

2019-133

Construction, Collin County Aggregate Rinse Stations

Issue Date: 5/21/2019 Questions Deadline: 6/7/2019 03:00 PM (CT) Response Deadline: 6/13/2019 02:00 PM (CT)

Collin County Purchasing

Contact Information

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CONTRACT DOCUMENTS AND SPECIFICATIONS FOR

COLLIN COUNTY AGGREGATE RINSE STATIONS IFB NO. 2019-133

COLLIN COUNTY



May 6, 2019

Prepared by:



1575 Heritage Drive, Suite 308 McKinney, Texas 75069 972-569-9193 Texas Registered Engineering Firm No: F-9356



THE CONSTRUCTION OF

COLLIN COUNTY AGGREGATE RINSE STATIONS

COLLIN COUNTY OFFICIALS

Commissioners' Court

Chris Hill, County Judge Susan Fletcher, Commissioner Precinct No. 1 Cheryl Williams, Commissioner Precinct No. 2 Darrell Hale, Commissioner Precinct No. 3 Duncan Webb, Commissioner Precinct No. 4

Building Projects Department

Bill Burke, Director of Building Projects

Purchasing

Michalyn Rains, Purchasing Agent Michelle Charnoski, Asst. Purchasing Agent J.D. Griffin, Buyer II

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SECTION 001116 – ADVERTISEMENT FOR BIDS

BY ORDER OF the Collin County Commissioners Court, Collin County, Texas, bids will be received electronically through Collin County eBid located at <u>https://collincountytx.ionwave.net</u>. Bidders are encouraged to submit bids electronically by utilizing Collin County eBid. However, you may submit a sealed hard copy paper bid to the Office of the Collin County Purchasing Agent. All bids, both electronic or hard copy paper form must be submitted as stated below:

SUBMIT BIDS HARD COPY PAPER BIDS TO:

Office of the Purchasing Agent Collin County Administration Building 2300 Bloomdale Road, Suite 3160 McKinney, Texas 75071

****NOTE:** All Correspondence must include suite number to assist in proper delivery.******

SUBMIT NO LATER THAN:

2:00 P.M., Thursday, June 13, 2019

MARK ENVELOPE:

IFB 2019-133 Project: Construction, Collin County Aggregate Rinse Stations

ALL BIDS MUST BE RECEIVED IN THE OFFICE OF THE PURCHASING AGENT BEFORE OPENING DATE AND TIME

SCOPE OF WORK INCLUDES all materials, labor, equipment and services to produce or be incorporated in such construction. Contract will be a general contract for Construction of approximately 1,085 linear feet of 6 inch Water Line including all appurtenances. Payment for the contract work shall be made pursuant to the terms of the Contract Documents.

The opinion of probable construction cost for this contract is \$177,237.

COLLIN COUNTY APPRECIATES your time and effort in preparing a bid. Hard copy paper bid must be in a separate sealed envelope, manually signed in ink by a person having the authority to bind the firm in a contract and marked clearly on the outside as outlined above. Please note that all bids must be received at the designated location by the deadline shown. Bids received after deadline shall be considered void and unacceptable. Collin County is not responsible for lateness of mail, carrier, etc. and time/date stamp clock in the Collin County Purchasing Department shall be the official time of receipt. All bid forms provided in this Invitation for Bid must be completed prior to submission. Failure to complete the forms shall render your bid null and void. We would appreciate you indicating on your "NO BID" response any requirements of this bid request which may have influenced your decision to "NO BID".

BIDS WILL BE publicly opened in the Office of the Purchasing Agent, 2300 Bloomdale Rd, Suite 3160, McKinney, TX 75071, at the date and time indicated above.

A PRE-BID CONFERENCE will be held by Collin County at <u>Collin County Central Plant</u> <u>2nd Floor Conference Room, 4600 Community Ave., McKinney, TX 75071 on Tuesday,</u> <u>June 4, 2019 at 10:00 AM</u> in order for bidders to ask questions regarding the proposed work. Immediately following the pre-bid conference, a site-walk will be conducted at the job site located at McKinney Stockpile, Hwy 75/Bloomdale Rd., McKinney, TX 75071. It is recommended that all bidders desiring to bid the work have a representative at the prebid conference and site walks.

No oral, telegraphic, telephonic or facsimile bids will be considered. IFB's, RFP's, RFQ's and RFI's may be submitted in electronic format via Collin County eBid at <u>https://collincountytx.ionwave.net</u>.

BID SECURITY: All Bidders must submit, prior to the bid opening time, a certified check, Cashier's Check or acceptable Bid Bond payable without recourse to Collin County in the amount of not less than five percent (5%) of the total bid plus alternates as submitted.

- 1. Bid Bond, certified check or Cashier's Check may be mailed or hand delivered to the Office of the Collin County Purchasing Agent, Collin County Administration Building, 2300 Bloomdale Road, Ste 3160, McKinney, TX 75071 and shall be delivered in an envelope, marked plainly on the outside with the Bid Name and Number.
- 2. Bidders submitting a bid via Collin County eBid shall upload a Bid Bond at <u>https://collincountytx.ionwave.net</u>

Regardless of delivery method, all Bid Bonds shall be received prior to the bid opening time to be considered. Failure to submit a copy of bid security prior to bid opening shall be cause for rejection of bid.

The original Bid Bond shall be received in the Collin County Purchasing Department **no** later than close of business on the third working day after the bid opening. Late receipt of original Bid Bond shall be cause for rejection of bid.

BONDS: Contractor must furnish performance bond and payment bond within ten (10) consecutive calendar days following award of contract. The bonds shall be issued by a corporate surety in accordance with all Texas Law, including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects.

INFORMATION AND BIDDING DOCUMENTS: Drawings, specifications, instructions to bidders, and bidding and contract documents may be examined without charge at the following locations:

Civil Consulting Group 1575 Heritage Drive Suite 308 McKinney, Texas 75069 972-569-9193 CIVCAST www.civcastusa.com 940-498-7855

North Texas Construction Report 2000 S Stemmons Frwy #201 Lake Dallas, TX 75065 940-498-7855 amtek.dfw@amtekusa.com

Dodge Data & Analytics 4300 Beltway Place Suite 180 Arlington, Texas 76018 800-328-4542 www.construction.com

iSqFt 14109 Inwood Road Dallas, Texas 75244 888-601-5761 isqftmr@gmail.com www.isqft.com

BIDDERS MAY SECURE copies of the Bidding Documents from the office of the Engineer, Civil Consulting Group, 1575 Heritage Drive, Suite 308; McKinney, Texas 75069; 972-569-9193. Please allow 24 hours for printing of plans and specifications.

Single sets of Drawings (22"x34") and Specifications, upon payment of \$100.00 (nonrefundable).

Single sets of Drawings (11"x17") and Specifications, upon payment of \$25.00 (nonrefundable).

CD of Drawings and Specifications (PDF), upon payment of \$10.00 (nonrefundable).

Partial sets of Drawings and Specifications will not be available.

SECTION 002113 - INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL REQUIREMENTS

1.1 RELATED DOCUMENTS

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

1.2 DEFINITIONS

- A. All definitions set forth in the General Conditions of the Contract for Construction or in other Contract Documents are applicable to these Bidding Documents.
- B. Bidding Documents include the Advertisement or Invitation for Bids, 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.
- C. Addenda are written or graphic instruments issued prior to the opening of the Bidding Documents, which modify or interpret the Bidding Documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.
- D. "Civil Consulting Group, PLLC" will be hereafter referred to in the Project Manual as "Engineer" and all correspondence shall be addressed to: Trevor Castilla, Civil Consulting Group, PLLC, 1575 Heritage Drive, Suite 308, McKinney, TX 75069.
- E. "Bill Burke" will be hereinafter referred to in this Project Manual as "Project Manager".
- F. "Collin County" will be hereafter referred to in this Project Manual as "Owner".
- G. A Bid is a complete and properly signed submittal to do the Work for designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- H. 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.
- I. 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 in the corresponding change in the Work, as described in the Bidding Documents or in the proposed Contract Documents.
- J. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials or service as described in the Bidding Documents or in the proposed Contract Documents.
- K. A Bidder is a person or entity who submits a Bid.
- L. A Sub-Bidder is a person or entity who submits a bid to a Bidder for materials or labor for a portion of the work.
- M. A Contractor is a person or entity who is determined to be the lowest responsible and responsive bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.

N. The Bid Requirements and Other General Conditions, as provided under the Division of the North Central Texas Council of Governments Standard Specifications for Public Works Construction will be applicable to this project, unless noted otherwise in the Contract Documents

1.3 EXAMINATION OF DOCUMENTS AND SITE

- A. Each bidder, by making his/her Bid, represents that he/she has read and understands the Bidding Documents.
- B. Each Bidder, by making his/her Bid, represents that he/she has visited the site, performed investigations and verifications as he/she deems necessary, and familiarized himself/herself with the local conditions under which the Work is to be performed and will be responsible for any and all errors in his/her bid resulting from his/her failure to do so.
- C. The location and elevations of the various utilities and pipe work included within the scope of the work are offered as a general guide only, without guarantee as to accuracy. The Contractor shall verify and investigate to his/her own satisfaction the location and elevation of all utilities, pipe work, and the like and shall adequately inform himself/herself of their relation to the work before submitting a bid.
- D. Before submitting a bid each bidder will, at bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information (surface, subsurface, and underground facilities) at or contiguous to the site, or otherwise which may affect cost, progress, performance or furnishing of the work and which bidder deems necessary to determine its bid for performing and furnishing the work in accordance with the time, price and other terms and conditions of the Contract Documents. Bidder will rely solely on its own site investigation and assumes the risk of any site conditions not discovered that may result in additional costs and all errors in the bid.
- E. On request in advance, Owner will provide each bidder access to the site to conduct explorations and tests as each bidder deems necessary for submission of a bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations.
- F. The lands upon which the work is to be performed, right-of way and easement for access thereto and other lands designated for use by Contractor in performing the work are identified in the Contract Documents.
- G. Each bidder by making his/her bid represents that his/her bid is based upon the materials, systems, and equipment required by the Bidding Documents without exception.

1.4 BIDDING DOCUMENTS

- A. Complete sets of Bidding Documents shall be used in preparing bids; neither County, nor Engineer assume any responsibility for errors or misinterpretations resulting from use of incomplete sets of Bidding Documents.
- B. County or the Engineer, in making copies of the Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

1.5 BIDDING PROCEDURES

- A. All bids shall be prepared on the forms provided by the Engineer and submitted in accordance with the Instruction to Bidders. The Engineer or owner will furnish bidders with bid forms which will provide for the following bid items. Bidders shall provide all requested information. Prices bid/proposed shall <u>only</u> be considered if they are provided in the appropriate space(s) on the Collin County bid form(s). For consideration, any additions or deductions to the bid/proposal prices offered must be shown under the exceptions section of the bid/proposal in the case of electronic submittal, ONLY in the case of a hard copy submittal will an additional attachment be allowed. Extraneous numbers, prices, comments, etc. or bidder/offeror generated documents appearing elsewhere on the bid or as an additional attachment shall be deemed to have no effect on the prices offered in the designated locations.
 - 1. A single contract price for each bid item as detailed and described in these specifications.
 - 2. Acknowledgment of Addenda.
 - 3. Number of consecutive calendar days to complete project.
 - 4. Alternate bids.
 - 5. Unit prices.
- B. A bid (electronic or hard copy) is invalid if it has not been deposited at the designed location prior to the time and date for receipt of bids indicated in the Advertisement or Invitation For Bid, or prior to any extension thereof issued to the bidders. Bids received in County Purchasing Department after submission deadline shall be returned unopened and will be considered void and unacceptable. Owner is not responsible for lateness of mail, carrier, etc. and time/date stamp clock in County Purchasing Department shall be the official time of receipt.
- C. Unless otherwise provided in any supplement to these Instructions to Bidders, no bidder shall modify, withdraw or cancel his/her bid or any part thereof for ninety (90) consecutive calendar days after the time designated for the receipt of bids in the Advertisement or Invitation For Bid.
- D. Bids shall not contain any recapitulation of the Work to be done.
- E. The Bidder shall make no additional stipulations on the Bid Form nor limit or qualify his/her bid in any other manner. Bids so qualified will be subject to disqualification.
- F. Collin County is by statute exempt from the State Sales Tax and Federal Excise Tax; therefore, the prices submitted shall not include taxes.

1.6 DISCREPANCIES AND AMBIGUITIES

Any interpretations, corrections and/or changes to an Invitation For Bid and related Specifications or extensions to the opening/receipt date will be made by addenda to the respective document by the Collin County Purchasing Department. Questions and/or clarification requests must be submitted no later than seven (7) days prior to the opening/receipt date. Those received at a later date may not be addressed prior to the public opening. Sole authority to authorize addenda shall be vested in Collin County Purchasing Agent as entrusted by the Collin County Commissioners' Court. Addenda may be transmitted electronically via Collin County eBid, by facsimile, E-mail transmission or mailed via the US Postal Service.

1.6.1 Addenda will be transmitted to all that are known to have received a copy of the IFB and related Specifications. However, it shall be the sole responsibility of the Bidder to verify issuance/non-issuance of addenda and to check all avenues of document availability (i.e. Collin County eBid at <u>https://collincountytx.ionwave.net</u>; telephoning Purchasing Department directly, etc.) prior to opening/receipt date and time to insure Bidder's receipt of any addenda issued. Bidder shall acknowledge receipt of all addenda.

1.7 SUBSTITUTIONS

- A. Each bidder represents that his/her bid is based upon the materials and equipment described in the Bidding Documents.
- B. No substitution will be considered unless written request has been submitted to the Engineer for approval at least seven (7) consecutive calendar days prior to the date for receipt of bids.
- C. If the Engineer and Owner approves a proposed substitution, such approval will be set forth in an Addendum.

1.8 QUALIFICATION OF BIDDERS

- A. Within seven (7) consecutive calendar days following bid opening, the apparent low bidder shall submit with a properly executed Contractor's Qualification Statement as evidence to establish bidder's financial responsibility, experience and possession of such equipment as may be needed to prosecute the work in an expeditious, safe and satisfactory manner. This Statement shall include:
 - 1. List of current projects.
 - 2. List of projects completed within the past five years.
 - 3. Experience of key individuals of the organization.
 - 4. Trade and Bank references.
 - 5. A recent financial statement to confirm that the bidder has suitable financial status to meet obligations incidental to performing the work. Audited financial statements are not mandatory. Unaudited financial statements will be accepted. If bidder's firm does, however, have audited statements, please include a copy with your bid.
 - 6. A statement of cost for each major item of Work included in the Bid.
 - 7. A designation of the Work to be performed by the Bidder with his/her own forces.
 - 8. A list of names of the Subcontractors or other persons or organizations (including those who are to furnish materials or equipment fabricated to a special design) proposed for each portion of the Work. The Bidder will be required to establish to the satisfaction of the Engineer and Owner the reliability and responsibility of the proposed Subcontractors. Prior to the award of the Contract, the Engineer will notify the Bidder in writing if either the County or the Engineer, after due investigation, has reasonable and substantial objection to any person or organization on such lists. If Owner or Engineer has a reasonable and substantial objection to any person or organization, the Bidder may, at his/her option, withdraw his/her Bid without forfeiture of Bid Security or provide an acceptable substitute. Subcontractors and other persons and organizations proposed by the Bidder and accepted by Owner and Engineer must be used on the Work for which they were proposed and accepted, and shall not be changed except with the written approval of Owner and the Engineer.
- B. Bidders may be disqualified and their bids not considered for any of the following specific reasons:

- 1. Reason for believing collusion exists among bidders.
- 2. The bidder being interested in any litigation against Owner.
- 3. The bidder being in arrears on any existing contract or having defaulted on a previous contract.
- 4. Lack of competency as revealed by the financial statement, experience and equipment, questionnaires, or qualification statement.
- 5. Uncompleted work which in the judgment of Owner will prevent or hinder the prompt completion of additional work if awarded.
- C. Minimum Standards For Responsible Prospective Bidders: A prospective Bidder must meet the following minimum requirements:
 - 1. have adequate financial resources, or the ability to obtain such resources as required;
 - 2. be able to comply with the required or proposed delivery/ completion schedule;
 - 3. have a satisfactory record of performance;
 - 4. have a satisfactory record of integrity and ethics; and
 - 5. be otherwise qualified and eligible to receive an award.

Collin County may request representation and other information sufficient to determine Bidder's ability to meet these minimum standards listed above.

- D. In determining to whom to award the contract, the Owner may consider;
 - 1. the purchase price;
 - 2. the reputation of the bidder/contractor/vendor and of the bidder/contractor/vendor's goods or services;
 - 3. the quality of the bidder/contractor/vendor's goods or services;
 - 4. the extent to which the goods or services meet the Owner's needs;
 - 5. the bidder/contractor/vendor's past relationship with the Owner;
 - 6. the total long-term cost to the Owner to acquire the bidder/contractor/vendor's goods or services; and
 - 7. any other relevant factors specifically listed in the Instruction to Bidders..

1.9 PREPARATION OF BID

A. Bidder shall submit his/her bid on the forms furnished by the Engineer. All blank spaces in forms shall be correctly filled in and the bidder shall state the prices, written in words and in figures. Where there is discrepancy between the price written in words and the price written in figures, the price written in words shall govern. If bid is submitted by an individual, his/her name must be signed by him/her or his/her duly authorized agency. If the bid is submitted by a firm, association or partnership, the name and address of each member must be given, and the bid must be signed by an official or duly authorized agent. Powers of attorney authorizing agents or others to sign bids must be properly certified and must be in writing and submitted with the bid.

- B. Bidder shall bear any/all costs associated with it's preparation of any bid, proposal or submittal.
- C. Public Information Act: Collin County is governed by the Texas Public Information Act, Chapter 552 of the Texas Government Code. All information submitted by prospective bidders during the bidding process is subject to release under the Act.
- D. The Bidder shall comply with Commissioners' Court Order No. 2004-167-03-11, County Logo Policy.

1.10 BID SECURITY

- A. Each bid must be accompanied by Bid Security (in accordance with instructions set forth in section 001116-Advertisement For Bids) made payable to Owner in an amount of five percent (5%) of the bidder's maximum bid price and in the form of a Cashier's Check or a Bid Bond, duly executed by bidder as principal and having as surety thereon, a corporate surety authorized and admitted to do business in the State of Texas and licensed to issue such bond, as a guarantee that the bidder will enter into a Contract and execute required Performance and Payment Bonds and one (1) year Maintenance Bonds within ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract.
- B. The Bid Security of the contractor will be retained until such bidder has executed the Contract Agreement and furnished the required Contract Security, whereupon, the Bid Security will be returned. If the contractor fails to execute and deliver the Agreement and furnish the required Contract Security within ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, Owner may annul the award of contract and the Bid Security of that bidder will be forfeited. The Bid Security of the other bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the seventh (7th) consecutive calendar day after the effective date of the Agreement or the ninety-fifth (95th) consecutive calendar day after the bid Security with bids which are not competitive will be returned within seven (7) consecutive calendar days after the contract award.
- C. Should the bidder to whom the Contract is awarded refuse or neglect to execute and file the contract and bonds within ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, Owner may annul award of Contract and the Bid Security filed with the bid shall become the property of Owner, not as a penalty, but as liquidated damages. Owner reserves the right to award canceled Contract to next responsible, lowest and best bidder as it deems to be in the best interest of the County.
- D. Owner will have the right to retain the bid security of all bidders until either:
 - 1. the Contract has been executed and the bonds have been furnished, or
 - 2. the specified time has elapsed so that bids may be withdrawn, or
 - 3. all bids have been rejected.

1.11 PERFORMANCE BOND, LABOR & MATERIAL PAYMENT BOND, MAINTENANCE BOND

A. The Contractor shall post with Owner, not later than ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, a Performance Bond in the amount of one hundred percent (100%) of the total contract price in such form as is satisfactory to Owner, in compliance with Chapter 2253 of the Texas Government Code and all other

applicable Texas Law, and on the form specified in the Contract Documents. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes.

- B. The Contractor shall post with Owner, not later than ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, a Payment Bond in the amount of one hundred percent (100%) of the total contract price in such form as is satisfactory to Owner, in compliance with Chapter 2253 of the Texas Government Code and all other applicable Texas Law, and on the form specified in the Contract Documents. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes.
- C. The shall coordinate with Marc Heitter (972-547-7477),Contractor mheitter@mckinneytexas.org with the City of McKinney; and shall post a Maintenance Bond in the amount of fifteen percent (15%) of the contract sum covering defects of material and workmanship for two (2) calendar years following the Owner's approval and acceptance of the construction. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes. No alternate maintenance bond forms will be accepted.
- D. The Contractor must demonstrate to Owner that it can secure the required performance and payment bonds, issued by a corporate surety company authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. Contractor must also demonstrate that the bond is not in excess of ten percent (10%) of the corporate surety company's capital and surplus. To the extent the amount of the bond exceeds ten percent (10%) of the corporate surety company's capital and surplus. To the extent the corporate surety company has reinsured the portion of the risk that exceeds ten percent (10%) of the corporate surety company has reinsured the portion of the risk that exceeds ten percent (10%) of the corporate surety company's capital and surplus with one or more insurers who are duly authorized, accredited or trusted to do business in the State of Texas. The amount reinsured by any reinsurer must not exceed ten percent (10%) of the reinsurer's capital and surplus.
- E. The Contractor must file with the performance bond and payment bond, all documents and information necessary to establish that the agent signing the bond is authorized to write the bond in the amount requested, and if applicable, that reinsurance requirements, have been met, including limits and ratings or other evidence of company solvency.
- F. If the corporate surety company on any bond furnished by Contractor to Owner is declared bankrupt or becomes insolvent or such corporate surety company's right to do business in the State of Texas is revoked, the Contractor shall within five (5) consecutive calendar days thereafter substitute another bond and corporate surety company, both of which shall be acceptable to Owner.

