming, etc. as required.

2.4 PROTECTION:

- A. Contractor shall take precautions to protect any trees, vegetation, structures, benchmarks and survey stakes, and utilities not intended to be removed. Prior to beginning work, Contractor shall be responsible for field verifying that there are no utilities within the work area. Contractor shall be responsible for repairing and/or replacing, at no additional cost to the Sponsor, items that are damaged during construction that were not intended to be removed.

2.5 DISPOSAL OF MATERIAL:

- A. All materials resulting from clearing and grubbing activities shall be removed and disposed of in an acceptable manner at an acceptable facility conforming to all applicable regulations. Materials suitable for use as aquatic habitat enhancement (stumps, logs, etc.) shall be stockpiled as directed by the Engineer.

PART 3 – MEASUREMENT AND PAYMENT

3.1 METHOD OF MEASUREMENT:

- A. The quantity of Clearing, Grubbing and Demolition will not be measured for payment unless the construction limits are changed. No adjustment will be made for changes involving less than 0.1 acre (0.04 ha).

3.2 BASIS OF PAYMENT:

- A. The amount of work completed and approved, as stated above, shall be paid for as part of the contract lump sum price. Such payment shall constitute full compensation for all labor, equipment, tools and all other items necessary and incidental to completion of the work.
- B. In the event of a change in construction limits, the Contractor shall submit a unit price for Clearing, Grubbing and Demolition to be approved by the Engineer or Owner.

END OF SECTION 02102

SECTION 02200 – EXCAVATING, FILLING AND GRADING

PART 1 – GENERAL

A.1 WORK INCLUDED IN THIS SECTION:

A. Excavating, filling and grading required for this work includes, but is not necessarily limited to:

1. Excavating, filling and backfilling for cofferdam installation.
2. Miscellaneous grading necessary to return the site to pre-construction conditions.

1.2 RELATED WORK IN OTHER SECTIONS:

A. Clear, Grubbing, and Demolition: Section 02102

1.3 JOB CONDITIONS:

A. Dust Control:

1. Use all means necessary to control dust on and near the work and on and near all offsite borrow areas, if such dust is caused by the Contractor's operations during performance of the work, or if resulting from the condition in which the Contractor leaves the site.

B. Protection: Use all means necessary to protect all materials of this section before, during, and after installation, and to protect all objects designated to remain. In the event of damage, immediately make all repairs and replacements necessary to the approval of the Engineer and at no additional cost to the Sponsor. Protect tops, trunks and roots of existing trees on project site which are to remain.

C. Notification: The Contractor shall notify the Engineer prior to installation of specified portions of the work to allow the inspector sufficient time to inspect the work and shall obtain approval of all material prior to commencing construction. Any portion of the work installed without inspection may be removed to allow for inspection. Any eventual difficulty or loss of time caused by the Contractor failing to meet permit requirements shall be borne solely by the Contractor.

1.4 LINES AND GRADES:

A. All excavation, filling and backfill shall be done to the lines and grades shown on the drawings.

1.5 BENCH MARKS AND MONUMENTS:

- A. Maintain carefully all bench marks and reference points, which are shown on the drawings. The Contractor shall pay for the replacement of such reference points if disturbed by the Contractor during construction.

1.6 REFERENCES:

- A. The publications listed below form a part of this specification. The latest revision of the following standards shall apply to work hereunder:

Associated General Contractors of America, Inc.
"Manual of Accident Prevention in Construction"

PART 2 – PRODUCTS

2.1 FILL MATERIAL, GENERAL:

- A. All fill material for embankment construction shall come from onsite unless otherwise specified by the engineer. All fill material shall be subject to approval of the Engineer.

2.2 IMPORTED FILL MATERIAL:

- A. If imported fill material is required to finish embankments or subgrade. The Contractor shall be responsible for providing a borrow area for imported fill.

2.3 OTHER MATERIAL:

- A. All other materials not specifically described, but required for proper completion of the work of this section, shall be as selected by the Contractor, subject to the approval of the Engineer.

PART 3 – INSTALLATION

3.1 GENERAL:

- A. Familiarization: Prior to all work in this section, become thoroughly familiar with the site, the site conditions, and all portions of the work falling within this section.
- B. Backfilling Prior to Approval
 - 1. Do not allow or cause any of the work installed to be covered up or enclosed by work of this section prior to all required inspections, tests, and approval.
 - 2. Should any of the work be so enclosed or covered up before it has been approved, uncover all such work at no additional cost to the Sponsor.
- C. Site Drainage: During construction, excavation and fill shall be performed in a manner and sequence that will provide drainage at all times.

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3.2 EXCAVATION AND FILLING:

- A. General: Excavation, as hereinafter specified, shall comprise the satisfactory removal and disposition of all material. After topsoil removal has been done, excavation of every description and of whatever substances encountered, shall be performed to the lines and grades indicated on the drawings. After backfilling of key trenches has been completed, any surplus of excavated material shall be known as "waste" and shall be disposed of at the location approved by the Engineer. Any additional fill material required, that is not available from excavation within the immediate project area, shall be obtained from borrow area locations approved by the Engineer. During construction, excavation, key trenching, and backfilling shall be performed in a manner and sequence that will provide drainage at all times.
1. Classification of Excavation: Excavation shall be unclassified.
 2. Earth and Rock Excavation shall be unclassified. Earth and Rock Excavation shall include earth, clay, silt, sand, gravel, hard pan, loose shale, loose stone masses, boulders, rock material in ledges, bedded deposits, unstratified masses, and conglomerate deposits so firmly cemented that they possess the characteristics of solid rock, which cannot be removed without systematic drilling.
- B. Depressions Resulting from Removal of Obstructions: Where depressions result from, or have resulted from, the removal of surface or subsurface obstructions, open the depression to equipment working width and remove all debris and soft material, as directed by the Engineer.
- C. Sloped Surfaces: Sloped ground surfaces steeper than 1 vertical to 4 horizontal, on which fill is to be placed, shall be plowed, stepped (benched) or broken up, in such manner that the fill material will bond with the existing surface.
- D. Fill and Backfill: All fill or backfill material shall consist of earth or other approved material with all undesirable material removed. Unless otherwise specified, all fill shall be uniformly placed uniform layers to achieve the lines and grades shown on the drawings and then compacted by equipment.
- E. Over-excavation: Backfill and compact all over-excavation areas, as specified for fill, at no additional cost to the Sponsor.
- F. Unfavorable Weather: Ground frozen or too wet - do not place, spread, or roll any fill material during unfavorable weather conditions. Do not resume operations until moisture content and fill density are satisfactory to the Engineer.
- G. Overbank flow: To prevent erosion of finished slopes from overland flow, provide berms and rock chutes or slope drain devices along sections of disturbed bank where drainage is towards the disturbed bank.

- H. Soften Sub-grade: Where soil has been softened or eroded by flooding or placement during unfavorable weather, remove all damaged areas and re-compact as specified for fill and compaction below.
- I. Dewatering: Provide and maintain at all times during construction, ample means and devices with which to promptly remove and dispose of all water from every source entering the excavations or other parts of the work. Dewater by means, which will insure dry excavation and the preservation of the final lines and grades of bottoms of excavation.

3.3 BACKFILLING:

- A. General Backfill: Unless otherwise specified, all channel slopes shall be shaped to a 3H:1V slope which smoothly transitions into the existing slope at each end of the project.
- B. Responsibility of Contractor for Backfill Settlement:
 - 1. The Contractor shall be responsible for the satisfactory compaction and maintenance of all backfill of any description required under this contract. If, prior to the final acceptance of this entire contract, any backfilled areas are found to have settled, they shall immediately be reworked by the Contractor and restored to the specified grades.