1.12 FILING BID

A. All Bids, proposals, or submittals submitted in hard copy paper form shall be submitted in a sealed envelope, plainly marked on the outside with the Invitation for Bid (IFB) number and name. A hard copy paper form bid, proposal, or submittal shall be manually signed in ink by a person having the authority to bind the firm in a contract. Submittals, bids or proposals shall be mailed or hand delivered to the Collin County Purchasing Department.

- D. No oral, telegraphic or telephonic submittals will be accepted. Bids, proposals, or submittals may be submitted in electronic format via Collin County eBid at <u>https://collincountytx.ionwave.net</u>. Electronic submissions are preferred.
- C. All Bids, submittals or proposals submitted shall remain locked until official date and time of opening as stated in the Special Terms and Conditions of the IFB.
- D. For hard copy paper form bids, proposals, or submittals, any alterations made prior to opening date and time must be initialed by the signer of the bid, proposal, or submittal, guaranteeing authenticity. Bids, proposals, or submittals cannot be altered or amended after submission deadline.
- E. No bid, proposal, or submittal will be considered unless it is filed with the Owner Purchasing Department within the time limit for receiving bids as stated in the Advertisement for Bids or IFB. Each hard copy paper bid shall be in a sealed envelope plainly marked with the word "BID", and the name and bid number of the project as designated in the Advertisement for Bids or IFB.

1.13 MODIFICATION AND WITHDRAWAL OF BID

A. No bid, proposal, or submittal may be withdrawn or modified after the bid opening except where the award of the contract has been delayed beyond ninety (90) consecutive calendar days after date of bid opening or as per Texas Local Government Code, Title 8, Chapter 262, Subchapter C., Section 262.0305. Modifications after Award.

1.14 IRREGULAR BID

A. It is understood that Collin County, Texas reserves the right to accept or reject any and/or all Bids, proposals, or submittals for any or all products and/or services covered in an Invitation For Bid (IFB) and to waive informalities or defects in submittals or to accept such submittals as it shall deem to be in the best interest of Collin County.

1.15 REJECTION OF BID

A. The bidder acknowledges the right of Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the bidder recognizes the right of Owner to reject a bid if the bidder failed to furnish any required Bid Security, or to submit the data required by the Bidding Documents, or if the bid is in any way incomplete or irregular.

1.16 METHOD OF AWARD

- A. In evaluating bids, Owner will consider whether or not the bids comply with the prescribed requirements, base prices, any alternates, unit pricing, completion time, bidder's qualifications, bidder's proposed subcontractors, suppliers, etc., and other data as may be requested in the Bid Documents.
- B. Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any bid and to establish the responsibility, qualifications and financial ability of bidder, proposed subcontractors, suppliers and other persons and organizations to perform and furnish the Work in accordance with the Bidding Documents to Owner's satisfaction within the prescribed time.
- C. If the contract is to be awarded, it will be awarded to the lowest and best responsible bidder whose evaluation, by Owner, indicates to be in the best interests of the project. If no

alternates are selected by Owner, the Owner may award the contract to a responsible bidder who submits the lowest and best bid.

- D. <u>Evaluation of Alternates</u> Any and/or all or none of the alternates may be considered in evaluation. Owner may award Contract on base bid plus any and/or all or none of the alternates.
- E. Owner anticipates award within ninety (90) consecutive calendar days after bid opening.
- F. The bid, when properly accepted by the County, shall constitute a Contract equally binding between the contractor and Owner. No different or additional terms will become part of this Contract with the exception of a written Change Order, signed by both parties.
- G. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing by Collin County Purchasing Agent.

1.17 EXECUTION OF CONTRACT

A. The person or persons, partnership, company, firm, association or corporation to whom a contract is awarded shall within ten (10) consecutive calendar days after such award, sign the necessary contract agreements and submit the required bonds entering into the required Contract with Owner. No contract shall be binding on Owner until it has been executed by Owner or his/her duly authorized representative, and delivered to the Contractor.

1.18 FAILURE TO EXECUTE CONTRACT

A. The failure of the Bidder to execute the required bonds or to sign the required Contract within ten (10) consecutive calendar days after the Contract is awarded, shall be considered by Owner as abandonment of his/her Bid, and Owner may annul the award, at the Owner's sole discretion.

1.19 PURCHASE ORDER

A. A purchase order(s) shall be generated by Owner to the contractor. The purchase order number <u>must</u> appear on all itemized invoices. Collin County will not be responsible for any orders placed or delivered without a valid purchase order number.

1.20 NOTICE TO PROCEED

A. Upon the execution and delivery of Bonds, Executed Contract by Contractor, progress schedule, proof of insurance, and all other documents required prior to commencing work herein, Owner will issue a written Notice to Proceed to the Contractor requesting that he/she proceed with construction, and the Contractor shall commence work within ten (10) consecutive calendar days after the date of Notice to Proceed.

1.21 PAYMENT PROCEDURES

- A. Contractor shall submit Applications for Payment in accordance with the Contract, and payments shall be made in accordance with the Contract Documents.
- C. Final Payment: Upon final completion and acceptance of the work, Owner shall pay the remainder of the contract price as recommended by Engineer, in accordance with Texas Government Code, Title 10, Subtitle F., Chapter 2251. Contractor(s) is required to pay

subcontractors within ten (10) days after the contractor has received payment from the County.

D. The Contractor understands, acknowledges and agrees that if the Contractor subcontracts with a third party for services and/or material, the primary Contractor (awardee) accepts responsibility for full and prompt payment to the third party. Any dispute between the primary Contractor and the third party, including any payment dispute, will be promptly remedied by the Contractor. Failure to promptly render a remedy or to make prompt payment to the third party (subcontractor) may result in the withholding of funds from the primary Contractor by Collin County for any payments owed to the third party.

1.22 AFFIDAVIT OF BILLS PAID

A. Prior to final acceptance of this project by Owner, the Contractor shall execute an affidavit that all bills for labor, materials, and incidentals incurred in the project construction have been paid in full, and that there are no claims pending.

1.23 EXEMPTION FROM STATE OF TEXAS AND LOCAL SALES TAX ON MATERIALS

A. Owner qualifies for exemption from State and Local Sales Tax pursuant to the provisions of Chapter 151, Section 151.309 of the Texas Limited Sales, Excise and Use Tax Act. The Contractor performing this Contract may purchase all materials, supplies, equipment consumed in the performance of this Contract by issuing to his/her suppliers an exemption certificate in lieu of the tax.

1.24 CONFLICT OF INTEREST

A. No public official shall have interest, direct or indirect, in this contract, in accordance with Texas Local Government Code Title 5, Subtitle C, Chapter 171.

1.25 ETHICS

A. The bidder/contractor shall comply with Commissioners Court Order No. 96-680-10-28, Establishment of Guidelines & Restrictions Regarding The Acceptance of Gifts by County Officials & County employees.

1.26 BID COMPLIANCE

- A. Bid must comply with all federal, state, county and local laws concerning this type of project and the fulfillment of all ADA (Americans With Disabilities Act) requirements.
- B. Design, strength, quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practice.
- C. All products must be new and unused, unless otherwise specified, in first-class condition and of current manufacture.

1.27 DRUG FREE

A. All bidders shall provide any and all notices as may be required under the Drug-Free Work Place Act of 1988, 41 U.S.C. 701, and Collin County Commissioners' Court Order No. 90-455-06-11, to its employees and all sub-contractors to insure that Owner maintains a drugfree work place. The use, possession or being under the influence of drugs and/or alcohol while working on this bid project or while on County property is prohibited and may result in removal of an individual from the project and/or immediate termination of contract. The County reserves the right to review drug testing records of any personnel involved in this bid project. The County may require, at contractor's expense, drug testing of contractor's personnel if no drug testing records exists or if such test results are older than six (6) months.

B. Substances and cut-off levels are as follows:

SUBSTANCE	MAXIMUM LEVEL
Amphetamines	1000 NG/ML
Barbiturates	300 NG/ML
Benzodiazepines	300 NG/ML
Cocaine Metabolite	300 NG/ML
Opiates	300 NG/ML
Phencyclidine (PCP)	25 NG/ML
THC (Marijuana) Metaboline	100 NG/ML
Methadone, Urinary	300 NG/ML
Methaquaone, Urine	300 NG/ML
Propoxyphene	300 NG/ML

1.28 INDEMNIFICATION

To the fullest extent permitted by law, the CONTRACTOR and his sureties shall indemnify, A. defend and hold harmless the OWNER and all of its, past, present and future, officers, agents and employees from all suits, cause of action, claims, liabilities, losses, fines, penalties, liens, demands, obligations, actions, proceedings, of any kind, character, name and description brought or arising, on account of any injuries or damages received or sustained by any person, destruction or damage to any property on account of, in whole or part, the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said Contract; failing to comply with any law, ordinance, regulation, rule or order of any governmental or regulatory body including those dealing with health, safety, welfare or the environment; on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER growing out of such injury or damage. In no event shall OWNER be liable to CONTRACTOR for indirect or consequential damages or loss of income or profit irrespective of the cause, fault or reason for same. CONTRACTOR'S duty to indemnify herein shall not be limited by any limitation on the type or amount of damages payable by or for CONTRACTOR or any Subcontractor under workman's compensation acts, disability benefit acts or any other employee benefit acts.

In addition, the CONTRACTOR likewise covenants and agrees to, and does hereby, indemnify and hold harmless the OWNER from and against any and all injuries, loss or damages to property of the OWNER during the performance of any of the terms and conditions of this Contract, arising out of or in connection with or resulting from, in whole or in part, any and all alleged acts or omissions of officers, agents, servants, employees, contractors, subcontractors, licenses or invitees of the CONTRACTOR.

The rights and responsibilities provided in this indemnification provision shall survive the termination or completion of this Contract.

1.29 CONSTRUCTION SCHEDULE

- A. The time for completion is set forth herein and will be included in the Contract. All work shall be completed within the consecutive calendar day count shown in the Contractor's bid. The calendar day count shall commence ten (10) consecutive calendar days after the date of the Notice to Proceed.
- B. Prior to the issuance of the Notice to Proceed by Owner, the Contractor shall submit a detailed progress and schedule chart to Owner for review. This chart will be used to assure completion of the job within the number of consecutive calendar days stated in bid documents.

1.30 DELAYS AND EXTENSIONS OF TIME

- A. If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Engineer, or of an employee of either, or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control, or by delay authorized by the Owner pending mediation and arbitration, or by other causes which the Engineer determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Engineer may determine.
- E. If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that the weather conditions had an adverse effect on the scheduled construction.
- C. Contractor's sole remedy for any delays in the project, which are not the fault of the Contractor, shall be an equitable extension of time to perform the work, required by the Contract. In no event shall the Contractor be entitled tom make a claim for delay, impact or acceleration damages against the Owner.

1.31 DAMAGES

A. Should the contractor fail to complete the project within the specified completion schedule the sum of \$200.00 per calendar day will be deducted from the moneys due the contractor for the work. This sum shall not be considered as a penalty, but rather as reasonable liquidated damages, since it would be impracticable or extremely difficult to fix the actual damages. An extension of time may be allowed for delays beyond the control of the contractor at the discretion of Owner.

1.32 TERMINATION

This contract shall remain in effect until any of the following occurs:

- A. completion of project;
- B. acceptance of work ordered; or
- C. termination by either party pursuant to the terms of the Contract with a thirty (30) days written notice prior to cancellation that must state therein the reasons for such cancellation.
- D. Breach of the contract by the Contractor for failure
 - 1. to meet completion schedules, or

2. otherwise perform in accordance with these specifications.

Breach of contract or default authorizes the County to purchase elsewhere and charge the full increase in cost and handling to the defaulting Contractor.

1.33 PATENTS - COPYRIGHTS

A. The contractor agrees to protect Owner from any claims involving infringements of patents and/or copyrights. In no event shall Owner be liable to a contractor for any/all suits arising on the grounds of patent(s) or copyright(s) infringement.

1.34 VENUE; GOVERNING LAW

A. This contract will be governed by the laws of the State of Texas. Should any portion of this contract be in conflict with the laws of the State of Texas, the State laws shall invalidate only that portion. The remaining portion of the contract shall remain in effect. This contract is performable in Collin County, Texas.

1.35 ASSIGNMENT

A. The contractor shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written approval from Collin County Commissioners' Court.

1.36 SILENCE OF SPECIFICATION

A. The apparent silence of any part of the specification as to any detail or to the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of the specification shall be made on the basis of this statement.

1.37 PROVISION CONCERNING ESCALATOR CLAUSES

A. Bid(s) containing any condition which provides for changes in the stated bid prices due to increase or decrease in the costs of materials, labor, or other items required for this project, will be rejected and returned to the bidder without being considered.

1.38 ESTIMATES OF QUANTITIES

A. The quantities listed in the Bid Form will be considered as approximate and will be used for the comparison of bids. Payments will be made to the Contractor only for the actual quantities of work performed or materials furnished in accordance with the contract. The quantity of work to be done and the materials may be increased or decreased as provided for in the Contract Documents.

1.39 TREE PROTECTION OUTSIDE LIMITS OF WORK

A. The Contractor will be required to obtain written authorization from Owner for the removal of any tree three inches (3") in diameter or greater. It is the intent of Owner to preserve as much as possible the natural condition of the landscape areas.

1.40 EXCAVATION/TRENCH SAFETY

A. TRENCH SAFETY

The CONTRACTOR shall be responsible for complying with state laws and federal regulations relating to trench safety, including those which may be enacted during the performance under this contract. The CONTRACTOR shall be responsible for selecting an appropriate method of providing trench safety after due consideration of the job conditions, location of utilities, pavement conditions and other relevant factors. Slope-back methods which may result in unnecessary displacement of utilities and/or destruction of pavement may not be used without permission from the OWNER. The CONTRACTOR shall be responsible for providing to the OWNER an acceptable trench safety plan signed and sealed by a Professional Architect qualified to do such work and registered in Texas. Devices used to provide trench safety such as trench shields and shoring systems will be likewise certified by professional Architects registered in the State of Texas or by a professional Engineer registered in the state of manufacture of the shield.

B. PAYMENT FOR TRENCH SAFETY

Payment for trench safety shall be by the lineal feet of trench exceeding a depth of five (5) ft. Excavation for slope-back methods shall be subsidiary to the trench safety pay item including replacement and recompaction. Excess excavation for other trench safety methods is also subsidiary to the trench safety pay item. Costs relating to the preparation of the trench safety plan including geotechnical investigation, testing and report preparation fees are all subsidiary to the pay item for trench safety. Should trench safety measures be required during contract performance where no pay item has been provided, then the CONTRACTOR shall immediately notify the OWNER and, if directed to do so, provide trench safety under the provisions of the contract. Should the OWNER fail to authorize the work, then the CONTRACTOR shall proceed under the provisions of the Contract. Trench safety requirements are mandatory and may not be waived.

C. PAYMENT FOR SPECIAL SHORING

Payment for special shoring, if any, shall be based on the square feet of shoring used.

- D. The Contractor must be made aware that on construction projects in which trench excavation will exceed a depth of five feet (5'), the uniform set of general conditions must require that the bid documents and the contract include detailed plans and specifications for adequate safety systems that meet Occupational Safety and Health Administration standards that will be in effect during the period of construction of the project. The Contractor shall provide a separate pay item for trench excavation safety in accordance with the Texas Health & Safety Code Chapter 756. The Contractor shall verify that these plans and specifications include a pay item for these same trench excavation safety systems, in accordance with Texas Government Code, Title 10, Section 2166.303, Uniform Trench Safety Conditions. The contractor shall ensure that drainage from adjacent properties is not blocked by his/her excavations. Measurement and payment for excavation/trench safety systems will not be made directly, but considered subsidiary to the work.
- E. The Contractor shall be responsible for obtaining and paying for all surveys and testing, including geotechnical surveys and testing, necessary to insure it can comply with all laws regarding adequate trench excavation safety.

1.41 CONSTRUCTION STAKING

- A. Owner will provide the Contractor with primary horizontal and vertical control to consist of one construction baseline and two benchmarks.
- B. The Contractor shall take all necessary precautions to preserve any and/or all markings and staking. Payment for costs of restaking shall be the responsibility of the Contractor.

1.42 PERMITS

A. Collin County will pay impact fees and permit fees. Contractor shall be responsible for obtaining all necessary permits.

1.43 MATERIALS TESTING

A. Owner will be responsible for all materials testing.

1.44 STORM WATER PROTECTION

A. The Contractor shall perform, track, participate, implement, and comply with storm water pollution prevention minimum control measures, protocols, and best management practices (BMP) and ensure that water quality standards are not violated in accordance with all regulations and policies as they apply to the Texas Pollutant Discharge Elimination System general permits. Applicable permits include: 1) Texas Construction General Permit (TXR150000).

Contractors will obtain permit coverage for construction activities disturbing over one acre of land (total acreage is cumulative across all portions of the project). BMPs include, but are not limited to:

- Preparing and implementing a site-specific Storm Water Pollution Prevention Plan (SWPPP) as outlined in the permit and prior to any soil disturbance.
- Installing and managing erosion and sediment control.
- Make available, upon request, permit associated documentation.
- Practicing spill prevention and good housekeeping.
- Meeting the requirements of the MS4 permit.

1.45 WAGE SCALE

A. In accordance with Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the general prevailing wage rate has been determined for this locality for the craft or type of workman needed to execute work of a similar character of the project listed herein. The Contractor shall pay the prevailing wage rate in this locality to all his/her employees and subcontractors performing work on this project, and in no event shall the Contractor pay less than the rate shown in the following schedule.

General Decision Number: TX190239 02/08/2019 TX239

Superseded General Decision Number: TX20180289

State: Texas

Construction Type: Building

County: Collin County in Texas.

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

Note: Under Executive Order (EO) 13658, an hourly minimum wage of 10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least 10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0	01/04/2019
1	02/09/2010

1 02/08/2019

ASBE0021-011 06/01/2016

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR (Duct, Pipe and Mechanical System Insulation)	\$ 24.32	7.52
BOIL0074-003 01/01/2017		
	Rates	Fringes
BOILERMAKER	\$ 28.00	22.35
CARP1421-002 04/01/2016		
	Rates	Fringes
MILLWRIGHT	\$ 26.60	8.65
* ELEV0021-006 01/01/2019		
	Rates	Fringes
ELEVATOR MECHANIC	\$ 41.24	33.705

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all hours worked. 8% over 5 years based on regular hourly rate for all hours worked.

B. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Veterans Day.

ENGI0178-005 06/01/2014		
	Rates	Fringes
 POWER EQUIPMENT OPERATOR (1) Tower Crane	\$ 29.00	10.60
Crane 60 tons and above	\$ 28.75	10.60
(3) Hydraulic cranes 59 Tons and under		10.60
IRON0263-005 06/01/2017		
	Rates	Fringes
IRONWORKER (ORNAMENTAL AND STRUCTURAL)	\$ 23.25	7.32
PLUM0100-005 11/01/2017		
	Rates	Fringes
HVAC MECHANIC (HVAC Unit Installation Only) PIPEFITTER (Excludes HVAC	\$ 30.84	11.51
Pipe Installation)	\$ 30.84	11.51
SUTX2014-015 07/21/2014		
	Rates	Fringes
BRICKLAYER	\$ 21.06	0.00
CARPENTER, Excludes Drywall Hanging, Form Work, and Metal Stud Installation	\$ 15.78	0.00

CAULKER	\$ 15.16	0.00
CEMENT MASON/CONCRETE FINISHER.	\$ 13.04	0.00
DRYWALL HANGER AND METAL STUD INSTALLER	\$ 13.00	0.00
ELECTRICIAN (Alarm Installation Only)	\$ 20.93	3.86
ELECTRICIAN (Communication Technician Only)	\$ 15.35	1.39
ELECTRICIAN (Low Voltage Wiring Only)	\$ 17.04	1.39
ELECTRICIAN, Excludes Low Voltage Wiring and Installation of Alarms/Sound and Communication Systems	\$ 20.01	2.69
FORM WORKER	\$ 11.89	0.00
GLAZIER	\$ 16.46	3.94
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine)	\$ 10.04	2.31
INSTALLER - SIDING (METAL/ALUMINUM/VINYL)	\$ 14.74	0.00
INSTALLER - SIGN	\$ 15.50	0.00
INSULATOR - BATT	\$ 13.00	0.00
IRONWORKER, REINFORCING	\$ 12.29	0.00
LABORER: Common or General	\$ 10.52	0.00
LABORER: Mason Tender - Brick	\$ 10.54	0.00
LABORER: Mason Tender - Cement/Concrete	\$ 10.93	0.00
LABORER: Pipelayer	\$ 13.00	0.35

LABORER: Plaster Tender	\$ 12.22	0.00
LABORER: Roof Tearoff	\$ 11.28	0.00
LABORER: Landscape and Irrigation	\$ 10.55	0.00
LATHER	\$ 16.00	0.00
OPERATOR: Backhoe/Excavator/Trackhoe	\$ 12.83	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader	\$ 13.93	0.00
OPERATOR: Bulldozer	\$ 18.29	1.31
OPERATOR: Drill	\$ 15.69	0.50
OPERATOR: Forklift	\$ 13.21	0.81
OPERATOR: Grader/Blade	\$ 13.03	0.00
OPERATOR: Loader	\$ 13.46	0.85
OPERATOR: Mechanic	\$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	\$ 18.44	0.00
OPERATOR: Roller	\$ 15.04	0.00
PAINTER (Brush, Roller and Spray), Excludes Drywall		
Finishing/Taping	\$ 13.35	5.10
PAINTER: Drywall Finishing/Taping Only	\$ 14.24	3.83
PIPEFITTER (HVAC Pipe Installation Only)	\$ 20.45	4.00
PLASTERER	\$ 16.58	0.00
PLUMBER, Excludes HVAC Pipe Installation	\$ 22.46	4.06

ROOFER	\$ 17.19	0.00
SHEET METAL WORKER (HVAC Duct Installation Only)	\$ 21.13	4.79
SHEET METAL WORKER, Excludes HVAC Duct Installation	\$ 24.88	5.97
SPRINKLER FITTER (Fire Sprinklers)	\$ 37.50	0.00
TILE FINISHER	\$ 11.22	0.00
TILE SETTER	\$ 14.25	0.00
TRUCK DRIVER: 1/Single Axle Truck	\$ 16.00	0.81
TRUCK DRIVER: Dump Truck	\$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck	\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck	\$ 12.50	0.00
TRUCK DRIVER: Water Truck	\$ 12.00	4.11

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

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

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

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

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

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

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

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

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

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

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

4.) All decisions by the Administrative Review Board are final.