3.4 FINISH GRADING

- A. The finishing of side slopes, cuts and fills shall be to reasonably smooth uniform surfaces that will merge with the adjacent terrain without noticeable break. Finishing shall be done in accordance with grades shown on the drawings, and without variations that are readily discernible.
- B. Finish grading shall be performed to the lines and grades shown on the drawings. All areas disturbed by the Contractor during construction operations shall be bladed smooth, shaped, and compacted, as specified herein before. The finished grade shall provide for topsoil that is free from perennial vegetation and is loosened to depth of twelve (12) inches for areas disturbed under this contract.
- C. Finished grading shall be immediately seeded with oats or annual rye. The seed shall be regularly irrigated with methods that do not cause erosion to the finished grade until 80% of the seed has germinated. Contractor is responsible for irrigation and maintenance of this temporary seeding until final seeding and planting is completed.
- D. Newly graded areas shall be protected from traffic, erosion, and any settlement or washing away that may occur from any cause, prior to acceptance, shall be repaired and grades reestablished to the required elevations and slopes. Damaged areas shall be revegetated, if necessary.
- E. Haul roads into the work sites shall be ripped to loosen compacted soils prior to removing equipment from the project site.

3.5 BORROW AND SPOIL AREAS:

- A. Borrow and spoil areas shall be graded to promote positive drainage at the completion of the work. No borrow or spoil slopes shall be greater than 3 horizontal to 1 vertical.
- B. Erosion controls shall be implemented to prevent erosion into waterways.
- C. Borrow and spoil areas shall be seeded and mulching shall be applied at the completion of construction.

3.6 CLEANING UP:

- A. Upon completion of the work of this section, immediately remove all debris and excess earth materials from the site.

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT:

There is no Direct Pay for Excavation Filling and Grading as part of the Verdigris River Low Water Dam Inspection & Improvements project.

END OF SECTION 02200

SECTION 02250 – EROSION & SEDIMENT CONTROL

PART 1 – GENERAL

1.1 SCOPE

- A. This section covers the requirements for controlling erosion of soil from the site. The Contractor shall prevent erosion of soil on the site and adjacent property caused by his construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other activity that will disturb the natural protection. Erosion control shall comply with the provisions of the Division of Water Resources of the Kansas State Board of Agriculture, the Kansas Department of Health and Environment (KDHE); and all other agencies and authorities as applicable.
- B. Work shall be scheduled to expose areas subject to erosion for the shortest possible time and natural vegetation shall be preserved to the greatest extent practicable. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other ground cover, silt fencing, and other measures and devices shall be provided as necessary to control runoff and erosion.
- C. The Contractor is responsible for preparing an erosion and sediment control plan, and for implementing and maintaining the plan until the erosion control measures are no longer required. At the completion of the Work, all remaining temporary erosion control devices shall be removed.
- D. Additional requirements for trench dewatering and temporary discharge of storm water and other water are covered in the Earthwork section.

1.2 EROSION CONTROL DEVICES

- A. Erosion control devices to be utilized throughout the project may include, but are not limited to, the following:
 - Vegetative Buffer Strips
 - Silt/Sediment Fencing
 - Temporary Seeding
 - Mulching
 - Earth Diversion Dikes
 - Sediment Basins
 - Protection of Trees
 - Drainage Swales
 - Permanent Seeding
 - Channel/Slope Riprap
 - Area/Curb Inlet Sediment Filters
 - Rock Dam Ditch Checks
 - Straw Bale Ditch Checks
 - Straw Bale Erosion/Sediment Control
 - Sandbags
 - Tarp Covers

- B. The Contractor shall be responsible for constructing, operating, and maintaining soil erosion and sediment control measures for the construction areas and any on-site and off-site stockpile areas used by the Contractor. The Contractor also shall remove such measures and restore the sites of erosion and sediment control facilities upon completion of construction.

1.3 EROSION CONTROL REQUIREMENTS

- A. All disturbances and changes to the earth shall be made in such a manner as to minimize the duration and area of disturbed land exposed and unprotected against the erosive action of wind, ice, precipitation, and the flow of water.
- B. Sediment generated by accelerated soil erosion shall be restricted to a nonpolluting minimum as determined by the Engineer.
- C. All sediment control facilities shall be maintained in an operating condition satisfactory to the Engineer for the period of time that the Owner deems necessary. This provision applies to all facilities that receive drainage from the earth-change area, whether such facilities are a part of the proposed construction or existed prior to proposed construction.
- D. Stabilization measures shall be repeated as often as necessary, as determined by the Engineer.
- E. Any facility constructed for the conveyance of water around, through, or from the earth-change area shall limit the water flow to a non-erosive velocity.
- F. Sediment control devices/measures and facilities shall be removed upon completion of the construction. The land surface formerly occupied by such facilities shall then be graded and restored.

1.4 EROSION CONTROL MEASURES

- A. The Contractor shall provide additional devices and/or measures where field conditions warrant.
- B. Construction Times: The Contractor shall minimize the duration of the disturbance to the area.
- C. Construction Sequence: The Contractor shall minimize the area of unstabilized land surface over which storm water must flow. Construction shall proceed from lower ground toward higher ground, whenever possible.
- D. Temporary Stockpiles: Steps shall be taken to minimize erosive loss and resultant off-site sedimentation from stored piles of excavated spoils, topsoil, sand, gravel, and aggregate. Control methods used by the Contractor may include remote storage, covering, temporary stabilization, compacting, diversion

ditches, and silt fences, in total or in any combination, as may be dictated by the size, type, location, season and anticipated duration of storage.

- E. Sediment Control: The Contractor shall provide suitable sediment control devices/measures and facilities at affected connections to existing or new storm drains, to minimize deposition of sediment in the storm drains during the construction period. Sediment control devices/measures and facilities shall be provided in accordance with the requirements of all laws and regulations prior to any significant clearing, grading, or surface disruption of the tributary areas.
- F. Dewatering: Pumped water from well points, dewatering wells, or excavations shall not be discharged onto unstabilized areas. Such discharge shall be conveyed by pipe, hose or stabilized channel to a settling basin or other suitable sediment control facility.
- G. Vehicle Controls: Where frequent use of improved roads by off-the-road vehicles occurs, appropriate methods shall be used to minimize the transfer of sediment-producing materials from the treads and tracks of the vehicles onto the improved road surface.

1.5 TEMPORARY STORM WATER RUNOFF PROVISIONS

- A. The Contractor shall provide for the drainage of storm water runoff and any water that may be applied or discharged on the site in performance of the Work. Storm water facilities shall be adequate to prevent damage to the Work, the site, and adjacent property.
- B. Existing drainage channels and conduits shall be cleaned, enlarged, or supplemented as necessary to convey all increased runoff attributable to The Contractor's operations. Dikes shall be constructed as necessary to divert increased runoff from entering adjacent property (except in natural channels), to protect Owner's facilities and the Work, and to direct water to drainage channels or conduits. Ponding shall be provided as necessary to prevent downstream flooding.

1.6 EROSION AND SEDIMENT CONTROL PLAN

- A. The Contractor shall submit a plan for control of soil erosion and sediment to the city and to the Engineer for review and acceptance prior to starting construction work. The plan shall show locations and limits of disturbed areas, methods of control details, description of the phasing, sequencing, and time of the work. The plan also shall indicate the inspection, enforcement, and maintenance program to be followed by the Contractor. The plan shall be prepared by a certified erosion and sediment control professional or a professional engineer or landscape architect registered in Kansas.

- B. The Contractor shall be responsible for the proper implementation (construction, timing and sequencing of operations, operation and maintenance) of the Erosion and Sediment Control Plan. The Contractor shall obtain all necessary erosion and sediment control and land disturbance permits. A regular inspection program and a thorough maintenance program shall be developed and implemented by the Contractor, to insure the effectiveness of the erosion and sediment control practices.

PART 2 - MATERIALS

Not used.

PART 3 - EXECUTION

Not used.

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

- A. Erosion & Sediment Control construction shall not be measured.

4.2 BASIS OF PAYMENT

- A. The amount of completed and accepted work, measured as provided above, shall be paid for at the contract unit prices per lump sum of "Erosion & Sediment Control." Such payment shall constitute full compensation for all labor, material, tools, and machinery necessary to complete the item.