- B. Except for work on legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) the number of hours worked per day, except for overtime hours, times (b) the above respective rate per hour.
- C. For legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on the legal holiday.
- D. For overtime work, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on overtime.
- E. Under the provisions of Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the contractor or subcontractor of the contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded, sixty dollars (\$60.00) for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the contract.
- F. If the construction project involves the expenditure of Federal funds in excess of \$2,000, the minimum wages to be paid various classes of laborers and mechanics will be based upon the wages that will be determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on the project of a character similar to the contract work.

1.46 Collin County Purchasing Department shall serve as Contract Administrator or shall supervise agents designated by Collin County.

- 1.47 All warranties shall be stated as required in the Uniform Commercial Code.
- 1.48 The Contractor and Collin County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.
- 1.49 Contractor shall not fraudulently advertise, publish or otherwise make reference to the existence of a contract between Collin County and Contractor for purposes of solicitation. As exception, Contractor may refer to Collin County as an evaluating reference for purposes of establishing a contract with other entities.
- 1.50 Contractor shall provide Collin County with diagnostic access tools at no additional cost to Collin County, for all Electrical and Mechanical systems, components, etc., procured through this contract.
- 1.51 CRIMINAL HISTORY BACKGROUND CHECK: All individuals may be subject to a criminal history background check performed by the Collin County's Sheriff's Office prior to access being granted to Collin County property or facilities. Upon request, Contractor shall provide list of individuals to Collin County within five (5) working days.
- 1.52 Vendors/Contractors/Providers must be in compliance with the Immigration and Reform Act of 1986 and all employees specific to this solicitation must be legally eligible to work in the United States of America.

- 1.53 CERTIFICATION OF ELIGIBILITY: This provision applies if the anticipated Contract exceeds \$100,000.00 and as it relates to the expenditure of federal grant funds. By submitting a bid or proposal in response to this solicitation, the Bidder/Quoter/Offeror certifies that at the time of submission, he/she is not on the Federal Government's list of suspended, ineligible, or debarred contractors. In the event of placement on the list between the time of bid/proposal submission and time of award, the Bidder/Quoter/Offeror will notify the Collin County Purchasing Agent. Failure to do so may result in terminating this contract for default.
- 1.54 Contractors doing business with OWNER agree to comply with Federal Executive Order 13465 E-Verify. It is OWNER's intention and duty to comply and support the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification and non-discrimination. According to the INA, contractors/employers may hire only persons who may legally work in the United States. Subsequently, contractors and subcontractors doing business with OWNER must confirm their enrollment in the E-Verify system which verifies employment eligibility through completion and checking of I-9 forms. OWNER reserves the right to audit contractor's process to verify enrollment compliance.

1.55 INSURANCE REQUIREMENTS

A. CONTRACTOR'S INSURANCE

- 1. Before commencing work, the CONTRACTOR and each subcontractor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) required by Texas Law, and the coverages required herein, indicating the coverage is to remain in force throughout the term of this Contract. Without limiting any of the other obligations or liabilities of the CONTRACTOR, during the term of the Contract the CONTRACTOR and each subcontractor at their own expense shall purchase and maintain the herein stipulated minimum insurance with companies duly approved to do business in the State of Texas and satisfactory to the OWNER. Certificates of each policy shall be delivered to the OWNER before any work is started, along with a written statement from the issuing company stating that said policy shall not be canceled, nonrenewed or materially changed without 60 days advance written notice being given to the OWNER.
- 2. In addition to any coverage required by Texas Law, the CONTRACTOR shall provide the following coverages at not less than the specified amounts:
- B. Workers Compensation insurance required by Texas Law at statutory limits, including employer's liability coverage of not less than \$1,000,000. In addition to these, the CONTRACTOR must comply with all the requirements of the Texas Department of Insurance, Division of Workers' Compensation; (Note: If you have questions concerning these requirements, you are instructed to contact the DWC.)

1. By signing this contract or providing or causing to be provided a certificate of coverage, the CONTRACTOR is representing to the OWNER that all employees of the CONTRACTOR and its subcontractors who will provide services on the Project will be covered by workers compensation coverage for the duration of the Project, that the coverage will be based on proper reporting of classification codes

and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.

2. The CONTRACTOR'S failure to comply with any of these provisions is a breach of Contract by the Contractor which entitles the OWNER to declare the Contract void if the CONTRACTOR does not remedy the breach within ten (10) days after receipt of notice of breach from the OWNER.

C. Broad form commercial general liability insurance, including independent contractor's liability, completed operations and contractual liability, written on an occurrence form, covering, but not limited to, the liability assumed under the indemnification provisions of this contract, fully insuring CONTRACTOR'S (or subcontractor's) liability for injury to or death of OWNER'S employees and third parties, extended to include personal injury liability coverage with damage to property, with minimum limits as set forth below:
 General Aggregate \$2,000,000
 Products — Components/Operations Aggregate \$2,000,000
 Personal and Advertising Injury \$1,000,000

Each Occurrence \$ 2,000,000

1. The policy shall include coverage extended to apply to completed operations, asbestos hazards (if this project involves work with asbestos) and XCU (explosion, collapse and underground) hazards. The completed operations coverage must be maintained for a minimum of one year after final completion and acceptance of the work, with evidence of same filed with OWNER.

F. Comprehensive automobile and truck liability insurance, covering owned, hired and non-owned vehicles, with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence; or separate limits of \$1,000,000 for bodily injury (per person), \$1,000,000 for bodily injury (per accident) and \$1,000,000 for property damage. Such insurance shall include coverage for loading and unloading hazards.

E. OWNER'S PROTECTIVE LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain at all times during the prosecution of the work under this contract an OWNER'S protective liability insurance policy naming the OWNER as insured for property damage and bodily injury, which may arise in the prosecution of the Work or CONTRACTOR'S operations under this Contract. Coverage shall be on an "occurrence" basis, and the policy shall be issued by the same insurance company that carries the CONTRACTOR'S liability insurance with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence and \$2,000,000 aggregate.

F. "UMBRELLA" LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain umbrella liability insurance during the contract term, insuring CONTRACTOR for an amount of not less than \$1,000,000 per occurrence combined limit for bodily injury and property damage that follows from and applies in excess of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted. OWNER shall be named as an additional insured.

G. RAILROAD PROTECTIVE INSURANCE

When required in the Special Provisions, CONTRACTOR shall obtain, maintain and present evidence of railroad protective insurance (RPI). The policy shall be in the name of the railroad company having jurisdiction over the right-of-way involved. The minimum limit of coverage shall meet the specifications provided by the railroad company. The OWNER shall specify the amount of RPI necessary.

H. POLICY ENDORSEMENTS AND SPECIAL CONDITIONS

1. Each insurance policy to be furnished by CONTRACTOR shall include the following conditions by endorsement to the policy:

(a) each policy shall name the OWNER as an additional insured as to all applicable coverage;

(b) each policy shall require that thirty (30) days prior to the cancellation, nonrenewal or any material change in coverage, a notice thereof shall be given to OWNER by certified mail;

(c) the term "OWNER" shall include all past, present or future, authorities, boards, bureaus, commissions, divisions, departments and offices of the OWNER and individual members, elected official, officers, employees and agents thereof in their official capacities and/or while acting on behalf of the OWNER;

(d) the policy phrase "other insurance" shall not apply to the OWNER where the OWNER is an additional insured on the policy;

(e) all provisions of the contract concerning liability, duty and standard of care together with the indemnification provision, shall be underwritten by contractual liability coverage sufficient to include such obligations within applicable policies;

(f) each policy shall contain a waiver of subrogation in favor of OWNER, and its, past, present and future, officials, employees, and volunteers; and,

(g) each certificate of insurance shall reference the Project and Contract number, contain all the endorsement required herein, and require a notice to the OWNER of cancellation.

2. Insurance furnished by the CONTRACTOR shall be in accordance with the following requirements:

(a) any policy submitted shall not be subject to limitations, conditions or restrictions deemed inconsistent with the intent of the insurance requirements to be fulfilled by the CONTRACTOR. The OWNER'S decision thereon shall be final;

(b) all policies are to be written through companies duly licensed to transact that class of insurance in the State of Texas with a financial ratings of A+ VII or better as assigned by BEST Rating Company or equivalent; and

(c) All liability policies required herein shall be written with an "occurrence" basis coverage trigger.

3. CONTRACTOR agrees to the following:

(a) CONTRACTOR hereby waives subrogation rights for loss or damage to the extent same are covered by insurance. Insurers shall have no right of recovery or subrogation against the OWNER, it being the intention that the insurance policies shall protect all parties to the Contract and be primary coverage for all losses covered by the policies;

(b) Companies issuing the insurance policies and CONTRACTOR shall have no recourse against the OWNER for payment of any premiums or assessments for any deductibles, as all such premiums and deductibles are the sole responsibility and risk of the CONTRACTOR;

(c) Approval, disapproval or failure to act by the OWNER regarding any insurance supplied by the CONTRACTOR (or any subcontractors) shall not relieve the CONTRACTOR of full responsibility or liability for damages and accidents as set forth in the Contract Documents. Neither shall the bankruptcy, insolvency or denial of liability by the insurance company exonerate the CONTRACTOR from liability; and

(d) No special payments shall be made for any insurance that the CONTRACTOR and subcontractors are required to carry; all are included in the Contract Price and the Contract unit prices. Any of such insurance policies required under this section may be written in combination with any of the others, where legally permitted, but none of the specified limits may be lowered thereby.

1.56 Vendors/Contractors/Providers must be in compliance with the provisions of Section 2270.001 of the Texas Government Code which states a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and, (2) will not boycott Israel during the term of the contract. By submitting a response to a Collin County solicitation, the vendor will be required to sign the Chapter 2270 Verification form prior to a recommendation of the contract. This Act is effective September 1, 2017.

1.57 Vendors/Contractors/Providers must be in compliance with the provisions of Section 2252.152 and Section 2252.153 of the Texas Government Code which states, in part, contracts with companies engaged in business with Iran, Sudan, or Foreign Terrorist Organizations are prohibited. A governmental entity may not enter into a contract with a company that is listed on the Comptroller of the State of Texas website identified under Section 806.051, Section 807.051 or Section 2253.253 which do business with Iran, Sudan or any Foreign Terrorist Organization. This Act is effective September 1, 2017.

Section 004100-Bid Form



2019-133

Construction, Collin County Aggregate Rinse Stations

Issue Date: 5/21/2019 Questions Deadline: 6/7/2019 03:00 PM (CT) Response Deadline: 6/13/2019 02:00 PM (CT)

Collin County Purchasing

Contact Information

Contact: JD Griffin, CPPB Buyer II Address: 2300 Bloomdale Rd. Ste. 3160 Purchasing Admin. Building Ste.3160 McKinney, TX 75071 Phone: (972) 548-4116 Fax: (972) 548-4694 Email: jgriffin@co.collin.tx.us

Event Information

Number:2019-133Title:Construction, Collin County Aggregate Rinse StationsType:Invitation for Bid - ConstructionIssue Date:5/21/2019Question Deadline:6/7/2019 03:00 PM (CT)Response Deadline:6/13/2019 02:00 PM (CT)Notes:Please log in to view bid documents.

Ship To Information

Address: 4600 Community Ave. McKinney, TX 75071

Billing Information

Address: 2300 Bloomdale Rd. Ste. 3100 Auditor Admin. Building Ste. 3100 McKinney, TX 75071

Bid Activities

Pre-Bid Conference

A PRE-BID CONFERENCE will be held by Collin County at Collin County Central Plant 2nd Floor Conference Room, 4600 Community Ave., McKinney, TX 75071 on Tuesday, June 4, 2019 at 10:00 AM in order for bidders to ask questions regarding the proposed work. Immediately following the pre-bid conference, a site-walk will be conducted at the job site located at McKinney Stockpile, Hwy 75/Bloomdale Rd., McKinney, TX 75071. It is recommended that all bidders desiring to bid the work have a representative at the pre-bid conference and site walks.

Intent to Bid

Do you intent to submit a bid?

Bid Attachments

LEGAL NOTICE-2019-133.doc	Download
Legal Notice	
IFB No. 2019-133 Collin County Aggregate Rinse Station.pdf	View Online
Specifications	
2019-04-09 RVSD DWGS(CC Aggregate Rinse Station)(DEV2018-01-00202).pdf	View Online
Plans	

6/4/2019 10:00:00 AM (CT)

6/7/2019 5:00:00 PM (CT)

Requested Attachments

Bid Bond

(Attachment required)

BID SECURITY: All Bidders must submit, prior to the bid opening time, a certified check, Cashier's Check or acceptable Bid Bond payable without recourse to Collin County in the amount of not less than five percent (5%) of the total bid plus alternates as submitted.

1. Bid Bond, certified check or Cashier's Check may be mailed or hand delivered to the Office of the Collin County Purchasing Agent, Collin County Administration Building, 2300 Bloomdale Road, Ste 3160, McKinney, TX 75071 and shall be delivered in an envelope, marked plainly on the outside with the Bid Name and Number. 2. Bidders submitting a bid via Collin County eBid shall upload a Bid Bond at https://collincountytx.ionwave.net

Regardless of delivery method, all Bid Bonds shall be received prior to the bid opening time to be considered. Failure to submit a copy of bid security prior to bid opening shall be cause for rejection of bid.

The original Bid Bond shall be received in the Collin County Purchasing Department no later than close of business on the third working day after the bid opening. Late receipt of original Bid Bond shall be cause for rejection of bid.

Section 004100-Bid Schedule

(Attachment required)

2270 Verification

(Attachment required)

W-9

(Attachment required)

Conflict of Interest Questionnaire

Bid Attributes

1 eBid Notice

Collin County exclusively uses IonWave Technologies, Inc. (Collin County eBid) for the notification and dissemination of all solicitations. The receipt of solicitations through any other means may result in your receipt of incomplete specifications and/or addendums which could ultimately render your bid/proposal non-compliant. Collin County accepts no responsibility for the receipt and/or notification of solicitations through any other means. Please initial.

(Required: Maximum 1000 characters allowed)

2 Contact Information

List the contact name, email address and phone number of the main person(s) Collin County should contact in reference to this solicitation. Contact(s) shall be duly authorized by the company, corporation, firm, partnership or individual to respond to any questions, clarification, and or offers in response to this solicitation.

(Required: Maximum 4000 characters allowed)

3	Calendar Days Bid Bidder shall state the consecutive calendar days required to complete all work following a notice to proceed. (Required: Numbers only)
4	Exceptions Do you take exceptions to the specifications. If so, by separate attachment, please state your exceptions. Yes No (Required: Check only one)
5	Subcontractors State the business name of all subcontractors and the type of work they will be performing under this contract. If you are fully qualified to self-perform the entire contract, please respond with "Not Applicable-Self Perform".
6	(Required: Maximum 4000 characters allowed) Reference No. 1 List a company or governmental agency, other than Collin County, where these same/like products /services, as stated herein, have been provided. Texas references preferred. Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.
7	Reference No. 2 List a company or governmental agency, other than Collin County, where these same/like products /services, as stated herein, have been provided. Texas references preferred. Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.

8	Reference No. 3
	List a company or governmental agency, other than Collin County, where these same/like products /services, as stated herein, have been provided. Texas references preferred. Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.
	(Required: Maximum 4000 characters allowed)
•	
9	Preferential Treatment The County of Collin, as a governmental agency of the State of Texas, may not award a contract to a nonresident bidder unless the nonresident's bid is lower than the lowest bid submitted by a responsible Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid a nonresident bidder to obtain a comparable contract in the state in which the nonresident's principal place of business is located (Government Code, Title 10, V.T.C.A., Chapter 2252, Subchapter A). 1. Is your principal place of business in the State of Texas? 2. If your principal place of business is not in Texas, in which State is your principal place of business? 3. If your principal place of business is not in Texas, does your state favor resident bidders (bidders in your state) by some dollar increment or percentage? 4. If your state favors resident bidders, state by what dollar amount or percentage.
	(Required: Maximum 4000 characters allowed)
10	Debarment Certification I certify that neither my company nor an owner or principal of my company has been debarred, suspended or otherwise made ineligible for participation in Federal Assistance programs under Executive Order 12549, "Debarment and Suspension," as described in the Federal Register and Rules and Regulations. Please initial.
	(De minste Manimum 4000 shares (Inc. 1)
	(Required: Maximum 1000 characters allowed)
1	Immigration and Reform Act I declare and affirm that my company is in compliance with the Immigration and Reform Act of 1986 and all employees are legally eligible to work in the United States of America. I further understand and acknowledge that any non-compliance with the Immigration and Reform Act of 1986 at any time during the term of this contract will render the contract voidable by Collin County. Please initial.

(Required: Maximum 1000 characters allowed)

1 Disclosure of Certain Relationships

Chapter 176 of the Texas Local Government Code requires that any vendor considering doing business with a local government entity disclose the vendor's affiliation or business relationship that might cause a conflict of interest with a local government entity. Subchapter 6 of the code requires a vendor to file a conflict of interest questionnaire (CIQ) if a conflict exists. By law this questionnaire must be filed with the records administrator of Collin County no later than the 7th business day after the date the vendor becomes aware of an event that requires the statement to be filed. A vendor commits an offense if the vendor knowingly violates the code. An offense under this section is a misdemeanor. By submitting a response to this request, the vendor represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code. Please send completed forms to the Collin County County Clerk's Office located at 2300 Bloomdale Rd., Suite 2104, McKinney, TX 75071. Please initial.

(Required: Maximum 1000 characters allowed)

1 Anti-Collusion Statement

Bidder certifies that its Bid/Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Bid/Proposal for the same materials, services, supplies, or equipment and is in all respects fair and without collusion or fraud. No premiums, rebates or gratuities permitted; either with, prior to, or after any delivery of material or provision of services. Any such violation may result in Agreement cancellation, return of materials or discontinuation of services and the possible removal from bidders list. Please initial.

(Required: Maximum 1000 characters allowed)

1 Disclosure of Interested Parties

Section 2252.908 of the Texas Government Code requires a business entity entering into certain contracts with a governmental entity to file with the governmental entity a disclosure of interested parties at the time the business entity submits the signed contract to the governmental entity. Section 2252.908 requires the disclosure form (Form 1295) to be signed by the authorized agent of the contracting business entity, acknowledging that the disclosure is made under oath and under penalty of perjury. Section 2252.908 applies only to a contract that requires an action or vote by the governing body of the governmental entity before the contract may be signed or has a value of at least \$1 million. Section 2252.908 provides definitions of certain terms occurring in the section. Section 2252.908 applies only to a contract entered into on or after January 1, 2016. Please initial.

(Required: Maximum 1000 characters allowed)

1 Notification Survey

In order to better serve our offerors, the Collin County Purchasing Department is conducting the following survey.
We appreciate your time and effort expended to submit your bid. Should you have any questions or require more
information please call (972) 548-4165. How did you receive notice of this request?

Plano Star Courier	Plan Room	Collin County eBid Notification	Collin County Website
Other			
(Required: Check only one)			

1	Insurance Acknowledgement
6	I understand that the insurance requirements of this solicitation are required and are included in the submitted pricing. A certificate of insurance shall be submitted to the Purchasing department if I am awarded all or a portion of the resulting contract. Please initial.
	(Required: Maximum 1000 characters allowed)
1 7	Bonding Requirement Acknowledgement I understand that the bonding requirements of this solicitation are required and are included in the submitted pricing. A bond certificate (payment, performance, and/or maintenance) as stated in the specification document shall be submitted to the Purchasing department if I am awarded all or a portion of the resulting contract. Please initial.
	(Required: Maximum 1000 characters allowed)
18	Bid Bond Acknowledgement I understand that accompanying this bid, is a certified check, cashier's check or Bid Bond in the amount of five percent (5%) of the total amount bid. Bidders submitting a bid via Collin County eBid shall upload a Bid Bond at https://collincountytx.ionwave.net. Regardless of delivery method, all Bid Bonds shall be received prior to the bid opening time to be considered. I understand that the original Bid Bond shall be received in the Collin County Purchasing Department no later than close of business on the third working day after the bid opening. Late receipt of original Bid Bond shall be cause for rejection of bid. Please initial.
1 9	Construction Acknowledgement Bidder, declares that the only person or parties interested in this bid are those principals named herein, that his/her bid is made without collusion with any other person, firm or corporation, that he/she has carefully examined the Contract Documents including the Advertisement for Bids, Instruction to Bidders, Construction Agreement, Specifications and the Drawings, therein referred to and has carefully examined the locations, conditions and classes of materials for the proposed work, and agrees that he/she will provide all the necessary labor, machinery, tools, equipment, apparatus and other items incidental to construction and will do all the work and furnish all the materials called for in the Contract Documents in the manner prescribed therein. Bidder hereby declares that he/she has visited the site of the Work and has carefully examined the Contract Documents pertaining to the Work covered by the above Bid, and he/she further agrees to commence work within ten (10) consecutive calendar days after date of written Notice to Proceed and to substantially complete the work on which he/she has bid within the

after date of written Notice to Proceed and to substantially complete the work on which he/she has bid within the number of days specified subject to such extensions of time allowed by Specifications. Bidder certifies that the bid prices contained in this bid have been carefully checked and are submitted as correct and final. The prices have been shown in words and figures for each item listed in this bid and it is understood that in the event of a discrepancy, the words shall govern. Please initial.