END OF SECTION 02250

SECTION 02401 – TEMPORARY COFFERDAM

PART 1 - GENERAL

Description:

- A. Temporary Cofferdam shall include all activities associated with the construction, operation, and maintenance of the temporary diversion structure to complete the work.
- B. Work Covered by This Section:
 - 1. Furnish labor, materials, equipment and incidentals necessary to operate pumps, piping and other facilities to assist in the removal of rainfall, surface water, lake water, tailwater, and ground water, and provide protection from flood waters and waves. Build and maintain the necessary temporary impounding works, cofferdams, dikes, culverts, bridges, channels, flashboards, and diversions. Remove the temporary works, equipment, and materials after completion in strict accordance with this section of the specifications and the applicable drawings.
 - 2. Provide phased river diversions and care of water to correspond with the phased concrete inspection and repair

Related Sections:

None

PERIOD OF PERFORMANCE

- A. Cofferdam Construction Window:
 - 1. Contractor shall submit a plan of work detailing the anticipated construction timeline of the cofferdam construction.
 - 2. Contractor shall limit risk of high flow events. Construction and demolition of cofferdam shall be limited to a three month timeframe.
 - 3. If construction takes place between November 1st and January 31st, City shall provide compensation for up to two evacuations and stand-by time associated with high-flow events.
 - 4. If construction takes place outside of the window between November 1st and January 31st, the Flow Capacity and Minimum Height in the “Cofferdam Minimum Requirements” would be subject to increase to account for the seasonality factor of storm events outside the winter.

02401-1

Technical Specifications

Temporary Cofferdam

Verdigris River Low Water Dam
Inspection & Improvements

COFFERDAM MINIMUM REQUIREMENTS

A. Variance from the Plan design:

1. Contractor shall provide plans signed and sealed by a Professional Engineer registered in KS for any proposed cofferdam varying from the plans.

B. Flow Capacity:

1. Proposed Cofferdam shall pass a minimum of 600 CFS while maintaining 6" of freeboard.

C. Minimum Height:

1. Proposed Cofferdam shall have a top elevation no lower than 732' Upstream of the existing low-head dam and 725' Downstream of the Existing low-head dam.

CARE OF WATER PLAN

1. Contractor shall provide a Care of Water Plan signed by a Professional Engineer registered in KS.

EVACUATION OF SITE DURING INCREASED FLOWS AND FLOODING CONDITIONS

1. Contractor shall protect and remove all equipment, materials, and personnel during normal flow conditions and increased flow conditions resulting from local drainage, river/reservoir control operations by the USACE, or any other increased flow condition. Any damage or loss of equipment and materials shall be at the Contractor's sole expense. The Owner shall not be liable for any damages or costs associated with Contractor's failure to adequately protect the work areas or to move equipment, personnel, and materials.

2. If construction is constrained between November 1st and January 31st, the Owner will request that the Contractor evacuate the work areas during flows exceeding 600 cubic feet per second (cfs) as measured at the U.S.G.S. Verdigris R at Independence, KS - USGS-07170500 Gage located approximately 1 miles downstream of the Dam at US 160 HW bridge. The 600 cfs threshold for invoking evacuation and standby time may be increased after contract award if mutually agreed by Owner and Contractor. In the event that the Contractor cannot work due to increased flow conditions above 600 cubic feet per second (cfs) for a period of two or more consecutive days for each occurrence, the Contractor shall be paid stand-by time beginning on the second day the flow remains above 600 cfs for the same occurrence. Contract schedule will be adjusted for the days Contractor was on standby and the time required to dewater, clean, and repair the work area for resumption of contract work. No payment or completion schedule adjustment shall be made for Contractor's inability to work due to adverse weather conditions, normal flows, or increased flow conditions below 600 cfs.
3. If construction takes place outside of the window between November 1st and January 31st, the Contractor assumes all risk and costs associated with high-flow events and the Owner shall not compensate for stand-by time. The contractor is responsible for design of appropriate flow capacity, minimum height and for safe operation of the cofferdam.

MEASUREMENT AND PAYMENT

- A. Measurement: The work of this Section will not be measured separately for payment.
- B. Payment: "Temporary Cofferdam" will be paid for at the Contract Lump Sum price, and will include all effort to design, construct, operate, maintain and remove the temporary Cofferdam.
- C. Evacuation: an additional Bid item is included for each occurrence of evacuation due to water levels exceeding the design event, with a maximum payment of two occurrences. This item is only payable if construction is constrained between November 1st and January 31st.

END OF SECTION 02401

SECTION 02811

CONCRETE DAM REPAIR

PART 1 – GENERAL

1.1 SCOPE

- A. This work shall consist of Concrete dam repair, constructed to the lines, grades, dimensions and cross-sections shown on the approved drawings and in accordance with these specifications.

1.2 SECTION INCLUDES

- A. Forms.
- B. Reinforcement.
- C. Placing Concrete.

1.3 RELATED SECTIONS

- A. Section 02230 Clearing, Grubbing, and Demolition
- B. Section 02300 Earthwork
- C. Section 03050 Portland Cement Concrete

1.4 GENERAL

- A. All concrete constructed on public right-of-way or easements within the City shall be in accordance with any Standards set forth by the City.

1.5 SUBMITTALS

- A. Shop Drawings
 - 1. Reinforcing Steel
- B. Mix Designs
 - 1. Concrete Mix Designs. KCMMB 4k Mix
- C. Samples NOT USED
- D. Test Reports
 - 1. Seven day and 28 Day Break Concrete Compression Cylinder Test Results.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Reinforcement. Reinforcement for dam repairs shall conform to the sizes and spacing as called out in the plans. All reinforcement shall be new billet Grade 40 steel.

2.3 MIXES

- A. Portland Cement Concrete shall conform to Section 3050.

PART 3 – EXECUTION

3.1 CONSTRUCTION

A. Forms

1. All forms shall be sufficiently strong and rigid and securely staked and braced to obtain a finished product correct to the dimensions, lines and grades required. Forms may be of steel or wood at the option of the contractor.
2. Each form shall not vary more than one-quarter inch in longitudinal and vertical alignment for each ten feet in length. All forms must be cleaned and oiled before each use.

B. Reinforcement

1. All reinforcement shall be held in place and positioned by pins or bar chairs or other approved devices or methods.
2. Reinforcement for dam repairs shall conform to the sizes and spacing as called out in the plans. All reinforcement shall be new billet Grade 40 steel.

C. Placing Concrete

1. Concrete for dam repairs shall be anchored to existing sound material. Reinforcement shall be drilled and epoxied to existing concrete as shown in the plans or per manufacturer recommendation.
2. The concrete shall be compacted with an approved internal type vibrator, or by hand spudding and tamping. The surface shall be shaped by use of either steel or wood tools to produce the section shown on the approved drawings.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT AND PAYMENT

- A. “Concrete Dam Repair” shall be measured by the cubic yard of concrete specified in the Plans and listed on the Bid Proposal Form.
- B. Payment shall be made at the contract unit price as listed on the Bid Proposal Form-Unit Prices. Such payment shall constitute full compensation for all labor, material, tools, and machinery necessary to complete the item.

END OF SECTION

SECTION 02812

MISCELLANEOUS CONCRETE REPAIR

PART 1 – GENERAL

1.1 SCOPE

- A. This work shall consist of Concrete dam repair, as identified as necessary following the inspection of the dam, and not currently shown on the plans.

1.2 SECTION INCLUDES

- A. Forms.
- B. Reinforcement.
- C. Placing Concrete.

1.3 RELATED SECTIONS

- A. Section 02230 Clearing, Grubbing, and Demolition
- B. Section 02300 Earthwork
- C. Section 03050 Portland Cement Concrete

1.4 GENERAL

- A. All concrete constructed on public right-of-way or easements within the City shall be in accordance with and standards set forth by the City.

1.5 SUBMITTALS

- A. Shop Drawings
 - 1. Reinforcing Steel
- B. Mix Designs
 - 1. Concrete Mix Designs. KCMMB 4k Mix
- C. Samples NOT USED
- D. Test Reports
 - 1. Seven day and 28 Day Break Concrete Compression Cylinder Test Results.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Reinforcement. Reinforcement for dam repairs shall conform to the sizes and spacing as called out in the plans. All reinforcement shall be new billet Grade 40 steel.

2.3 MIXES

- A. Portland Cement Concrete shall conform to Section 3050.

PART 3 – EXECUTION

3.1 CONSTRUCTION

A. Forms

1. All forms shall be sufficiently strong and rigid and securely staked and braced to obtain a finished product correct to the dimensions, lines and grades required. Forms may be of steel or wood at the option of the contractor.
2. Each form shall not vary more than one-quarter inch in longitudinal and vertical alignment for each ten feet in length. All forms must be cleaned and oiled before each use.