(Required: Maximum 1000 characters allowed)

Bid Lines

_					
	Bid Grand Tota (Response required				
	Quantity: <u>1</u>	UOM: <u>lump sum</u>	Unit Price:	\$	Total: \$
	Item Notes:	Total Material Cost and Total La Total.	bor Cost must	add up to the Bid Grand	
1	Supplier Notes:				Additional notes (Attach separate sheet)
-	Item Attribute	25			
	1. Bid Grand	Total- Written in Words			
	The contract	award will be based on the total	bid price.		
	(Required: Maxi	mum 4000 characters allowed)			
	2. Total Mater	ial Cost Incorporated in Proje	ect		
	\$				
	(Required: Num				
;	3. Total Mater	ial Cost Incorporated in Proje	ct- Written in	Words	
	(Required: Maxi	mum 4000 characters allowed)			
ŀ	4. Total Labor	Cost Incorporated in Project			
	\$				
	(Required: Num	bers only)			
1	5. Total Labor	Cost Incorporated in Project	- Written in W	/ords	
	(Required: Maxi	mum 4000 characters allowed)			

Supplier Information

Company Name:	
Contact Name:	
Address:	
Phone:	
Fax:	
Email:	
Supplier Note	es a la companya de la

The undersigned hereby certifies the foregoing bid submitted by the company listed below hereinafter called "bidder" is the duly authorized agent of said company and the person signing said bid has been duly authorized to execute same. Bidder affirms that they are duly authorized to execute this contract; this company; corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder or other person or persons engaged in the same line of business; and that the contents of this bid as to prices, terms and conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

Print Name

Signature

SECTION 004100 - BID SCHEDULE

BID SCHEDULE - BASE BID COLLIN COUNTY AGGREGATE RINSE STATION

ITEM NO.	SPEC. NO.	ESTIMATED QUANTITY	UNIT	DESCRIPTION WITH UNIT PRICES				
NO.	NO.	QUANTIT		WRITTEN IN WORDS	(\$)	(\$)		
				MOBILIZATION				
100	NI 400			Complete in Place, for the Sum of				
100	N-100	1	LS		llars			
				Cei	nts			
				per LS				
				REMOVE & RESET EXIST FIRE HYDRANT				
				Complete in Place, for the Sum of				
200	N-201.2	1	EA		llars			
				Cer	nts			
				per EA				
				FURNISH & INSTALL TREE PROTECTION				
				Complete in Place, for the Sum of				
201	N-202	647	LF	Do	llars			
				Cei	nts			
				per LF				
				REMOVE TREE PROTECTION				
				Complete in Place, for the Sum of				
202	N-202	N-202	647	LF	Do	llars		
				Cer	nts			
				per LF				
	3 N-202			FURNISH & INSTALL PERMANENT SEEDING				
						Complete in Place, for the Sum of		
203		202 620	620	SY	Do	llars		
				Cer	nts			
				per SY				
				FURNISH & INSTALL EROSION CONTROL LOGS (8")				
				Complete in Place, for the Sum of				
204	N-202	202 1003	LF	Do	llars			
201		1000		00				
				per LF				
				REMOVE EROSION CONTROL LOGS (8")				
				Complete in Place, for the Sum of				
205	N-202	1003	LF	-	llars			
205	11-202	1002	LF	00				
				per LF	11.5			
				FURNISH & INSTALL EROSION CONTROL LOGS (12")				
200	NI 202			Complete in Place, for the Sum of	U			
206	N-202	24	LF		llars			
				Cer	nts			
	<u> </u>			per LF				
				REMOVE EROSION CONTROL LOGS (12")				
		_		Complete in Place, for the Sum of				
207	N-202	24	LF		llars			
				Cer	nts			
				per LF				

ITEM NO.	SPEC. NO.	ESTIMATED QUANTITY	UNIT	DESCRIPTION WITH UNIT PRICES WRITTEN IN WORDS		UNIT PRICE (\$)	AMOUNT BID (\$)
				REMOVE EROSION CONTROL LOGS (8")			
				Complete in Place, for the Sum of			
205	NI 202	1002		-	Dallana		
205	N-202	1003	LF		Dollars		
					Cents		
				per LF			
				FURNISH & INSTALL 4" REINF CONCRETE PAD			
				Complete in Place, for the Sum of			
300	N-303	4	SY		Dollars		
					Cents		
				per SY			
				FURNISH & INSTALL 6" PVC WATER MAIN			
				Complete in Place, for the Sum of			
				-			
500	N-501	1073	LF		Dollars		
					Cents		
				per LF			
				FURNISH & INSTALL CONCRETE BLOCKING 2000 PSI			
				Complete in Place, for the Sum of			
501	N-502.4	9.7	CY		Dollars		
					Cents		
				per CY			
				FURNISH & INSTALL DUCTILE IRON FITTINGS			
500	N 500 5	0.6	TON	Complete in Place, for the Sum of			
502	N-502.5	0.6	TON		Dollars		
					Cents		
				per TON			
				FURNISH & INSTALL 10"x6" TAPPING SLEEVE AND VALVE			
				Complete in Place, for the Sum of			
503	N-502.6	1	EA		Dollars		
					Cents		
				per EA			
				FURNISH & INSTALL 6" GATE VALVE			
				Complete in Place, for the Sum of			
504	N-502.6	3	EA		Dollars		
504	N-302.0	5	EA				
					Cents		
				per EA			
				FURNISH & INSTALL 6" CITY OF MCKINNEY DOMESTIC WATER METER W/13			
				Complete in Place, for the Sum of			
505	N-502.10	1	EA		Dollars		
					Cents		
				per EA			
				TRENCH EXCAVATION PROTECTION			
				Complete in Place, for the Sum of			
FOC		250	LF	-	Dollars		
506	N-504.3	350			Dollars		
					Cents		
				per LF			

ITEM NO.	SPEC. NO.	ESTIMATED QUANTITY	UNIT	DESCRIPTION WITH UNIT PRICES WRITTEN IN WORDS	UNIT PRICE (\$)	AMOUNT BID (\$)
507	N-506.5	1	LS	STERILIZATION AND TESTING Complete in Place, for the Sum of Dollars Cents		
700	700	4	EA	per LS FURNISH & INSTALL 4" BOLLARD Complete in Place, for the Sum ofDollarsCents per EA		

SUBTOTAL AMOUNT BASE BID FOR MATERIALS AND SERVICES, ITEMS 100 THROUGH ITEMS 700, INCLUSIVE.

\$

NOTE: Refer to project documents and the October 2004 Edition of the Public Works Construction Standards - North Central Texas as amended and published by the North Central Texas Council of Governments for specifications.

004313 BID BOND

STATE OF TEXAS	ş			
COUNTY OF COLLIN	§	KNOW ALL MEN BY	THESE PRESENTS:	
THAT			, a corporation organiz	zed and existing_under the laws of
the State of	, and fully authorized	to transact business in the State of	Texas, whose address is	of the
City of	County of	, and State of	,(hereinafter referred to as "Princi	pal"), and
			(hereinafter referred to as "Surety	y", a corporation organized under
the laws of the State of	and auth	norized under the laws of the State	of Texas to act as surety on bonds for prin-	cipals, are held and firmly bound
unto	(hereinafte	r referred to as "Owner") and unto	all persons, firms and corporations who may	y furnish materials for or perform
labor upon the buildings, strue	ctures or improvements re-	ferred to in the attached Contract, ,	in the penal sum of	
Dollars (\$) in lawful money of the United St	ates, for the payment whereof, the said Prine	cipal and Surety bind themselves,
and their heirs, administrators	, executors, successors, an	nd assigns, jointly and severally, fire	nly by these presents:	
SIGNED, SEALE	D and DATED this	day of2	0	

WHEREAS, the Principal is herewith submitting its proposal for IFB 2019-133, CONSTRUCTION, COLLIN COUNTY AGGREGATE RINSE STATIONS.

The condition of the above obligations are such that if the aforesaid Principal shall be awarded the Contract, the said Principal will, within the time required, enter into a Contract and give Bonds, if required, for the faithful performance of the Contract and the prompt payment for labor and materials in the prosecution thereof, then this obligation shall be null and void; otherwise the Principal and Surety will pay unto the OWNER the full penal sum hereof, as liquidated damages, it being difficult and impractical to determine accurately the actual amount of damages occurring to OWNER by reason of Principal's failure to execute said Contract and Bonds.

PROVIDED FURTHER, that if any legal action be filed on this Bond, venue shall lie in _____ County, Texas.

The Resident Agent of the Surety for delivery of notice and service of process is:

Name: _____ Address:

Phone Number:

WITNESS

WITNESS

PRINCIPAL

Printed/Typed Name
Title:
Company:
Address:
SURETY
Printed/Typed Name
Title:
Company:
Address:

NOTE: CERTIFIED COPY OF POWER-OF-ATTORNEY SHOULD BE ATTACHED HERETO.

Revised 11/2008

SECTION 00 43 25 - PRODUCT SUBSTITUTION REQUEST FORM

(Must be submitted a minimum of 7 days before the bid date)

Bidder:	Project No: IFB 2019-133
Project: Construction, Collin Count	y Aggregate Rinse Stations
Section:	Article/ Paragraph:
Proposed Substitution:	
Manufacturer:	Address:
Telephone:	Proposed Model No.:
	iption, specifications, drawings, photographs, and performance and test data applicable portions of the data are clearly identified.
Attached data also includes a descript require for its installation.	tion of changes to the Contract Documents that the proposed substitution will
The undersigned warrants and represe	nts:
 Same maintenance service an Proposed substitution will ha progress schedule. Proposed substitution does not 	hed for proposed substitution as for specified product. In source of replacement parts, as applicable, is available. Ive no adverse effect on other trades and will not affect or delay of affect dimensions and functional clearances. anges to building design, including A/E design, detailing, and substitution.
Submitted By:	Signed:
Firm:	Address:
Phone:	
Substitution approved as note Substitution rejected - Use sp	e submittals in accordance with Project Manual requirements. ed - Make submittals in accordance with Project Manual requirements. becified materials. d too late - Use specified materials.
Signature:	Date:
Supporting Data Attached:Drav	vingsProduct DataSamplesTestsReportsOther
	END OF REQUEST FORM

SECTION 004547-CONFLICT OF INTEREST INFORMATION REGARDING CONFLICT OF INTEREST QUESTIONNAIRE

During the 79th Legislative Session, House Bill 914 was signed into law effective September 1, 2015, which added Chapter 176 to the Texas Local Government Code. Recent changes have been made to Chapter 176 pursuant to HB23, which passed the

84th Legislative Session. Chapter 176 mandates the <u>public disclosure of certain</u> <u>information</u> <u>concerning persons doing business or seeking to do business with Collin County, including family,</u> <u>business, and financial relationships such persons may</u> <u>have with Collin County officers or</u> <u>employees involved in the planning,</u> <u>recommending, selecting and contracting of a vendor for this</u> <u>procurement.</u>

For a copy of Form CIQ and CIS:

http://www.ethics.state.tx.us/filinginfo/conflict_forms.htm

The vendor acknowledges by doing business or seeking to do business with Collin County that he/she has been notified of the requirements under Chapter 176 of the Texas Local Government Code and that he/she is solely responsible for complying with the terms and conditions therein. Furthermore, any individual or business entity seeking to do business with Collin County who does not comply with this practice may risk award consideration of any County contract.

For a listing of current Collin County Officers: http://www.collincountytx.gov/government/Pages/officials.aspx

The following County employees will be involved in the planning, recommending, selecting, and contracting for the attached procurement:

Department/Evaluation Team: Bill Burke - Director of Building Projects David Dooley - Building Projects Coordinator

Purchasing: Michalyn Rains, CPPO, CPPB – Purchasing Agent Michelle Charnoski, CPPB – Assistant Purchasing Agent J. D. Griffin, CPPB – Buyer II

Commissioners' Court: Chris Hill – County Judge Susan Fletcher – Commissioner Precinct No. 1 Cheryl Williams – Commissioner Precinct No. 2 Darrell Hale – Commissioner Precinct No. 3 Duncan Webb – Commissioner Precinct No. 4

Advisors: Civil Consulting Group, PLLC 1575 Heritage Drive, Suite 308 McKinney, TX 75069

CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity	FORM CIQ
This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.	OFFICE USE ONLY
This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).	Date Received
By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. <i>See</i> Section 176.006(a-1), Local Government Code.	
A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.	
1 Name of vendor who has a business relationship with local governmental entity.	
2 Check this box if you are filing an update to a previously filed questionnaire. (The law re completed questionnaire with the appropriate filing authority not later than the 7th busines you became aware that the originally filed questionnaire was incomplete or inaccurate.)	s day after the date on which
3 Name of local government officer about whom the information is being disclosed.	
Name of Officer	
 4 Describe each employment or other business relationship with the local government offi officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship wit Complete subparts A and B for each employment or business relationship described. Attac CIQ as necessary. A. Is the local government officer or a family member of the officer receiving or li other than investment income, from the vendor? Yes No B. Is the vendor receiving or likely to receive taxable income, other than investment officer or a family member of the officer AND the taxable local government officer or a family member of the officer AND the taxable local government and the local government officer or a family member of the officer AND the taxable local governmental entity? 	h the local government officer. h additional pages to this Form kely to receive taxable income,
Yes No	
 Describe each employment or business relationship that the vendor named in Section 1 m other business entity with respect to which the local government officer serves as an o ownership interest of one percent or more. Check this box if the vendor has given the local government officer or a family member 	fficer or director, or holds an
as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.0	
	Date

CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

SECTION 004548 - HB89/CHAPTER 2270 VERIFICATION

I, _____, the undersigned representative of (PRINT NAME)

(COMPANY)

do hereby verify that the company named-above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

- 1. Does not boycott Israel currently; and
- 2. Will not boycott Israel during the term of the contract.

Pursuant to Section 2270.001, Texas Government Code:

- "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and
- 2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.

SOLICITATION NUMBER

SIGNATURE OF COMPANY REPRESENTATIVE

DATE

TITLE

005213 CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT is made and entered into by and between a corporation (hereinafter referred to as "Contractor"), and COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas (hereinafter referred to as "County" or "OWNER"), to be effective from and after the date hereinafter provided.

For and in consideration of the covenants and agreements contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

CONTRACT SUM

The County shall pay the Contractor in current funds for the performance of the work, subject to additions and deductions by Change orders as provided in the Contract Documents. The contract sum shall be the amount of (\$_____).

EFFECTIVE DATE

This Construction Agreement, having been previously approved by the Commissioners' Court of Collin County, Texas, shall be effective upon the date of delivery and execution by Contractor, provided the County executes the same within five (5) consecutive calendar days after said delivery and execution by Contractor.

I. CONTRACT GENERAL PROVISIONS

1.1 DEFINITIONS

Words which have well-known technical or construction industry meanings shall have their commonly understood meanings in the Contract Documents, unless a different meaning is stated in the Contract Documents. The following words and expressions, or pronouns used in their place, shall wherever they appear in this contract be construed as follows, unless a different meaning is clear from the context:

Addendum, Bulletin or Letter of Clarification: Any additional contract provisions, or change, revisions or clarification of the Contract Documents issued in writing by the OWNER, to prospective bidders prior to the receipt of bids.

Contract or Contract Documents: The written agreement covering the performance of the work. The Contract and Contract Documents include this written Construction Agreement between OWNER and CONTRACTOR, Advertisement for Bids, Instructions to Bidders, Requests for Proposal, all Addenda, the Specifications, including the general and supplemental special and technical conditions, Drawings, provisions, plans or working drawings — and any supplemental changes or agreements pertaining to the Work or materials therefor; and bonds and any additional documents incorporated by reference in the above.

CONTRACTOR: The person, persons, partnership, firm, corporation, association or organization, or any combination thereof, entering into the contract for the execution of the work, acting directly or through a duly authorized representative.

Other CONTRACTORS: Any contractor, other than the CONTRACTOR or his subcontractors, who has a direct contact with the OWNER for work on or adjacent to the site of the work.

Contract Work or Work: Everything expressly or impliedly required to be furnished and done by the CONTRACTOR by the Contract Documents.

Engineer: The term "Engineer" means the Engineer or his duly authorized representative. The Engineer shall be understood to be the Engineer of the OWNER, and nothing contained in the Contract Documents shall create any contractual or agency relationship between the Engineer and the CONTRACTOR.

Extra Work: Work other than that which is expressly or impliedly required by the Contract Documents at the time of the execution of the contract.

Change Order: A written order to the CONTRACTOR authorizing and directing an addition, deletion or revision in the work within the general scope of the Contract Documents, or authorizing an adjustment in the Contract Price or the Contract time.

Contract Price: The total amount of money payable to the CONTRACTOR under the terms and conditions of the Contract Documents. When used in such context, it may also mean the unit price of an item of work under the Contract terms.

OWNER'S Representative: The Engineer or other duly authorized assistant, agent, engineer, inspector or superintendent acting within the scope of their particular duties.

Drawings or Contract Drawings: Those drawings that are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, including but not limited to, the plans, elevations, sections, details, schedules, diagrams, any bulletin, or any detailed drawing furnished by the OWNER, pertaining or supplemental thereto.

Specifications: Those portions of the Contract Documents that specify the requirements for materials, equipment, systems, standards and workmanship for performance of the Work, and related services.

Inspector: Any representative of the OWNER designated to inspect the work.

Materialman or Supplier: Any subcontractor contracting with the CONTRACTOR, or any of his subcontractors, to fabricate or deliver or who actually fabricates or delivers materials, supplies or equipment to be consumed or incorporated into the Work.

Notice: Written notice effective the date of the postmark thereon, or if hand delivered, effective the date of hand delivery.

OWNER: COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas. The term OWNER means the OWNER or its authorized representative.

Payment Bond: A bond in the amount of the Contract executed by a corporate surety in accordance with all Texas Law, including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects as security furnished by the CONTRACTOR and his sureties solely for the protection of payment bond beneficiaries supplying labor and materials in the prosecution of the Contract Work.

Performance Bond: A bond in the amount of the Contract executed by a corporate surety in accordance with all Texas Law, including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects as security furnished by the CONTRACTOR and his sureties solely for the protection of the Owner, conditioned on the faithful performance of the Contract Work in accordance with the plans, specification, and Contract Documents.

Maintenance Bond: A bond executed by a corporate surety for 10% of the Contract Price that complies with all Texas Laws, including but not limited to, Chapter 3503 of the Texas Insurance Code, guaranteeing the prompt, full and faithful performance of the general guaranty and warranty contained in the Contract Documents, and Texas Law.

Project: The total construction of the work described in the Contract Documents performed by the Contractor, Other Contractor or the Owner in whole or part.

Proposal: The written statement or statements duly submitted to the OWNER by the person, persons, partnership, company, firm, association or corporation proposing to do the Work contemplated, including the approved form on which the formal bids for the Work are to be proposed.

Plan, or Plans: The plans are the drawings or reproductions therefrom made by the Owner or Owner's Representative and approved by the Owner showing the dimensions, location, design and position of the various elements of the Project and Work, including plans, elevations, sections, details, schedules, diagrams, working drawings, preliminary drawings, and such supplemental drawings as the Owner may issue to clarify other drawings or for the purpose of showing changes in the Contract Work authorized by the Owner, or for showing details not shown therein.

Special Provisions or Conditions: The special clauses of the Contract, or Contract Documents, setting forth conditions or requirements peculiar to the specific Project involved, supplementing the standard or general specifications and taking precedence over any conditions or requirements of the standard or general specifications with which they are in conflict.

Specifications or Contract Specifications: All of the general, special and technical conditions or provisions, and all addendum or supplements thereto consisting of written requirements for materials, equipment, systems, standards and performance of the work.

Site: The area upon or in which the CONTRACTOR'S operations are carried on, and such other areas adjacent thereto as may be designated as such by the OWNER.

Subcontractors: Any persons, firm or corporation, other than employees of the CONTRACTOR, who or which contracts with the CONTRACTOR to furnish, or who actually furnishes, labor and/or materials and equipment at or about the site.

Sureties: The corporate bodies which are bound by such bonds as are required with and for the CONTRACTOR. The sureties engaged to be responsible for the entire and satisfactory fulfillment of the Contract and for any and all requirements as set out in the specifications, Contract or plans.

The Work: All work including the furnishing of all labor, materials, tools, equipment, required submittals and incidentals to be performed by the CONTRACTOR under the terms of the Contract.