B. Reinforcement

1. All reinforcement shall be held in place and positioned by pins or bar chairs or other approved devices or methods.
2. Reinforcement for dam repairs shall conform to the sizes and spacing as called out in the plans. All reinforcement shall be new billet Grade 40 steel.

C. Placing Concrete

1. Concrete for dam repairs shall be anchored to existing sound material. Reinforcement shall be drilled and epoxied to existing concrete as shown in the plans or per manufacturer recommendation.
2. The concrete shall be compacted with an approved internal type vibrator, or by hand spudding and tamping. The surface shall be shaped by use of either steel or wood tools to produce the section shown on the approved drawings.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT AND PAYMENT

- A. “Concrete Dam Repair” shall be measured by the square foot of face of concrete specified listed as a unit on the Bid Proposal Form.
- B. Payment shall be made at the contract unit price as listed on the Bid Proposal Form-Unit Prices. Such payment shall constitute full compensation for all labor, material, tools, and machinery necessary to complete the item.

END OF SECTION

SECTION 02840 – ROCK RIPRAP

PART 1 – GENERAL

1.1 DESCRIPTION:

A. This section covers rock riprap to be used at various locations within the project area. Items include, but are not necessarily limited to:

1. Procurement, storage and handling of riprap.
2. Preparation of subgrade for installation of riprap.
3. Installation of riprap.

1.2 RELATED WORK IN OTHER SECTIONS:

A. Excavation, Filling, and Grading: Section 02200

1.3 REFERENCES:

A. The publications listed below form a part of this specification to the extent referenced. The latest revision of the following standards shall apply to work hereunder:

1. ASTM C 88: Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
2. ASTM C 127-88: Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate
3. ASTM D 5312-92: Standard Test Method for Evaluation of Durability of Rock for Erosion Control under Freezing and Thawing Conditions

PART 2 – PRODUCTS

2.1 ROCK RIPRAP:

- A. Material shall be free from dirt, clay, sand, rock fines and other materials not meeting the required gradation limits.
- B. The rock shall be dense, sound and free from cracks, seams and other defects conducive to accelerated weathering. Except as otherwise specified, the rock shall be angular to sub rounded in shape. The least dimension of an individual rock fragment shall not less than one-third the greatest dimension of the fragment.
- C. The riprap materials shall be reasonably well graded by weight within the limits stated on the Drawings:

PART 3 – INSTALLATION

3.1 INSTALLING ROCK RIPRAP:

- A. The sub-grade surfaces on which the rock riprap, filter, bedding or geotextile is to be placed shall be cut and graded to the lines and grades shown on the drawings. The surface to which the riprap is to be placed shall be reasonably smooth and free of mounds, dips, or windrows.
- B. The riprap shall be placed by equipment on the surfaces and to the depths specified. The riprap shall be installed to the full course thickness in one operation and in such a manner as to avoid serious displacement of the underlying material. The riprap shall be delivered and placed in a manner that will ensure that the riprap shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks and spalls filling the voids between the larger rocks. Riprap shall be placed in a manner to prevent damage to structures. Hand placing will be required as necessary to prevent damage to any new and existing structures.

3.2 MAINTENANCE:

- A. If, at any time before 2 months after the completion and acceptance of the work, there shall be any settlement requiring repairs to be made in any property along the line of work, or should any defect appear in the work due to neglect, carelessness or improper construction on the part of the Contractor, the Contracting Officer will notify the Contractor to make such repairs and remedy any defects. The Contractor shall, within 5 days after such notice, begin and carry out such repairs at no additional cost to the Owner.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT AND PAYMENT

- A. “Rock Riprap” shall be measured by the cubic yard of rock specified in the Plans and listed on the Bid Proposal Form.
- B. Payment shall be made at the contract unit price as listed on the Bid Proposal Form-Unit Prices. Such payment shall constitute full compensation for all labor, material, tools, and machinery necessary to complete the item.