Directed, Required, Approved and Words of Like Import: Whenever they apply to the Work or its performance, the words "directed," "required," "permitted," "ordered," "designated," "established," "prescribed" and words of like import used in the Contract, specifications or upon the drawings shall imply the direction, requirement, permission, order, designation or prescription of the OWNER; and "approved," "acceptable," "satisfactory" and words of like import shall mean approved by, acceptable to or satisfactory to the OWNER.

Equal: Materials, articles or methods which are of equal or higher quality than those specified or shown on the drawings and as further defined in the "or equal" clause. Substitution of Materials shall be determined by the Engineer at his or her discretion, and approved by the Owner.

Working Time, Completion Time or Contract Time: The time set forth in the Contract for the performance and completion of the Work contracted for. The time may be expressed as calendar days, working days or a specific date.

Calendar Day or Days: Any successive days of the week or month, no days being excepted.

Working Day: A working day is defined as a calendar day not including Saturdays, Sundays or those legal holidays as specified in the list prepared by the OWNER for contract purposes. Nothing in this definition shall be construed as prohibiting the CONTRACTOR from working on Saturdays if he so desires, however permission of the OWNER shall be necessary if the CONTRACTOR chooses to work on Saturday. Work on Sundays shall not be permitted without the written permission of the OWNER. If Saturday or Sunday work is permitted, working time shall be charged on the same basis as week days. Where the working time is expressed as calendar days or a specific date, the concept of working days shall no longer be relevant to the contract.

CONTRACT DOCUMENTS

1.2 The parties agree that the Contract Documents shall consist of the following documents in addition to any other documents referenced or incorporated herein:

- A. This written Construction Agreement, including any changes or modifications;
- B. All addenda including the following listed and numbered addenda: Addendum No. 1 dated ______ Received ______ Addendum No. 2 dated ______ Received ______ Addendum No. 3 dated ______ Received
- C. Advertisement for Bids, Instructions to Bidder, the Invitation to Bid and Bid Form;
- D. The Special/Supplemental Conditions;
- E. The Specifications and the Project Drawings (if any);
- F. The Construction Details shown on plans;
- G. The Standard Specifications and Standard Drawings from the Public Works Construction Standards-North Central Texas Council of Governments, 2004 edition and all subsequent addendums;
- H. The Performance Bond in the sum of ONE HUNDRED PERCENT (100%) of the total Contract Price;
- I. The Payment Bond in the sum of ONE HUNDRED PERCENT (100%) of the total Contract Price; and,

1.2.1 PRIORITY OF THE CONTRACT DOCUMENTS

These Contract Documents (A through I above) form the Construction Agreement and are a part of this Construction Agreement as if fully set forth herein. In the event of an inconsistency in any of the provisions of the Contract Documents, the inconsistency shall be resolved by giving precedence to the Contract Documents in the order in which they are listed above.

1.2.2 THE CONTRACT

The Contract Documents form the Contract. The Contract represents the entire integrated agreement between the OWNER and the CONTRACTOR and supersedes all prior negotiations, and representations by either party.

1.3 CORRELATION AND INTENT OF DOCUMENTS

The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all. The intent of the documents, unless otherwise specifically provided, is to produce complete and finished work, which the CONTRACTOR undertakes to do in full compliance with the Contract Documents. It is not intended to mention every item of work in the specifications which can be adequately shown on the drawings nor to show on the drawings all items of work described or required by the specifications. All materials or labor for work shown on the drawings or reasonably inferable therefrom as being necessary to produce a finished job shall be provided by the CONTRACTOR whether or not same is expressly covered in the specifications. No verbal conversation, understanding or agreement with any officer or employee or agent of the OWNER, either before or after the execution of the Contract, shall affect or modify any of the terms, conditions or obligations contained in the Contract Documents.

1.3.1 CONTRACT DRAWINGS AND SPECIFICATIONS

The OWNER shall furnish the CONTRACTOR one copy of the Contract Drawings and any supplemental drawings and specifications reasonably necessary for the proper execution of the work. At least one copy of all drawings and specifications shall be accessible at all times to the OWNER at the job site.

1.3.2 SUPPLEMENTAL DRAWINGS AND SPECIFICATIONS

In order to carry out the intent of the Contract Documents and to assist the CONTRACTOR in performing its work, the OWNER, after the execution of the Contract, may, by supplemental drawings, specifications or otherwise, furnish additional information or instructions as may be necessary for construction purposes.

All such supplemental drawings, specifications or instructions are intended to be consistent with the Contract Documents and reasonably inferable therefrom. Therefore, no extra costs shall be allowed by the OWNER on a claim that particular supplemental drawings, specifications or instructions differ from the requirements of the Contract Documents, incurring extra costs, unless the CONTRACTOR has first brought the matter, in writing, to the OWNER'S attention for adjustment before proceeding with the work covered by such.

If the OWNER decides that there is no departure from the requirements of the Contract Documents, the CONTRACTOR shall then proceed with the work as shown, specified or directed. If the OWNER shall decide that Extra Work is involved, he shall so modify the supplemental drawings, specifications or instructions to eliminate the Extra Work, or cause a written Change Order to be issued in accordance with the Contract Documents.

1.3.3 ERRORS AND CORRECTIONS IN DRAWINGS AND SPECIFICATIONS

The CONTRACTOR shall not take advantage of any apparent errors, omissions or discrepancies in the drawings or specifications; and the Architect or Engineer shall be permitted to make such corrections or interpretations as may be necessary for the fulfillment of the intent of the Contract Documents. In case of any errors, omissions or discrepancies in the drawings or specifications, the CONTRACTOR shall promptly submit the matter to the OWNER or OWNER'S Representative in writing who, in turn, shall promptly make a determination and issue the necessary instructions in writing. Any adjustment by the CONTRACTOR without this determination and instructions shall be at the CONTRACTOR'S own risk and expense. The Work is to be made complete as intended by the Contract Documents.

1.3.4 EXISTING STRUCTURES

The plans show the general locations of some known surface and subsurface structures. The locations of many gas mains, water mains, conduits, sewers, other utilities, etc., however, are unknown, and the OWNER assumes no responsibility for

failure to show any or all of these structures on the plans or to show them in their exact locations. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for Extra Work or for increasing the pay quantities in any manner whatsoever. The CONTRACTOR shall be solely responsible for locating all gas mains, water mains, conduits, sewers, other utilities etc., so as to perform the Work without damaging the same.

II. THE WORK

2.1 SCOPE OF WORK

Contractor shall provide all labor, supervision, materials, and equipment necessary to perform all work required by the Contract Documents in connection with **IFB 2019-133, Construction, Collin County Aggregate Rinse Stations**.

2.2 CHANGE OR MODIFICATION OF CONTRACT

2.2.1 ALTERATION OF PLANS AND SPECIFICATIONS

The OWNER reserves the right to make such changes in the plans and specifications and in the character of the work as may be necessary or desirable to insure completion in the most satisfactory manner, provided such changes do not materially alter the original plans and specifications or change the general nature of the Work as a whole. Such changes shall not be considered as waiving or invalidating any condition or provision of the Contract or bonds. Such changes shall be issued by the Engineer.

2.2.2 INCREASED OR DECREASED QUANTITIES OF WORK

The OWNER reserves the right and may from time to time, by written order, and without notice to any surety, make changes in the quantity or time of performance of the Work, as may be considered necessary or desirable and such changes shall not be considered as waiving or invalidating any conditions or provisions of the Contract or bonds. The CONTRACTOR shall perform all the Contract Work in strict compliance with the Contract Documents, and shall not make any changes to the Work without prior written authorization from the OWNER, in the form of a written Change Order. If such changes increase or decrease either the cost or the time necessary for the performance of the Work, then the parties will mutually agree upon an equitable adjustment to the price or time to perform the Work pursuant to the terms of the Contract.

2.2.3 EXTRA WORK/CHANGE ORDERS

When any work is necessary to the proper completion of the Project and for which no prices are provided for in the Bid or Proposal and Contract, the CONTRACTOR shall do such work, but only when and as ordered in writing by the OWNER. The OWNER may order changes in the Work without invalidating Contract. Payment for Extra Work shall be made as provided herein. Contractor agrees that overhead and profit for Extra Work shall not exceed 10% of the total cost of the Extra Work. The Contractor shall not be entitled to any additional funds for any work or Extra Work performed on the Project, unless a Change Order is issued and signed by the Owner. The CONTRACTOR shall perform the work as altered, whether increased or decreased, and no allowances shall be made for anticipated profits. Nothing in this section shall give rise to any claims for any delay or acceleration damages, and the CONTRACTORS sole remedy for any delays in the Project shall remain an equitable extension of time as provided for in the Contract Documents. CONTRACTOR acknowledges and agrees to waive all rights or claims for compensation for any additional or other work not specifically authorized by the OWNER.

2.3 DISPUTED WORK AND CLAIMS FOR ADDITIONAL COMPENSATION

If the CONTRACTOR is of the opinion that (a) the work necessary or required to accomplish the result intended by this Contract, or (b) any work ordered to be done as Contract Work by the OWNER is Extra Work and not Contract Work, or (c) any determination or order of the OWNER violates the terms and provisions of this Contract, the CONTRACTOR shall promptly, either before proceeding with such work or complying with such order or determination, notify the OWNER in writing of his contentions with respect thereto and request a final determination thereof.

Such determination of the OWNER shall be given in writing to the CONTRACTOR. If the OWNER determines that the work in question is Extra Work and not Contract Work, or that the order complained of requires performance by the CONTRACTOR beyond that required by the Contract or violates the terms and provisions of the Contract, thereupon the OWNER shall cause either (a) the issuance of a written Change Order covering the Extra Work as provided herein, or (b) the determination or order complained of to be rescinded or so modified so as to not require performance beyond that required by the terms and provisions of the Contract.

If the OWNER determines that the work in question is Contract Work and not Extra Work, or that the determination or order complained of does not require performance by the CONTRACTOR beyond that required by the Contract or violate the terms and provisions of the Contract, he shall direct the CONTRACTOR to proceed, and the CONTRACTOR must promptly comply. In order to reserve his right to claim compensation for such work resulting from such compliance, however, the CONTRACTOR must, within 20 calendar days after receiving the OWNER'S determination and direction, notify the OWNER in writing that the work is being performed, or that the determination and direction is being complied with, under protest.

If the CONTRACTOR fails to so appeal to the OWNER for a determination or, having so appealed, should the CONTRACTOR thus fail to notify the OWNER in writing of his protest, the CONTRACTOR shall be deemed to have waived any claim for extra compensation or damages therefore. No oral appeals or oral protests, no matter to whom made, shall be deemed even substantial compliance with the provisions of this item.

In addition to the foregoing requirements, the CONTRACTOR shall, upon notice from the OWNER, for a minimum period of three (3) years following final payment or termination of contract, produce for examination and audit at the CONTRACTOR'S office, by the representatives of the OWNER, all his books and records showing all of his acts and transactions in connection with contractual performance as well as relating to or arising by reason of the matter in dispute. At such examination a duly authorized representative of the CONTRACTOR may be present.

Unless the aforesaid requirements and conditions are complied with by the CONTRACTOR, the OWNER shall be released from all claims arising under, relating to or by reason of disputed work or Extra Work. It is further stipulated and agreed that no conduct on the part of the OWNER or any agent or employee of the OWNER shall ever be construed as a waiver of the requirements of this section, when such requirements constitute an absolute condition precedent to any approval of any claim for extra compensation, notwithstanding any other provisions of the Contract Documents; and in any action against the OWNER to recover any sum in excess of the contract amount, the CONTRACTOR must allege and prove strict compliance with the provisions of this section. The CONTRACTOR ASSUMES THE RISK OF NONPAYMENT, for failing to comply with any of the requirements of this section.

III. CONTRACTORS RESPONSIBILITIES

3.1 CONTRACTOR'S REPRESENTATIONS, WARRANTIES AND ASSURANCES.

In consideration of, and to induce the award of this contract to him, the CONTRACTOR represents and warrants: (a) That he is financially solvent, and sufficiently experienced and competent to perform the work; (b) That the facts stated in the proposal and the information given by him pursuant to the bidding documents are true and correct in all respects; (c) That he has read, understood and complied with all the requirements set forth in the bidding documents; (d) That he is familiar with and understands all laws and regulations applicable to the work; and (e) unless otherwise specifically provided for in the Contract Documents, the CONTRACTOR shall do all the Work and shall furnish all the tools, equipment, machinery, materials, labor and appliances, except as herein otherwise specified, necessary or proper for performing and completing the work required by this Contract, in the manner and within the time herein prescribed.

By executing the contract, the CONTRACTOR represents that he has visited the site of Work, has fully familiarized himself with the local and on-site conditions under which the work is to be performed and has correlated his observation with the requirements of the Contract Documents. In addition, the CONTRACTOR represents that he has satisfied himself as to subsurface conditions at the site of the Work. Information, data and representations contained in the Contract Documents pertaining to the conditions at the site, including subsurface conditions, are for information only and are not warranted or represented in any manner to accurately show the conditions at the site of the Work. The CONTRACTOR agrees that he shall make no claims for damages, additional compensation or extension of time against the OWNER because of encountering actual conditions in the course of the Work which vary or differ from conditions or information contained in the

Contract Documents. All risks of differing subsurface conditions shall be borne solely by the CONTRACTOR.

The CONTRACTOR shall carefully study and compare the Contract Documents and shall at once report to the OWNER any error, inconsistency or omission he may discover. The CONTRACTOR shall perform no portion of the Work at any time without Contract Documents or, where required, approved shop drawings, product data or samples for such portion of the work.

3.1.1 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. Shop drawings are drawings, diagrams, schedules and other data specially prepared for the work by the CONTRACTOR or any subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

B. Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the CONTRACTOR to illustrate a material, product or system for some portion of the work.

C. Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the work shall be judged.

D. the CONTRACTOR shall provide, review, approve and submit to the Engineer with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the OWNER or any separate contractor, all shop drawings, product data and samples required by the Contract Documents. The Work will be performed in accordance with submittals approved by the Engineer. The CONTRACTOR shall not be relieved responsibility for deviations from the requirements of the Contract Documents by errors or omissions by the OWNER or Engineer in approving Shop Drawings, Product Data, samples or any other submittals.

E. By approving and submitting shop drawings, product data and samples, the CONTRACTOR represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or shall do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

F. As the Engineer's review is only for general conformance with the requirements of the Contract Documents, the CONTRACTOR shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Engineer's approval of shop drawings, product data or samples unless the CONTRACTOR has specifically informed the Engineer in writing of such deviation at the time of submission and the Engineer have given written approval to the specific deviation. The CONTRACTOR shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof. The CONTRACTOR shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.

G. the CONTRACTOR shall be responsible for delays caused by rejection of the submittal of inadequate or incorrect shop drawings, product data or samples. The CONTRACTOR shall be responsible for seeing that any "approved" copies of shop drawings bearing the approval of the Engineer are allowed on the job site. The CONTRACTOR shall be responsible for providing all copies of approved shop drawings necessary for the construction operations.

H. the CONTRACTOR shall keep adequate records of submittal and approvals so that an accurate up-to-date record file is maintained at the job site at all times.

I. No portion of the work requiring submission of a shop drawing, product data or sample shall be commenced until the submittal has been approved by the Engineer. All such portions of the work shall be in accordance with approved submittals.

3.1.2 SURETY BONDS

With the execution and delivery of the contract, the CONTRACTOR shall furnish and file with the OWNER in the amounts herein required, the surety bonds specified hereunder. Without exception, the OWNER'S bond forms, attached hereto as Section 00610 must be used, and exclusive venue for any lawsuit in connection with such bonds shall be specified as the county in which the OWNER'S principal office is located. Such surety bonds shall be in accordance with Texas Law, including but not limited to, the provisions of Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code. These bonds shall automatically be increased by the amount of any change order or supplemental agreement which increases the contract price with or without notice to the surety, but in no event shall a change which reduces the contract amount reduce the penal amount of such bonds.

A. Performance Bond. A good and sufficient bond in an amount not less than 100 percent of the total amount of the Contract Price guaranteeing the full and faithful execution of the Work and performance of the Contract in accordance with the plans, specifications and Contract Documents, including any extensions thereof, for the protection of the OWNER. This bond shall provide for the repair and/or replacement of all defects due to faulty materials and workmanship that appear within a period of one year from the date of completion and acceptance of the improvement by the OWNER or such lesser or greater period as may be designated in the Contract Documents.

B. Payment Bond. A good and sufficient bond in an amount not less than 100 percent of the total amount of the Contract Price guaranteeing the full and proper protection of all payment bond beneficiaries and claimants supplying labor and material in the prosecution of the work provided for in said Contract and for the use of each claimant. C. Sureties. No sureties shall be accepted by the OWNER who are now in default or delinquent on any bonds or who are interested in any litigation against the OWNER. All bonds shall be made on forms furnished by the OWNER and shall be executed by not less than one corporate surety authorized to do business in the State of Texas and acceptable to the OWNER. The sureties shall be listed in the most current Federal Register Treasury List. Each bond shall be executed by the CONTRACTOR and surety. Each surety shall designate an agent resident in the OWNER'S jurisdictional area acceptable to the OWNER to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship. The OWNER reserves the right to reject any and all sureties.

D. Additional or Substitute Bonds. If at any time the OWNER is or becomes dissatisfied with any surety, then upon the performance or payment bond, the CONTRACTOR shall, within five days after notice from the OWNER to do so, substitute an acceptable bond (or bonds), or provide an additional bond, in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such bonds shall be paid by the CONTRACTOR without recourse to the OWNER. No further payments under the contract shall be deemed due or payable until the substitute or additional bonds shall have been furnished and accepted by the OWNER.

3.1.3 PERMITS AND FEES

OWNER will pay for all building permits, and the CONTRACTOR shall secure and pay for all licenses and inspections necessary for proper execution and completion of the Work which are normally and legally required for the construction of similar projects in the State of Texas. The CONTRACTOR will give all notices required by laws, ordinances, rules, regulations and lawful orders of authorized public authorities required for the proper and legal performance of the Work.

3.14 CONTRACT DOCUMENTS AT SITE

The CONTRACTOR shall keep and maintain at the Project site one record copy of the Contract Documents, including but not limited to, the Drawings, Specifications, addenda, Change Orders, submittals, Product Data, Samples and other modifications, in good order and marked to show the current construction of the Project. These documents shall be available to the OWNER or Engineer to review at any time and shall be submitted to the OWNER upon completion of the Project, along with a complete set of as built drawings.

3.2 CONTRACTOR'S RESPONSIBILITIES

3.2.1 PERFORMANCE OF THE WORK

In addition to those matters elsewhere expressly made the responsibility of the CONTRACTOR, the CONTRACTOR shall have the full and direct responsibility for

the performance and completion of the Work under this Contract and for any act or neglect of the CONTRACTOR, his agents, employees or subcontractors. He shall bear all losses, if any, resulting on account of the amount and character of the Work, or because the conditions under which the work must be done are different from what were estimated or anticipated by him, or because of weather, floods, elements or other causes.

3.2.2 MEANS AND METHODS OF CONSTRUCTION

Unless otherwise expressly provided in the contract drawings, specifications or bulletins, the means and methods of construction shall be such as the CONTRACTOR may choose; subject, however, to the OWNER'S right to prohibit means and methods proposed by the CONTRACTOR which in the OWNER'S judgment:

A. shall constitute a hazard to the Work, or to persons or property, or shall violate express requirements of applicable laws or ordinances; or

B. shall cause unnecessary or unreasonable inconvenience to the public; or

C. shall not produce finished work in accordance with the requirements of the Contract Documents; or

D. shall not assure the Work to be completed within the time allowed by the contract.

The OWNER'S approval of the CONTRACTOR'S means or methods of construction, or the OWNER'S failure to exercise his right to prohibit such means or methods, shall not relieve the CONTRACTOR of his responsibility for the Work or of his obligation to accomplish the result intended by the Contract Documents; nor shall the exercise or non-exercise of such rights to prohibit create a cause of action for damages or provide a basis for any claim by the CONTRACTOR against the OWNER. The CONTRACTOR shall be solely responsible for, the construction means and methods, techniques, sequences, procedures, and for the safety precautions and programs in connection with the Work or the Project.

If the Contract Documents specify any means, methods, techniques, sequences or procedures, the CONTRACTOR shall evaluate said specifications and determine that they are safe for the proper prosecution of the Work. The CONTRACTOR shall be solely responsible for the job site safety of such means, methods, techniques, sequences or procedures. If the CONTRACTOR determines the specified means, methods, techniques, sequences or procedures may not be safe, the CONTRACTOR shall immediately notify the OWNER and Engineer and shall not proceed without further instructions.

3.2.3 CONSTRUCTION SCHEDULE

The CONTRACTOR, immediately after being awarded the contract, shall prepare and submit for the OWNER or Engineer's information an estimated progress schedule for the work. The progress schedule shall be related to the entire Project to the extent required by the Contract Documents and shall provide for expeditious and reasonable execution of the work, not to exceed the time limits for completion provided in the Contract Documents. The progress schedule shall be updated as the Work proceeds or the schedule changes and immediately upon request by the OWNER. The CONTRACTOR shall also prepare a schedule of submittals that allows for a reasonable time for the OWNER or Engineer to review the submittals so as not to delay the Project.

3.2.4 TIME OF PERFORMANCE OF THE WORK

The CONTRACTOR shall begin the work to be performed under this Contract not later than 10 days from the date specified in the purchase or work order and shall conduct the work in such a manner and with sufficient equipment, material and labor as is necessary to insure its completion within the working time. It is the intent of this specification to provide a continuous construction operation without delay except as occasioned by unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, and it shall be the CONTRACTOR's responsibility to execute the work in the most expeditious manner.

Work shall be done only during the regular and commonly accepted and prescribed working hours. No work shall be done on nights, Sundays or regular holidays unless permission is given by the OWNER

Time is of the Essence for the performance of the Work by the CONTRACTOR. CONTRACTOR agrees that the time allotted for the performance of the Work is reasonable.

3.2.5 PERFORMANCE OF EXTRA OR DISPUTED WORK

While the CONTRACTOR or his subcontractor is performing Extra Work in accordance with the OWNER'S written order, the cost of which is to be determined on a time and material basis, or is performing disputed work or complying with a determination or order under protest, the CONTRACTOR shall, on the Monday following the performance of the work, furnish the OWNER'S representative at the site with three copies of verified statements showing:

A. the name, address and telephone number of each workman employed on such Extra Work or engaged in complying with such determination or order, the character of Extra Work each is doing and the wages paid to him, including the rate and amount of payroll taxes, contributions for insurance, and federal social security; and B. the nature, cost and quantity of any materials, plant equipment or construction equipment furnished or used in connection with the performance of such Extra Work or in complying with such determination or order, and from whom purchased or rented, along with copies of invoices for such materials, plant equipment or construction equipment.

The CONTRACTOR and his subcontractors, when required by the OWNER, must also produce for inspection for a minimum period of three (3) years following final payment or termination of contract, produce for examination and audit by designated OWNER representatives, any and all of his books, vouchers, records, daily job diaries and reports, canceled checks, etc. showing the nature and quantity of labor, materials and equipment actually used in the performance of the Extra Work; the amounts expended therefore; and the costs incurred for insurance premiums and other items of expense directly chargeable to such Extra Work. The CONTRACTOR must permit the OWNER'S representatives to make extracts therefrom or copies thereof as may be desired.

Failure of the CONTRACTOR to comply strictly with the requirements of this section shall constitute a waiver of any claim for extra compensation on account of the performance of such Extra Work.

3.3 QUALITY OF WORK

3.3.1 INSPECTION AND TESTS

The CONTRACTOR shall furnish the OWNER with every reasonable accommodation and opportunity to ascertain whether or not the work performed is in accordance with the requirements and intent of the plans and specifications. Any work done or materials used without suitable inspection by the OWNER may be ordered removed and replaced at the CONTRACTOR'S expense. The CONTRACTOR shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the OWNER in his administration of the contract, or by inspections, tests or approvals required or performed by persons other than the CONTRACTOR.

Unless otherwise provided, the CONTRACTOR shall make arrangements for all tests, inspections and approvals with an independent testing laboratory or entity required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction over the Work or items to be tested, inspected or approved. If additional testing or inspection is required they shall be performed at the CONTRACTOR'S expense.

3.3.2 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

All work which has been rejected or condemned shall be repaired, or if it cannot be repaired satisfactorily, it shall be removed and replaced at the CONTRACTOR'S expense. Defective materials shall be immediately removed from the site of the work. Work done without line and grade having been given, work done beyond the lines or not in conformity with the grades shown on the plans or as given, save as herein provided, work done without written authority and prior agreement in writing as to process, shall be done at the CONTRACTOR'S risk and shall be considered unauthorized and at the option of the OWNER may be ordered removed at the CONTRACTOR'S expense.

Upon failure of the CONTRACTOR to repair satisfactorily or to remove and replace, if so directed, rejected, unauthorized or condemned work or materials immediately after receiving notice form the OWNER, the OWNER shall, after giving written notice to the CONTRACTOR, have the authority to cause defective work to be remedied or removed and replaced, or to cause unauthorized work to be removed and to deduct the cost thereof from any monies due or to become due the CONTRACTOR. Alternatively, the OWNER may, at its option, declare the CONTRACTOR in default.

3.3.3 WORKING AREA; COORDINATION WITH OTHER CONTRACTORS; FINAL CLEANUP

The CONTRACTOR shall confine his equipment, storage of materials and construction operations to the area shown on the contract drawings or stated in the specifications, prescribed by ordinance, laws, or permits or as may be directed by the OWNER, and shall not unreasonably encumber the site or public right-of-way with his construction equipment, plant or materials.

Such area shall not be deemed for the exclusive use of the CONTRACTOR. Other contractors of the OWNER may enter upon and use such portions of the area and for such items as determined by the OWNER are necessary for all purposes required by their contracts. The CONTRACTOR shall give to such other contractors all reasonable facilities and assistance to the end that the work on this and other contracts shall not be unduly or unreasonably delayed. Any additional areas desired by the CONTRACTOR for his use shall be provided by him at his own cost and expense.

The CONTRACTOR is responsible for cutting, fitting or patching any parts of the Work where such work is necessary to make the Work complete, for parts to fit together, or for any damage to the Work prior to Final Acceptance.

The CONTRACTOR shall keep the Project and the surrounding area clean and free from the accumulation of waste materials or trash. Upon completion of the work and before final acceptance and final payment shall be made, the CONTRACTOR shall completely clean and remove from the site of the work surplus and discarded materials, temporary structures and debris of every kind. He shall leave the site of the work in a neat and orderly condition equal to that which originally existed, or as called for in the Contract Documents. Surplus and waste materials removed from the site of the work shall be disposed of at locations satisfactory to the OWNER, and at the CONTRACTOR'S sole cost.

3.4 LEGAL RESPONSIBILITIES

3.4.1. PATENTS AND COPYRIGHTS

The CONTRACTOR shall pay all royalties and license fees and shall provide, by suitable legal agreement with the patentee or owner, for the use of any design, device, material or process covered by letters, patent or any copyright. The CONTRACTOR shall indemnify, defend, hold and save the OWNER and its officers, employees and agents harmless from all liability and claims for infringement of any patent or copyright.

In the event that any claims, suit or action at law or in equity of any kind whatsoever is brought against the OWNER, or its officers, employees or agents involving any such patents, copyrights or license rights, then the OWNER shall have the right to and may retain from any money due or to become due to the CONTRACTOR such sum deemed necessary by the OWNER for its protection until such claim or suit shall have been settled and satisfactory evidence to that effect shall have been furnished the OWNER.

3.4.2 INDEMNIFICATION

To the fullest extent permitted by law, the CONTRACTOR and his sureties shall indemnify, defend and hold harmless the OWNER and all of its, past, present and future, officers, agents and employees from all suits, cause of action, claims, liabilities, losses, fines, penalties, liens, demands, obligations, actions, proceedings, of any kind, character, name and description brought or arising, on account of any injuries or damages received or sustained by any person, destruction or damage to any property on account of, in whole or part, the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said Contract; failing to comply with any law, ordinance, regulation, rule or order of any governmental or regulatory body including those dealing with health, safety, welfare or the environment; on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER growing out of such injury or damage. In no event shall OWNER be liable to CONTRACTOR for indirect or consequential damages or loss of income or profit irrespective of the cause, fault or reason for same. CONTRACTOR'S duty to indemnify herein shall not be limited by any limitation on the type or amount of damages payable by or for CONTRACTOR or any Subcontractor under workman's compensation acts, disability benefit acts or any other employee benefit acts.

In addition, the CONTRACTOR likewise covenants and agrees to, and does hereby, indemnify and hold harmless the OWNER from and against any and all injuries, loss or damages to property of the OWNER during the performance of any of the terms and conditions of this Contract, arising out of or in connection with or resulting from, in whole or in part, any and all alleged acts or omissions of officers, agents, servants, employees, contractors, subcontractors, licenses or invitees of the CONTRACTOR.

The rights and responsibilities provided in this indemnification provision shall survive the termination or completion of this Contract.

3.5 SUPERVISION AND CONSTRUCTION PROCEDURES

3.5.1. SUPERVISION BY CONTRACTOR

The status of the CONTRACTOR is that of an independent CONTRACTOR under Texas law and the work under this Contract shall be under the direct charge and superintendence of the CONTRACTOR. Except where the CONTRACTOR is an individual and gives his personal superintendence to the work, the CONTRACTOR shall provide a competent superintendent or general foreman on the work site at all times during progress with full authority to act for the CONTRACTOR. The CONTRACTOR shall also provide an adequate staff for the coordination and expediting of the Work.

The superintendent and staff shall be satisfactory to the OWNER. The superintendent or general foreman shall not be changed during this Contract except with the written consent of the OWNER or unless the superintendent or general foreman proves unsatisfactory to the CONTRACTOR and ceases to be in his employ.

If the superintendent should be or become unsatisfactory to the OWNER, he shall be replaced by the CONTRACTOR upon written direction of the OWNER, and in such event, the CONTRACTOR shall not be entitled to file a claim for any additional working time or money from the OWNER.

3.5.2 EMPLOYEES

The CONTRACTOR shall employ only competent, efficient workmen and shall not use on the work any unfit person or one not skilled in the work assigned to him and shall at all times maintain good order among its employees. Whenever the OWNER shall inform the CONTRACTOR in writing that, in his opinion, any employee is unfit, unskilled, disobedient, or is disrupting the orderly progress of the work, such employee shall be removed from the work and shall not again be employed on it. Under urgent circumstances, the OWNER may orally require immediate removal of an employee for cause, to be followed by written confirmation.

The CONTRACTOR shall supervise and direct all the work, using his best skill and attention. He shall be solely responsible for all construction means, methods,

techniques, sequences, procedures and safety procedures and for coordinating all portions of the Work under the Contract. The CONTRACTOR shall be responsible to the OWNER for the acts and omissions of his employees, subcontractors and their agents, employees and subcontractors performing any of the work under a contract with the CONTRACTOR.

3.5.3 LABOR AND MATERIALS

Unless otherwise provided in the Contract Documents, the CONTRACTOR shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for the proper execution and completion of the work, whether temporary or permanent and whether or not incorporated or to be incorporated into the work.

The CONTRACTOR shall at all times enforce strict discipline and good order among his employees and shall not employ on the work site any unfit person or anyone not skilled in the task assigned to him.

The rate of progress shall be such that the whole work shall be performed and the premises cleaned up in accordance with the Contract within the working time established in the Contract, unless an extension of time is made in the manner hereinafter specified.

- 3.5.4 WAGE SCALE
- A. In accordance with Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the general prevailing wage rate has been determined for this locality for the craft or type of workman needed to execute work of a similar character of the project listed herein. The Contractor shall pay the prevailing wage rate in this locality to all his/her employees and subcontractors performing work on this project, and in no event shall the Contractor pay less than the rate shown in the following schedule.

General Decision Number: TX190239 02/08/2019 TX239

Superseded General Decision Number: TX20180289

State: Texas

Construction Type: Building

County: Collin County in Texas.

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

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60

per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/04/2019 1 02/08/2019

ASBE0021-011 06/01/2016

Rates Fringes ASBESTOS WORKER/HEAT & FROST **INSULATOR** (Duct, Pipe and Mechanical System Insulation)....\$ 24.32 7.52 _____ BOIL0074-003 01/01/2017 Rates Fringes BOILERMAKER.....\$28.00 22.35 _____ CARP1421-002 04/01/2016 Rates Fringes MILLWRIGHT.....\$ 26.60 8.65 * ELEV0021-006 01/01/2019 Rates Fringes

C

ELEVATOR MECHANIC......\$ 41.24 33.705

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all hours worked. 8% over 5 years based on regular hourly rate for all hours worked.

B. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Veterans Day.

ENGI0178-005 06/01/2014

Rates Fringes POWER EQUIPMENT OPERATOR (1) Tower Crane.....\$ 29.00 10.60 (2) Cranes with Pile Driving or Caisson Attachment and Hydraulic Crane 60 tons and above.....\$ 28.75 10.60 (3) Hydraulic cranes 59 Tons and under.....\$ 27.50 10.60 _____ IRON0263-005 06/01/2017 Rates Fringes **IRONWORKER (ORNAMENTAL AND** STRUCTURAL).....\$ 23.25 7.32 -----____ PLUM0100-005 11/01/2017 Rates Fringes HVAC MECHANIC (HVAC Unit Installation Only).....\$ 30.84 11.51 **PIPEFITTER (Excludes HVAC** Pipe Installation).....\$ 30.84 11.51 _____ SUTX2014-015 07/21/2014 Rates Fringes BRICKLAYER.....\$ 21.06 0.00 CARPENTER, Excludes Drywall Hanging, Form Work, and Metal Stud Installation.....\$ 15.78 0.00 CAULKER.....\$ 15.16 0.00 **CEMENT MASON/CONCRETE FINISHER...\$ 13.04**

0.00

DRYWALL HANGER AND METAL STUD INSTALLER\$ 13.00 0.00
ELECTRICIAN (Alarm Installation Only)\$ 20.93 3.86
ELECTRICIAN (Communication Technician Only)\$ 15.35 1.39
ELECTRICIAN (Low Voltage Wiring Only)\$ 17.04 1.39
ELECTRICIAN, Excludes Low Voltage Wiring and Installation of Alarms/Sound and Communication Systems\$ 20.01 2.69
FORM WORKER\$ 11.89 0.00
GLAZIER\$ 16.46 3.94
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine)\$ 10.04 2.31
INSTALLER - SIDING (METAL/ALUMINUM/VINYL)\$ 14.74 0.00
INSTALLER - SIGN\$ 15.50 0.00
INSULATOR - BATT\$ 13.00 0.00
IRONWORKER, REINFORCING\$ 12.29 0.00
LABORER: Common or General\$ 10.52 0.00
LABORER: Mason Tender - Brick\$ 10.54 0.00
LABORER: Mason Tender - Cement/Concrete\$ 10.93 0.00
LABORER: Pipelayer\$ 13.00 0.35
LABORER: Plaster Tender\$ 12.22 0.00
LABORER: Roof Tearoff\$ 11.28 0.00

LABORER: Landscape andIrrigation\$ 10.550.0	00
LATHER\$ 16.00	0.00
OPERATOR: Backhoe/Excavator/Trackhoe\$ 12.83	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader\$ 13.93	0.00
OPERATOR: Bulldozer\$ 18.29	1.31
OPERATOR: Drill\$ 15.69	0.50
OPERATOR: Forklift\$ 13.21	0.81
OPERATOR: Grader/Blade\$ 13.03	3 0.00
OPERATOR: Loader\$ 13.46	0.85
OPERATOR: Mechanic\$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)\$ 18.44	0.00
OPERATOR: Roller\$ 15.04	0.00
PAINTER (Brush, Roller and Spray), Excludes Drywall Finishing/Taping\$ 13.35	5.10
PAINTER: Drywall Finishing/Taping Only\$ 14.24	3.83
PIPEFITTER (HVAC Pipe Installation Only)\$ 20.45	4.00
PLASTERER\$ 16.58	0.00
PLUMBER, Excludes HVAC Pipe Installation\$ 22.46 4.	06
ROOFER\$ 17.19	0.00

SHEET METAL WORKER (HVAC Duct				
Installation Only)\$ 21.13 4.79				
SHEET METAL WORKER, ExcludesHVAC Duct Installation\$ 24.885.97				
SPRINKLER FITTER (Fire Sprinklers)\$ 37.500.00				
TILE FINISHER\$ 11.22 0.00				
TILE SETTER\$ 14.25 0.00				
TRUCK DRIVER: 1/Single Axle Truck\$ 16.00 0.81				
TRUCK DRIVER: Dump Truck\$ 12.39	1.18			
TRUCK DRIVER: Flatbed Truck\$ 19.65	5.57			
TRUCK DRIVER:Semi-TrailerTruck\$ 12.500.00				
TRUCK DRIVER: Water Truck\$ 12.00 4	.11			

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

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

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

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

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates

the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those

classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

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

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

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

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

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

Administrative Review Board U.S. Department of Labor

200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

Except for work on legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) the number of hours worked per day, except for overtime hours, times (b) the above respective rate per hour.

For legal holidays, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on the legal holiday.

For overtime work, the "General Prevailing Rate of Per Diem Wage" for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on overtime.

Under the provisions of Texas Government Code, Title 10, Chapter 2258, Prevailing Wage Rates, the contractor or subcontractor of the contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded, sixty dollars (\$60.00) for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the contract.

If the construction project involves the expenditure of Federal funds in excess of \$2,000, the minimum wages to be paid various classes of laborers and mechanics will be based upon the wages that will be determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on the project of a character similar to the Contract Work.

3.5.5 Contractors doing business with OWNER agree to comply with Federal Executive Order 13465 E-Verify. It is OWNER'S intention and duty to comply and support the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification and non-discrimination. According to the INA, contractors/employers may hire only persons who may legally work in the United States. Subsequently, contractors and subcontractors doing business with OWNER must confirm their enrollment in the E-Verify system which verifies employment eligibility through completion and checking of I-9 forms. OWNER reserves the right to audit contractor's process to verify enrollment compliance.

3.5.6 COMPLIANCE WITH LAWS

The CONTRACTOR shall fully comply with all local, state and federal laws, including all codes, ordinances and regulations applicable to this Contract and the

Work to be done thereunder, which exist or which may be enacted later by governmental bodies having jurisdiction or authority for such enactment.

All work required under this Contract is intended to comply with all requirements of law, regulation, permit or license. If the CONTRACTOR finds that there is a variance, he shall immediately report this to the OWNER for resolution.

3.5.6.1 EQUAL EMPLOYMENT OPPORTUNITY

The CONTRACTOR shall comply with all local, state and federal employment and discrimination laws and shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin or any other class protected by law.

3.5.7 RAILWAY CROSSINGS

Where the Work encroaches upon any right-of-way of any railway, the OWNER shall secure the necessary easement for the work. Where railway tracks are to be crossed, the CONTRACTOR shall observe all the regulations and instructions of the railway company as to methods of doing the work or precautions for safety of property and the public. All negotiations with the railway company, except for right-of-way, shall be made by the CONTRACTOR. The railway company shall be notified by the CONTRACTOR not less than five days prior to commencing the work. The CONTRACTOR shall not be paid separate compensation for such railway crossing but shall receive only the compensation as set out in the proposal.

3.5.8 OTHER CONTRACTORS; OBLIGATION TO COOPERATE

The OWNER reserves the right to perform construction on the Project with its own forces or may award other contracts for additional work on this Project, and the CONTRACTOR shall fully cooperate with such other contractors and shall coordinate and fit his work to be done hereunder to such additional work as may be contracted by the OWNER. The CONTRACTOR shall not commit or permit any act which shall interfere with the performance of work by any other contractor.

Upon receiving written notice from the CONTRACTOR that the OWNER or another contractor is failing to coordinate his work with the Work under this Contract as directed by the OWNER, the OWNER shall promptly investigate the charge and take such necessary action as the situation may require. However, the OWNER shall not be liable to the CONTRACTOR for damages suffered by the CONTRACTOR due to the fault or negligence of another contractor or through failure of another contractor to carry out the directions of the OWNER. Should any interference occur between contractors, the Engineer may furnish the CONTRACTOR with written instructions designating priority of effort, whereupon the CONTRACTOR shall immediately comply with such direction. In such event, the CONTRACTOR shall be entitled to

an extension of working time only for unavoidable delays verified by the Engineer; however, no increase in the Contract Price shall be due the CONTRACTOR.

3.5.9 SUBCONTRACTS

The CONTRACTOR shall not make any subcontract for performing any portion of the Work included in the contract without written notice to the OWNER. This contract having been made pursuant to the bid submitted by the CONTRACTOR and in reliance with the CONTRACTOR'S personal qualifications and responsibility, the OWNER reserves the right to withhold approval of any subcontractor which the OWNER may deem would not be in the OWNER'S best interest.

The CONTRACTOR shall, as soon as practicable after signing the Contract, submit a separate written notice to the OWNER identifying each proposed subcontractor. Upon request of the OWNER, the CONTRACTOR shall promptly furnish additional information tending to establish that any proposed subcontractor has the necessary facilities, skill, integrity, past experience and financial resources to perform the work in accordance with the terms and conditions of this Contract.

If the OWNER determines that any proposed subcontractor is unacceptable, he shall so notify the CONTRACTOR, who may thereupon submit another proposed subcontractor unless the CONTRACTOR decides to do the work himself. Disapproval by the OWNER of any proposed subcontractor shall not provide a basis for any claim by the CONTRACTOR.

If an approved subcontractor fails to properly perform the work undertaken, he shall be removed from the job upon request of the OWNER, following notification to the CONTRACTOR in writing of the request for removal and the reasons therefore.

Each subcontract entered into shall provide that the provisions of this Contract shall apply to such subcontractor and his officers and employees in all respects as if he and they were employees of the CONTRACTOR. The OWNER'S decision not to disapprove of any subcontract shall not relieve the CONTRACTOR of any of his responsibilities, duties and liabilities hereunder. The CONTRACTOR shall be solely responsible for the acts, omissions, negligence or defaults of his subcontractors and of such subcontractor's officers, agents and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the CONTRACTOR to the extent of his subcontract.

The CONTRACTOR agrees to bind each subcontractor and each subcontractor agrees to be bound by the terms of the Contract Documents insofar as applicable to his work. The CONTRACTOR and each subcontractor jointly and severally agree that nothing in the Contract Documents or otherwise shall create or be deemed to create any rights in favor of a subcontractor against the OWNER; nor shall be deemed or construed to impose upon the OWNER any obligation, liability or duty to a

subcontractor; or to create any contractual relation whatsoever between a subcontractor and the OWNER.

The provisions contained herein shall likewise apply to any sub-subcontracts.