END OF SECTION 02840

SECTION 03050

PORTLAND CEMENT CONCRETE

PART 1 – GENERAL

1.1 SCOPE

- A. This section covers all cast-in-place concrete, including reinforcing steel, forms, finishing, curing and appurtenant work for the construction of Portland Cement Concrete Dam Repairs and other cast-in place structures.

1.2 SECTION INCLUDES

- A. Material Requirements
- B. Construction
- C. Special Weather Conditions

1.3 RELATED SECTIONS

- A. Section 01410 Testing and Inspection Services
- B. Section 02811 Concrete Dam Repair
- C. Section 02812 Miscellaneous Concrete Repair

1.4 GENERAL

- A. Concrete shall conform to the standards and specifications as established by the Kansas City Metro Materials Board (KCMMB) excepted as specified herein.

1.5 REFERENCES

- A. KDOT Standard Specification Section 1403 Burlap
- B. KDOT Standard Specification Section 1404 Sheet Materials for Curing Concrete
- C. KDOT Standard Specification Section 1405 White Polyethylene Sheeting
- D. ACI 306.1-90
- E. AASHTO M148 Liquid Membrane-Forming Compounds for Curing Concrete
- F. ASTM 185 Specification for Steel Welded Wire Fabric, Plain for Concrete Reinforcement.
- G. ASTM A 615 Specification for Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- H. ASTM C 31 Practice for Making and Curing Concrete Test Specimens in the Field

- I. ASTM C 33 Specifications for Concrete Aggregates
- 1.6 SUBMITTALS
 - A. Mix Designs
 - 1. Concrete Mix Designs must conform to the KCMMB 4k Mix design
 - B. Test Reports and Material Certifications
 - 1. Aggregate Quality Test Reports
 - 2. Curing Compounds
 - 3. Add-Mixtures
- 1.7 QUALITY ASSURANCE
 - A. Testing and Inspection shall be in accordance with Section 01410.
 - B. Test Cylinders. Compression test specimens shall be made, cured and stored and delivered to the laboratory in accordance with ASTM C 31 and ASTM C 39.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Aggregate Requirements. All concrete items of work shall be constructed using the Concrete Material Specification on file in the office of the City.
- B. KCMMB 4k Mix Concrete. KCMMB 4k Mix concrete, as specified in the Concrete Material Specification shall be used for all concrete items of work in the Right of way, Public Easements, and all concrete items of work.

The mix design shall conform to the following requirements:

Concrete Requirements:

Compressive Strength	4,000 psi at 28 days
Aggregate	KDOT Class 1
Air Entrainment	6.5% ± 1.5%
Water/Cement Ratio	0.4
Slump	4.00 ± 1.00 inch

All admixtures shall contain no chloride. All cement shall be Type I/II. Maximum water content shall be 268 lbs/cy.

- C. High Early KCMMB 4k Mix Concrete. High Early Strength KCMMB 4k Mix shall conform to the requirements of KCMMB 4k Mix Concrete, except it shall have a

minimum compressive strength of 3,000 pounds per square inch in 24 hours. Early strength may be achieved by the addition of extra cement, use of Type III cement, or the addition of non-chloride accelerating admixture.

D. Reinforcing Steel.

1. Reinforcement bars shall be deformed steel bars conforming to the requirements of ASTM A 615, Grade 40.
2. Welded wire fabric shall conform to the requirements of ASTM A 185, Grade 60.
3. Bar Supports shall be CRSI Class 1, plastic protected, or Class 2, stainless steel protected.

E. Water. Water shall be clean and free from deleterious substances.

PART 3 – EXECUTION

3.1 CONSTRUCTION

- A. Concrete Curing Materials. Concrete shall be cured by using acrylic or water-based curing compounds.

3.2 SPECIAL WEATHER CONDITIONS

- A. Cold Weather. The contractor shall comply fully with the provisions of Section 01411.1.4.D
- B. Concrete operations in hot weather shall conform to Section 402.07 (a) of the Standard Specifications.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT AND PAYMENT

- A. No measurement for “Portland Cement Concrete” will be made.
- B. No direct payment for “Portland Cement Concrete” will be made. Payment for this work shall be made as part other items of the contract.

END OF SECTION



— Dam Location

■ Construction access

Google Satellite Hybrid