3.6 PROTECTION OF WORK AND OF PERSONS AND PROPERTY

3.6.1 PROTECTION OF WORK

During performance and up to date of final acceptance, the CONTRACTOR shall be under the absolute obligation to protect the finished work against any damage, loss or injury. In the event of such damage, loss or injury, the CONTRACTOR shall promptly replace or repair such work, whichever the OWNER shall determine to be preferable. The obligation to deliver finished work in strict accordance with the Contract prior to final acceptance shall be absolute and shall not be affected by the OWNER'S approval of or failure to prohibit means and methods of construction used by the CONTRACTOR. All risk of loss or damage to the work shall be borne solely by the CONTRACTOR until final completion and acceptance of all work by the OWNER, as evidenced by the OWNER'S issuance of a certificate of acceptance.

3.6.2 PROTECTION OF PERSONS AND PROPERTY

The CONTRACTOR shall have the responsibility to provide and maintain all warning devices and take all precautionary measures required by law or otherwise to protect persons and property while said persons or property are approaching, leaving or within the work site or any area adjacent to said work site. No separate compensation shall be paid to the CONTRACTOR for the installation or maintenance of any warning devices, barricades, lights, signs or any other precautionary measures required by law or otherwise for the protection of persons or property.

The CONTRACTOR shall assume all duties owed by the OWNER to the general public in connection with the general public's immediate approach to and travel through the work site and the area adjacent to said work site.

Where the work is carried on in or adjacent to any street, alley, sidewalk, public rightof-way or public place, the CONTRACTOR shall at his own cost and expense provide such flagmen and watchmen and furnish, erect and maintain such warning devices, barricades, lights, signs and other precautionary measures for the protection of persons or property as may be prudent or necessary, or as are required by law. The CONTRACTOR'S responsibility for providing and maintaining flagmen, watchmen, warning devices, barricades, signs and lights and other precautionary measures shall not cease until the project shall have been completed and accepted by the OWNER, and shall cease when the certificate of acceptance is issued by the OWNER pursuant to the Contract Documents. If the OWNER discovers that the CONTRACTOR has failed to comply with the applicable federal and state law (by failing to furnish the necessary flagmen, warning devices, barricades, lights, signs or other precautionary measures for the protection of persons or property), the OWNER may order the CONTRACTOR to take such additional precautionary measures as required by law to be taken to protect persons and property.

In addition, the CONTRACTOR shall be held responsible for all damages to the work and other public or private property due to the failure of warning devices, barricades, signs, lights or other precautionary measures in protecting said property; and whenever evidence is found of such damage, the OWNER may order the damaged portion immediately removed and replaced by and at the cost and expense of the CONTRACTOR.

3.6.3 STORM WATER PROTECTION

The Contractor shall perform, track, participate, implement, and comply with storm water pollution prevention minimum control measures, protocols, and best management practices (BMP) and ensure that water quality standards are not violated in accordance with all regulations and policies as they apply to the Texas Pollutant Discharge Elimination System general permits. Applicable permits include: 1) Texas Construction General Permit (TXR150000).

Contractors will obtain permit coverage for construction activities disturbing over one acre of land (total acreage is cumulative across all portions of the project). BMPs include, but are not limited to:

• Preparing and implementing a site-specific Storm Water Pollution Prevention Plan (SWPPP) as outlined in the permit and prior to any soil disturbance.

- Installing and managing erosion and sediment control.
- Make available, upon request, permit associated documentation.
- Practicing spill prevention and good housekeeping.
- Meeting the requirements of the MS4 permit.

3.6.4 SAFETY; TRENCH SAFETY; UNDERGROUND UTILITY SAFETY; PUBLIC CONVENIENCE AND SAFETY;

The CONTRACTOR shall be responsible for complying with state laws and federal regulations relating to safety, trench safety, and underground utility safety, including those which may be enacted during the performance under this Contract. The CONTRACTOR shall comply with the provisions of the The Standard Specifications and Standard Drawings from the Public Works Construction Standards-North Central Texas Council of Governments, 2004 edition and all subsequent addendums and the Instructions to Bidders regarding trench safety, public convenience and safety, and sanitary provisions. The CONTRACTOR shall be solely responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work and the Project.

3.7 MATERIALS AND WORKMANSHIP; WARRANTIES AND GUARANTEES

Unless otherwise expressly provided in the contract drawings or specifications, the work shall be performed in accordance with the best modern practice with materials and workmanship of the highest quality and suitable for their purpose. The OWNER shall judge and determine the CONTRACTOR'S compliance with these requirements.

3.7.1 MATERIALS AND EQUIPMENT

The CONTRACTOR shall be free to secure the approved materials, equipment and articles from sources of his own selection. However, if the OWNER finds that the work shall be delayed or adversely affected in any way because a selected source of supply cannot furnish a uniform product in sufficient quantity and at the time required and a suitable source does exist, or the product is not suitable for the Work, the OWNER shall have the right to require the original source of supply changed by the CONTRACTOR. The CONTRACTOR shall have no claim for extra cost or damage because of this requirement.

The CONTRACTOR warrants to the OWNER that all materials and equipment furnished under this contract shall be new unless otherwise specified in the Contract Documents and that same shall be of good quality and workmanship, free from faults and defects and in conformance with the Contract Documents. All materials and equipment not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective and shall be promptly repaired or replaced by the CONTRACTOR at the CONTRACTOR's sole cost upon demand of the OWNER. If required by the OWNER, the CONTRACTOR shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3.7.1.1 "OR EQUAL" CLAUSE

A. Whenever a material or article required is specified or shown on the plans, by using the name of a proprietary product or of a particular manufacturer or vendor, any material or article which the Engineer determines shall perform adequately the duties imposed by the general design or which the Engineer deems to be of similar appearance (in cases where appearance is of importance) shall be considered equal and satisfactory, provided the material or article so proposed is of equal substance and function. Authorization for any substitution of materials or articles must be obtained by the CONTRACTOR from the Engineer before proceeding with such substitution.

B. Should an authorized substitution require redesign of a portion of the work or alterations to the plans or specifications in order for the materials or articles which are to be substituted to properly fit or in other ways to be satisfactory, the Engineer shall accomplish such redesigns and alterations. The CONTRACTOR shall bear all reasonable costs associated with redesign and alteration efforts performed by the Engineer.

3.7.2 WORKMANSHIP

The CONTRACTOR shall promptly correct or replace all work rejected by the OWNER as defective or as failing to conform to the Contract Documents whether observed before or after substantial completion and whether or not fabricated, installed or completed. The CONTRACTOR shall bear all costs of correcting such rejected work, including costs incurred for additional services made necessary thereby.

3.8 WARRANTIES

3.8.1 SPECIAL WARRANTY

If within one year after final acceptance of the work by the OWNER, as evidenced by the final certificate of acceptance or within such longer or shorter period of time as may be prescribed by law or by the terms of any other applicable special warranty on designated equipment or portions of work as required by the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the CONTRACTOR shall correct it promptly after receipt of a written notice from the OWNER to do so. This obligation shall survive termination or completion of the Contract. The OWNER shall give such notice promptly after discovery of the condition.

The CONTRACTOR shall remove from the site all portions of the work which are defective or nonconforming and which have not been corrected unless removal is waived in writing by the OWNER.

3.8.2 SUBCONTRACTORS' AND MANUFACTURERS' WARRANTIES

All subcontractors', manufacturers' and suppliers' warranties and guarantees, express or implied, respecting any part of the work and any materials used therein, shall be obtained and enforced by the CONTRACTOR for the benefit of the OWNER without the necessity of separate transfer or assignment thereof.

3.8.3 CORRECTED WORK WARRANTY

Any work repaired or replaced, pursuant to this section, shall be subject to the provisions of this section to the same extent as work originally performed.

3.8.4 RIGHTS AND REMEDIES

The rights and remedies of the OWNER provided in this section are in addition to, and do not limit, any rights or remedies afforded to the OWNER by law or any other provision of the Contract Documents, or in any way limit the OWNER'S right to recovery of damage due to default under the Contract. No action or inaction by the OWNER shall constitute a waiver of a right or duty afforded it under the Contract.

IV. INSURANCE

4.1 CONTRACTOR'S INSURANCE

Before commencing work, the CONTRACTOR and each subcontractor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) required by Texas Law, and the coverages required herein, indicating the coverage is to remain in force throughout the term of this Contract. Without limiting any of the other obligations or liabilities of the CONTRACTOR, during the term of the Contract the CONTRACTOR and each subcontractor at their own expense shall purchase and maintain the herein stipulated minimum insurance with companies duly approved to do business in the State of Texas and satisfactory to the OWNER. Certificates of each policy shall be delivered to the OWNER before any work is started, along with a written statement from the issuing company stating that said policy shall not be canceled, nonrenewed or materially changed without 60 days advance written notice being given to the OWNER.

In addition to any coverage required by Texas Law, the CONTRACTOR shall provide the following coverages at not less than the specified amounts:

4.2 Workers Compensation insurance required by Texas Law at statutory limits, including employer's liability coverage at \$1,000,000. In addition to these, the CONTRACTOR must comply with all the requirements of the Texas Department of Insurance, Division of Workers' Compensation; (Note: If you have questions concerning these requirements, you are instructed to contact the DWC.)

By signing this contract or providing or causing to be provided a certificate of coverage, the CONTRACTOR is representing to the OWNER that all employees of the CONTRACTOR and its subcontractors who will provide services on the Project will be covered by workers compensation coverage for the duration of the Project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.

The CONTRACTOR'S failure to comply with any of these provisions is a breach of Contract by the Contractor which entitles the OWNER to declare the Contract void if the CONTRACTOR does not remedy the breach within ten (10) days after receipt of notice of breach from the OWNER.

4.3 Broad form commercial general liability insurance, including independent contractor's liability, completed operations and contractual liability, written on an occurrence form, covering, but not limited to, the liability assumed under the indemnification provisions of this contract, fully insuring CONTRACTOR'S (or subcontractor's) liability for injury to or

death of OWNER'S employees and third parties, extended to include personal injury liability coverage with damage to property, with minimum limits as set forth below:

General Aggregate \$2,000,000 Completed Products — Components/Operations Aggregate \$2,000,000 Personal and Advertising Injury \$ 1,000,000 Each Occurrence \$ 2,000,000

- 4.3.1 The policy shall include coverage extended to apply to completed operations, asbestos hazards (if this project involves work with asbestos) and XCU (explosion, collapse and underground) hazards. The completed operations coverage must be maintained for a minimum of one year after final completion and acceptance of the work, with evidence of same filed with OWNER.
- 4.4 Comprehensive automobile and truck liability insurance, covering owned, hired and non-owned vehicles, with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence; or separate limits of \$1,000,000 for bodily injury (per person), \$1,000,000 for bodily injury (per accident) and \$1,000,000 for property damage. Such insurance shall include coverage for loading and unloading hazards.

4.5 OWNER'S PROTECTIVE LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain at all times during the prosecution of the work under this contract an OWNER'S protective liability insurance policy naming the OWNER as insured for property damage and bodily injury, which may arise in the prosecution of the Work or CONTRACTOR'S operations under this Contract. Coverage shall be on an "occurrence" basis, and the policy shall be issued by the same insurance company that carries the CONTRACTOR'S liability insurance with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence and \$2,000,000 aggregate.

4.6 "UMBRELLA" LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain umbrella liability insurance during the contract term, insuring CONTRACTOR for an amount of not less than \$1,000,000 per occurrence combined limit for bodily injury and property damage that follows from and applies in excess of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted. OWNER shall be named as an additional insured.

4.7 RAILROAD PROTECTIVE INSURANCE

When required in the Special Provisions, CONTRACTOR shall obtain, maintain and present evidence of railroad protective insurance (RPI). The policy shall be in the name of the railroad company having jurisdiction over the right-of-way involved. The minimum limit of coverage shall meet the specifications provided by the railroad company. The OWNER shall specify the amount of RPI necessary.

4.8 POLICY ENDORSEMENTS AND SPECIAL CONDITIONS

Each insurance policy to be furnished by CONTRACTOR shall include the following conditions by endorsement to the policy:

A. each policy shall name the OWNER as an additional insured as to all applicable coverage;

B. each policy shall require that 30 days prior to the cancellation, nonrenewal or any material change in coverage, a notice thereof shall be given to OWNER by certified mail;

C. the term "OWNER" shall include all past, present or future, authorities, boards, bureaus, commissions, divisions, departments and offices of the OWNER and individual members, elected official, officers, employees and agents thereof in their official capacities and/or while acting on behalf of the OWNER;

D. the policy phrase "other insurance" shall not apply to the OWNER where the OWNER is an additional insured on the policy;

E. all provisions of the contract concerning liability, duty and standard of care together with the indemnification provision, shall be underwritten by contractual liability coverage sufficient to include such obligations within applicable policies;

F. all policies shall contain a waiver of subrogation in favor of OWNER, and its, past, present and future, officials, employees, and volunteers; and,

G. each certificate of insurance shall reference the Project and Contract number, contain all the endorsement required herein, and require a notice to the OWNER of cancellation.

Insurance furnished by the CONTRACTOR shall be in accordance with the following requirements:

A. any policy submitted shall not be subject to limitations, conditions or restrictions deemed inconsistent with the intent of the insurance requirements to be fulfilled by the CONTRACTOR. The OWNER'S decision thereon shall be final;

B. all policies are to be written through companies duly licensed to transact that class of insurance in the State of Texas with a financial ratings of A+VII or better as assigned by BEST Rating Company or equivalent; and

C. All liability policies required herein shall be written with an "occurrence" basis coverage trigger.

CONTRACTOR agrees to the following:

A. CONTRACTOR hereby waives subrogation rights for loss or damage to the extent same are covered by insurance. Insurers shall have no right of recovery or subrogation against the OWNER, it being the intention that the insurance policies shall protect all parties to the Contract and be primary coverage for all losses covered by the policies; B. Companies issuing the insurance policies and CONTRACTOR shall have no recourse against the OWNER for payment of any premiums or assessments for any deductibles, as all such premiums and deductibles are the sole responsibility and risk of the CONTRACTOR;

C. Approval, disapproval or failure to act by the OWNER regarding any insurance supplied by the CONTRACTOR (or any subcontractors) shall not relieve the CONTRACTOR of full responsibility or liability for damages and accidents as set forth in the Contract Documents. Neither shall the bankruptcy, insolvency or denial of liability by the insurance company exonerate the CONTRACTOR from liability; and

D. No special payments shall be made for any insurance that the CONTRACTOR and subcontractors are required to carry; all are included in the Contract Price and the Contract unit prices. Any of such insurance policies required under this section may be written in combination with any of the others, where legally permitted, but none of the specified limits may be lowered thereby.

V. OWNERS RIGHTS AND RESPONSIBILITIES

MONTHLY ESTIMATE, PARTIAL PAYMENTS AND FINAL PAYMENTS

5.1 Progress and final payments shall be paid to the Contractor based upon the progress of the Project as indicated by the approved Applications for Payment, certificates of acceptance, or Certificates for Payment, that include an approved Schedule of Values that will be submitted by the CONTRACTOR to the OWNER prior to the commencement of the Work and in accordance with the following:

5.2 MONTHLY ESTIMATES

The CONTRACTOR shall deliver to the OWNER an itemized Application for Payment that shall include the work completed, materials stored at the Project site but not incorporated into the work, materials ready to be installed and stored at another agreed location, and the percentage of Work completed, through the 20th day of each month, on an Application for Payment with a schedule of values previously submitted by the Contractor and approved by the Owner. Prior to release of funds in connection with any Application for Payment, the Owner may request, and the Contractor must provide, properly executed statements of full or partial releases of claims acceptable to Owner in form and content, for all persons or entities supplying labor or materials to the Project.

5.2.1 The Application for Payment is a representation by the CONTRACTOR to the OWNER that the construction has progressed to the point indicated, the quality of the Work covered by the application is in accordance with the Contract Documents, and the Contractor is entitled to payment in the amount requested.

5.2.2 INSPECTION AND PARTIAL PAYMENTS

Whenever the CONTRACTOR shall submit an Application for Payment to the OWNER for work performed by the CONTRACTOR, the CONTRACTOR shall notify the Engineer that the improvement is ready for inspection. The Engineer shall

then make such inspection, and will have the authority to reject work that does not conform to the Contract Documents. If the work is satisfactory and in accordance with the specifications and Contract Documents, the Engineer shall issue a Certificate for Payment.

- 5.2.3 Within thirty (30) days of the Owner's receipt of a properly submitted and correct Application for Payment, and the issuance of a Certificate for Payment, the Owner shall make payment to the Contractor, in the amount approved by the Owner less 5% retainage. Such payment shall be adjusted for work that is incomplete or not in accordance with the Contract Documents or that is the subject of a separate contract, or subcontract or supplier claim or lien against the Contractor or the payment bonds for the project.
- 5.2.4 No partial or final payment or the entire use or occupancy of the Project by the OWNER shall be considered acceptance of work that does not strictly comply with the Contract Documents or release the CONTRACTOR of any of his responsibilities under the Contract.

5.2.5 PAYMENT FOR LABOR AND MATERIAL; NO LIENS

The CONTRACTOR for himself or any of his subcontractors shall pay all indebtedness which may become due to any person, firm or corporation having furnished labor, material or both in the performance of this Contract. It shall be the responsibility of each person, firm or corporation claiming to have furnished labor, materials or both, in connection with this Contract, to protect his or its interest in the manner prescribed by applicable laws of the State of Texas, provided, however, that as this Contract provides for a public works project, no lien of any kind shall ever exist or be placed against the Work or any portion thereof, or any public funds or retainage held by the OWNER; and any subcontractor shall look solely to the CONTRACTOR and the payment bond surety, and not the OWNER, for payment of any outstanding amounts due for labor, materials or any other indebtedness in connection with the Work. However, the OWNER may, at any time prior to making final payment, require the CONTRACTOR to furnish a Consent of Surety to any payment due the CONTRACTOR for completed work and may, at the discretion of the OWNER or the request of the Surety, make the check jointly payable to the CONTRACTOR and the Surety. The Owner shall have no obligation under this Agreement to pay or to be responsible in any way for payment to any, Engineer, another design professional, contractor, subcontractor or supplier performing portions of the Work, pursuant to a contract with the Contractor.

5.2.6 PAYMENT WITHHELD

In addition to express provisions elsewhere contained in the contract, the OWNER may withhold from any payment otherwise due the CONTRACTOR such amount as determined necessary to protect the OWNER'S interest, or, if it so elects, may

withhold or retain all or a portion of any progress payment or refund payment on account of:

A. unsatisfactory progress of the Work not caused by conditions beyond the CONTRACTOR'S control,

B. defective work not corrected,

C. CONTRACTOR'S failure to carry out instructions or orders of the OWNER or his representative,

D. a reasonable doubt that the Contract can be completed for the balance then unpaid,

E. work or execution thereof not in accordance with the Contract Documents,

F. claim filed by or against the CONTRACTOR or reasonable evidence indicating probable filing of claims,

G. failure of the CONTRACTOR to make payments to subcontractor or for material or labor,

H. damage to another contractor,

I. unsafe working conditions allowed to persist by the CONTRACTOR,

J. failure of the CONTRACTOR to provide work schedules as required by the OWNER,

K. use of subcontractors without the OWNER'S approval or,

L. failure of the CONTRACTOR to keep current as-built record drawings at the job site or to turn same over in completed form to the OWNER.

When the above grounds are removed, payment shall be made for amounts withheld because of them, and OWNER shall never be liable for interest on any delayed or late payment.

5.2.7 PAYMENT FOR EXTRA WORK

The Extra Work done by the CONTRACTOR as authorized and approved by the Engineer shall be paid for in the manner hereinafter described, and the compensation thus provided shall be accepted by the CONTRACTOR as payment in full for all labor, materials, tools, equipment and incidentals and all superintendents' and timekeepers' services, all insurance, bond and all other overhead expense incurred in the performance of the Extra Work.

Payment for Extra Work shall be made by one of the following methods:

A. Method "A" — by unit prices agreed on in writing by the OWNER and CONTRACTOR before said Extra Work is commenced, subject to all other conditions of the contract.

B. Method "B" — by lump sum price agreed on in writing by the OWNER and the CONTRACTOR before said Extra Work is commenced, subject to all other conditions of the contract.

5.2.8 SUBSTANTIAL COMPLETION

The Project will be considered substantially complete when the OWNER can utilize the Project for its intended purpose and the Work is in conformance with the Contract Documents.

5.3 APPLICATION FOR FINAL PAYMENT.

Upon full performance of all the Contract Work and the full performance of all the provisions of the Contract, the CONTRACTOR shall submit a final application for payment to the OWNER, the CONTRACTOR shall notify the Engineer that the improvement is ready for inspection. All warranties and guaranties required of the CONTRACTOR by the Contract Documents shall be assembled and delivered by the CONTRACTOR to the OWNER as Part of the final Application for Payment. The Contractor will assign to the Owner all manufacturer's warranties relating to materials and labor used in the work and will perform the Work in such a manner as to preserve all such manufacturer's warranties. The CONTRACTOR will deliver a certificate evidencing that insurance and bonds required by the Contract. The final Certificate for Payment will not be issued until all such warranties and guaranties have been received and accepted by the Owner, and a Certificate of Acceptance is issued by the or Engineer.

5.3.1 FINAL INSPECTION AND ACCEPTANCE

Whenever the improvements provided for by the Contract shall have been completely performed on the part of the CONTRACTOR, the CONTRACTOR shall notify the OWNER, and Engineer that the improvement is ready for final inspection. The Engineer shall then make such final inspection, and if the work is satisfactory and in accordance with the specifications and Contract Documents, the CONTRACTOR shall be issued a certificate of acceptance.

5.3.2 FINAL PAYMENT

Whenever the improvements provided for by the Contract shall have been completely performed on the part of the CONTRACTOR, as evidenced in the certificate of acceptance, and all required submissions provided to the OWNER, a final estimate showing the value of the work shall be prepared by the Engineer as soon as the necessary measurements and computations can be made. All prior estimates upon which payments have been made are subject or necessary corrections or revisions in the final payment. The amount of this final estimate, less any sums that have been previously paid, or deducted under the provisions of the Contract, shall be paid the CONTRACTOR within 30 days after the final acceptance, provided that the CONTRACTOR has furnished to the OWNER a consent of surety and an affidavit or other satisfactory evidence that all indebtedness connected with the Work and all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished for and used in the performance of the work have been paid or otherwise satisfied, or that the person or persons to whom the same may respectively be due have consented to such final payment.

The acceptance by the CONTRACTOR of the final payment as aforesaid shall operate as and shall be a release to the OWNER from all claims or liabilities under the Contract, including all subcontractor claims, for anything done or furnished or relating to the Work under the Contract or for any act or neglect of said OWNER relating to or connected with the Contract.

All warranties and guarantees shall commence from the date of the certificate of acceptance. No interest shall be due the CONTRACTOR on any partial or final payment or on the retainage.

5.3 MODIFICATIONS TO CONTRACT WORK OR TIME OF PERFORMANCE

5.3.1 OWNER'S RIGHT TO TEMPORARILY SUSPEND WORK

5.3.2 REASONS FOR SUSPENSION

The OWNER shall have the right by written order to temporarily suspend the work, in whole or in part, whenever, in the judgment of the OWNER, such temporary suspension is required:

- A. in the interest of the OWNER generally,
- B. due to government or judicial controls or orders which make performance of this contract temporarily impossible or illegal,
- C. to coordinate the work of separate contractors at the job site,
- D. to expedite the completion of a separate contract even though the completion of this particular Contract may be thereby delayed,
- E. because of weather conditions unsuitable for performance of the Work, or
- F. because the CONTRACTOR is proceeding contrary to contract provisions or has failed to correct conditions considered unsafe for workmen.

The written order of the OWNER to the CONTRACTOR shall state the reasons for suspending the work and the anticipated periods for such suspension. Upon receipt of the OWNER'S written order, the CONTRACTOR shall suspend the work covered by the order and shall take such means and precautions as may be necessary to properly protect the finished and partially finished work, the unused materials and uninstalled equipment, including the providing of suitable drainage about the work and erection of temporary structures where necessary. The CONTRACTOR shall not suspend the Work without written direction from the OWNER and shall proceed with the work promptly when notified by the OWNER to resume operations.

5.3.3 NO ADDITIONAL COMPENSATION

No additional compensation shall be paid to the CONTRACTOR for a temporary suspension of the Work by the OWNER or otherwise where same is caused by the

fault of the CONTRACTOR. Where such temporary suspension is not due to the fault of the CONTRACTOR, he shall be entitled to:

A. an equitable extension of working time for the completion of the work, not to exceed the delay caused by such temporary suspension, as determined by the OWNER; and

B. the actual and necessary costs of properly protecting the finished and partially finished work, unused materials and uninstalled equipment during the period of the ordered suspension as determined by the OWNER as being beyond the Contract requirements, such costs, if any, to be determined pursuant to the terms of the Contract; and

C. where the CONTRACTOR elects to move equipment from the job site and then return it to the site when the work is ordered resumed, the actual and necessary costs of these moves, in an amount determined by the OWNER pursuant to the terms of the Contract.

5.3.4 USE OF COMPLETED PORTIONS OF WORK

The OWNER may, after written notice to the CONTRACTOR, and without incurring any liability for increased compensation to the CONTRACTOR, take over and use any completed portion of the Work prior to the final completion and acceptance of the entire work included in the Contract, and notwithstanding that the time allowed for final completion has not expired. The OWNER and CONTRACTOR agree that occupancy of portions of the Work by the OWNER shall not in any way evidence the substantial completion of the entire work or signify the OWNER's acceptance of the Work.

The CONTRACTOR shall not object to, nor interfere in any way with, such occupancy or use after receipt of the OWNER'S written notice. Immediately prior to such occupancy and use, the OWNER shall inspect such portion of the Work to be taken over and shall furnish the CONTRACTOR a written statement of the work, if any, still to be done on such part. The CONTRACTOR shall promptly thereafter complete such unfinished work to permit occupancy and use on the date specified in the OWNER'S written order, unless the OWNER shall permit specific items of work to be finished after the occupancy and use by the OWNER.

In the event the CONTRACTOR is unreasonably delayed by the OWNER exercising its rights under this section, the CONTRACTOR may submit a request for an extension of time; CONTRACTOR'S sole remedy for an unreasonable delay shall be an extension of time and shall not be entitled to any additional compensation.

5.4 COMMENCMENT; TIME OF COMPLETION; DELAYS; EXTENSION OF TIME; LIQUIDATED DAMAGES

5.4.1 COMMENCEMENT; TIME OF COMPLETION

Contractor shall commence work within ten (10) consecutive calendar days after receiving from County a notice to proceed. Contractor agrees and covenants that the number of consecutive calendar days allowed to complete all work following a notice to proceed shall be as follows:

5.4.2. LIQUIDATED DAMAGES FOR FAILURE TO COMPLETE ON TIME

Time is of the essence in the progress and completion of this Contract. For each calendar day that any Work shall remain uncompleted after the time specified in the proposal and the Contract, or the increased time granted by the OWNER, or as equitably increased by additional work or materials ordered after the Contract is signed, the sum per day given in the following schedule, unless otherwise specified in the special provisions, shall be deducted from the monies due the CONTRACTOR:

Two Hundred Dollars and Zero Cents (\$200.00)

The sum of money thus deducted for such delay, failure or non-completion is not to be considered as a penalty, but shall be deemed, taken and treated as reasonable liquidated damages, per calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract for completing the Work. The said amounts are fixed and agreed upon by and between OWNER and CONTRACTOR because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the OWNER in such event would sustain; and said amounts are agreed to be the amount of damages which the OWNER would sustain and which shall be retained from the monies due, or that may become due, the CONTRACTOR under this Contract; and if said monies be insufficient to cover the amount owing, then the CONTRACTOR or his surety shall pay any additional amounts due.

5.4.3 EXTENTIONS OF TIME

The CONTRACTOR shall be entitled to an extension of working time under this Contract only when claim for such extension is submitted to the OWNER in writing by the CONTRACTOR within seven days from and after the time when any alleged cause of delay shall occur, and then only when such time is approved by the OWNER. In adjusting the Contract working time for the completion of the Project, unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including, acts of God or the public enemy, acts of the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or delays of subcontractors due to such causes beyond their control shall be taken into consideration. If the satisfactory execution and completion of the Contract should require work and materials in greater amounts or quantities than those set forth in the Contract, requiring more time for completion than the anticipated time, then the contract working time shall be equitably increased, but not more than in the same proportion as the cost of the additional work bears to the cost of the original work contracted for. No allowances shall be made for delays or suspension of the performance of the Work due to the fault of the CONTRACTOR.

No adjustment to working time shall be made if, concurrently with the equitable cause for delay, there existed a cause for delay due to the fault or negligence of the CONTRACTOR, his agents, employees or subcontractors; and no adjustment shall be made to the Contract Price and the CONTRACTOR shall not be entitled to claim or receive any additional compensation as a result of or arising out of any delay resulting in adjustment to the working time hereunder, including delays caused by the acts or negligence of the OWNER. Notwithstanding any other provision of the Contract Documents, all claims for extension of working time must be submitted in accordance with the provisions of this Contract, and no act of the OWNER shall be deemed a waiver or entitlement of such extension.

5.5 TERMINATION FOR CONVENIENCE OF THE OWNER

5.5.1 NOTICE OF TERMINATION

The performance of the Work under this Contract may be terminated by the OWNER in whole or from time to time in part, in accordance with this section, whenever the OWNER shall determine that such termination is in the best interest of the OWNER. Any such termination shall be effected by mailing a notice of termination to the CONTRACTOR specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. Receipt of the notice shall be deemed conclusively presumed and established when the letter is placed in the United States Mail by the OWNER. Further, it shall be deemed conclusively presumed and established that such termination is made with just cause as therein stated; and no proof in any claim, demand or suit shall be required of the OWNER regarding such discretionary action.

5.5.2 CONTRACTOR ACTION

After receipt of a notice of termination, and except as otherwise directed by the OWNER or Engineer, the CONTRACTOR shall:

A. stop work under the Contract on the date and to the extent specified in the notice of termination;

B. place no further orders or subcontracts for materials, services or facilities except as may be necessary for completion of such portion the Work under the Contract as is not terminated;

C. terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination;

D. transfer title to the OWNER and deliver in the manner, at the times, and to the extent, if any, directed by the OWNER or Engineer:

1. the fabricated or unfabricated parts, work in process, completed work, supplies and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the notice of termination; and

2. the completed or partially completed plans, drawings, information and other property which, if the Contract had been completed, would have been required to be furnished to the OWNER.

E. complete performance of such part of the work as shall not have been terminated by the notice of termination; and

F. take such action as may be necessary, or as the Engineer may direct, for the protection and preservation of the property related to its Contract which is in the possession of the CONTRACTOR and in which the OWNER has or may acquire an interest.

At a time not later than 30 days after the termination date specified in the notice of termination, the CONTRACTOR may submit to the OWNER a list, certified as to the quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Engineer. Not later than 15 days thereafter, the OWNER shall accept title to such items and remove them or enter into a storage agreement covering the same, provided that the list submitted shall be subject to verification by the Engineer upon removal of the items, or, if the items are stored, within 45 days from the date of submission of the list, and provided that any necessary adjustments to correct the list as submitted shall be made prior to final settlement.

5.5.3 TERMINATION CLAIM

Within 60 days after notice of termination, the CONTRACTOR shall submit his termination claim to the Engineer and the OWNER in the form and with the certification prescribed herein. Unless one or more extensions in writing are granted by the OWNER upon request of the CONTRACTOR, made in writing within such 60-day period or authorized extension thereof, any and all such claims shall be conclusively deemed waived. The termination claim shall (1) list all Contract Work which the CONTRACTOR has completed but for which the CONTRACTOR asserts it has not been paid, including any retainage; (2) list of all fabricated or unfabricated parts, work in process, completed work, supplies and other material produced as a part of, or acquired in connection with the performance of the Contract and the itemized cost for each such fabricated or unfabricated part, work in process, completed work, supplies and other material; (3) list all costs and expenses saved as a result of the termination of the Contract. The termination claim must include a copy of all invoices for fabricated or unfabricated parts, supplies and other material; other material produced as a part of, or acquired in connection with the performance of the Contract and the itemized cost for each such fabricated or unfabricated part, work in process, completed work, supplies and other material; (3) list all costs and expenses saved as a result of the termination of the Contract. The termination claim must include a copy of all invoices for fabricated or unfabricated parts, supplies and other material produced as a part of, or acquired in connection with the performance of the Contract.

for which the CONTRACTOR seeks compensation; all invoices for any subcontractors providing services related to the Contract; and (4) evidence of payment of all material suppliers and subcontractors, together with CONTRACOTR's certification that all such-material suppliers and subcontractors have been fully paid together with executed lien releases from each such material supplier and subcontractor. The termination claim may not include any request for payment of Extra Work for which a Change Order has not been issued or for which the CONTRACTOR has not fully and timely complied with the provisions of section 2.3 of this Contract.

5.5.4 AMOUNTS

The CONTRACTOR and OWNER may agree upon the whole or any part of the amount or amounts to be paid to the CONTRACTOR by reason of the total or partial termination of work pursuant hereto, provided that such agreed amount or amounts shall never exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the Contract Price of work not terminated. The contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount. No amount shall be due for lost or anticipated profits. Nothing prescribing the amount to be paid to the CONTRACTOR in the event of failure of the CONTRACTOR and the OWNER to agree upon the whole amount to be paid to the CONTRACTOR by reason of the termination of work pursuant to this section, shall be deemed to limit, restrict or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the CONTRACTOR pursuant to this paragraph.

5.5.5 FAILURE TO AGREE

In the event of the failure of the CONTRACTOR and the OWNER to agree, as provided herein, upon the whole amount to be paid to the CONTRACTOR by reason of the termination of work pursuant to this section, the OWNER shall determine, on the basis of information available to it, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amounts determined. No amount shall be due for lost or anticipated profits.

5.5.6 DEDUCTIONS

In arriving at the amount due the CONTRACTOR under this section, there shall be deducted (a) all unliquidated advance or other payments on account theretofore made to the CONTRACTOR, applicable to the terminated portion of this contract; (b) any claim which the OWNER may have against the CONTRACTOR in connection with this Contract; and (c) the agreed price for or the proceeds of sale of any materials, supplies or other things kept by the CONTRACTOR or sold, pursuant to the provisions of this clause, and not otherwise recovered by or credited to the OWNER.

5.5.7 ADJUSTMENT

If the termination hereunder be partial prior to the settlement of the terminated portion of this Contract, the CONTRACTOR may file with the Owner a request in writing for an equitable adjustment of the price or prices specified in the Contract relating to the continued portion of the Contract (the portion not terminated by the notice of termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices; nothing contained herein, however, shall limit the right of the OWNER and the CONTRACTOR to agree upon the amount or amounts to be paid to the CONTRACTOR for the completion of the continued portion of the Contract when said contract does not contain an established contract price for such continued portion.

5.5.8 NO LIMITATION OF RIGHTS

Nothing contained in this section shall limit or alter the rights which the OWNER may have for termination of this Contract under any other provision of this Contract or any other right which OWNER may have for default or breach of contract by CONTRACTOR.

5.6 CONTRACTOR DEFAULT: OWNER'S RIGHT TO SUSPEND WORK AND ANNUL CONTRACT

The Work or any portion of the Work under contract shall be suspended immediately on written order of the OWNER declaring the CONTRACTOR to be in default. A copy of such notice shall be served on the CONTRACTOR'S surety. The contract may be annulled by the OWNER for any good cause or causes, among others of which special reference is made to the following:

A. failure of the CONTRACTOR to start the work within 10 days from date specified in the written work order issued by the OWNER to begin the work;

B. evidence that the progress of the work being made by the CONTRACTOR is insufficient to complete the work within the specified working time;

C. failure of the CONTRACTOR to provide sufficient and proper equipment, materials or construction forces for properly executing the Work;

D. evidence that the CONTRACTOR has abandoned the Work or discontinuance of the performance of the Work or any part thereof and failure to resume performance within a reasonable time after notice to do so;

E. evidence that the CONTRACTOR has become insolvent or bankrupt, or otherwise financially unable to carry on the Work;

F. deliberate failure on the part of the CONTRACTOR to observe any requirements of the specifications or to comply with any orders given by the Engineer as provided for in the specifications;

G. failure of the CONTRACTOR to promptly make good any defects in materials or workmanship, or any defects of any nature, the correction of which has been directed in writing by the OWNER; H. evidence of collusion for the purpose of illegally procuring a contract or perpetrating fraud on the OWNER in the construction of work under contract; I. repeated violations of safe working procedures;

J. the filing by the CONTRACTOR of litigation against the OWNER prior to final completion of the Work. When the Work is suspended for any of the causes itemized above, or for any other cause or causes, the CONTRACTOR shall discontinue the Work or such part thereof as the OWNER shall designate, whereupon the surety may either at its option assume the Contract or that portion thereof which the OWNER has ordered the CONTRACTOR to discontinue and perform the same or, with the written consent of the OWNER, sublet the same, provided, however, that the surety shall exercise its option within two weeks after the written notice to discontinue the work has been served upon the CONTRACTOR and upon the surety or its authorized agents. The surety in such event shall assume the CONTRACTOR'S place in all respects and shall be paid by the OWNER for all work performed by it in accordance with the terms of the Contract, but in no event shall such payments exceed the contract amount, regardless of the cost to the surety to complete the Work.

In the event that the surety assumes the CONTRACTOR'S place, duties and responsibilities in the Contract, all monies remaining due the CONTRACTOR at the time of his default shall thereupon become due and payable to the surety as the work progresses, subject to all terms of the Contract. In case the surety does not, within the hereinabove specified time, exercise its obligation to assume the Contract or that portion thereof which the OWNER has ordered the CONTRACTOR to discontinue, then the OWNER shall have the power to complete by contract or otherwise, as it may determine, the Work herein described or such part thereof as it may deem necessary; and the CONTRACTOR hereto agrees that the OWNER shall have the right to take possession of or use any or all of the materials, plans, tools, equipment, supplies and property of every kind provided by the CONTRACTOR for the purpose of the Work and to procure other tools, equipment and materials for the completion of the same and to charge to the account of the CONTRACTOR the expense of said contract for labor, materials, tools, equipment and expenses incident thereto. The expense so charged shall be deducted by the OWNER out of such monies as may be due or may at any time thereafter become due the CONTRACTOR under and by virtue of the Contract or any part thereof.

The OWNER shall not be required to obtain the lowest bid for the work of completing the Contract, but the expenses to be deducted shall be the actual cost of such work. In case such expense is less than the sum which would have been payable under the contract if the same had been completed by the CONTRACTOR, then in such case the OWNER may pay the CONTRACTOR the difference in the cost, provided that the CONTRACTOR shall not be entitled to any claim for damages or for loss of anticipated profits.

In case such expense shall exceed the amount which would have been payable under the Contract if the same had been completed by the CONTRACTOR, the CONTRACTOR and his surety shall pay the amount of the excess to the OWNER on notice from the OWNER for excess due including any costs incurred by the OWNER, such as inspection, legal fees and liquidated damages. When any particular part of the Work is being carried out by the OWNER by contract or otherwise under the provisions of this section, the CONTRACTOR

shall continue the remainder of the Work in conformity with the terms of the contract and in such manner as not to hinder or interfere with the performance of workmen employed as above provided by the OWNER or surety.

5.7 SUSPENSION BY COURT ORDER AGAINST THE OWNER

The CONTRACTOR shall suspend such part or parts of the Work pursuant to a court order issued against the OWNER and shall not be entitled to additional compensation by virtue of such court order; neither shall the CONTRACTOR be liable to the OWNER in the event the Work is suspended by such court order, unless such suspension is due to the fault or negligence of the CONTRACTOR. A delay of the CONTRACTOR due to a court order against the OWNER, or due to the OWNER'S failure to secure right-of-way at the time required or because of a conflict of a utility with the Work, shall not be cause for additional compensation for damages sustained by the CONTRACTOR, but may be a cause for extension of contract working time only. The CONTRACTOR'S sole remedy for any suspensions of the Work is an equitable extension of time to perform the Work.

5.8 NO WAIVER OF RIGHTS OR ESTOPPEL

The OWNER, or any officer or agent thereof, shall not be precluded at any time, either before or after final completion and acceptance of the Work and final payment therefore from:

A. showing the true and correct amount, classifications, quality and character of the Work done and materials furnished by the CONTRACTOR or any other person under this Contract, or from showing at any time that any determination, return, decision, approval, order, letter, payment or certification is untrue and incorrect or improperly made in any particular, or that the Work or the materials or any parts thereof do not in fact conform to the contract requirements; and (b) demanding the recovery from the CONTRACTOR of any overpayments made to him, or such damages as the OWNER may sustain by reason of the CONTRACTOR'S failure to perform each and every part of this Contract in strict accordance with its terms; or both.

VI. AUTHORITY OF THE ENGINEER

6.1 All work shall be performed in a good and workmanlike manner and to the satisfaction of the Engineer. The Engineer shall decide all questions which arise as to the quality and acceptability of materials furnished, work performed, manner of performance, rate of progress of the work, sequence of the construction, interpretation of the plans and specifications, acceptable fulfillment of the Contract, compensation, mutual rights between contractors under these specifications and suspension of the Work. He shall determine the amount and quality of work performed and materials furnished, and his decisions and estimates shall be final. His estimate in such event shall be a condition precedent to the right of the CONTRACTOR to receive money due him under the Contract.

6.2 OWNER'S REPRESENTATIVES

Where the Contract Documents indicate that determinations, directions or approvals shall be made by the OWNER or "Owner's representatives," this shall mean the OWNER acting directly, or through duly authorized persons acting within the limit of authority delegated to them. Any determination, direction or approval of such authorized representatives shall be subject to review by the OWNER. For purposes of administering the schedule or the payment provisions of this Contract the Engineer may act as the Owner's representative for purposes of approving payments, changes, scheduling, or acceptance of the Work, at the OWNER'S discretion.

6.3 INSPECTIONS OF WORK PROGRESS

The Engineer shall visit the site at during construction of the Project as necessary as the Owner's Representative to verify that the Work is being performed in compliance with the Contract Documents and shall be given total access to the Project by the CONTRACTOR. Site visits or inspections by the Engineer shall in no way relieve the CONTRACTOR of any of its responsibilities or duties pursuant to the Contract Documents. The Engineer will neither have control over, nor be responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work or the Project. The CONTRACTOR shall be solely responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work or the Project.

6.4 CONSTRUCTION STAKES

Engineer will provide the Contractor with primary horizontal and vertical control to consist of one construction baseline and two benchmarks.

The Contractor shall take all necessary precautions to preserve any and/or all markings and staking. Payment for costs of restaking shall be the responsibility of the Contractor.

6.5 APPROVAL OF SUBMITTALS

The Engineer shall review and approve or take other appropriate action the CONTRACTOR's submittals such as Shop Drawings, Product Data and Samples, for the purpose of checking for conformance with the Contract Documents. The Engineers review of the submittals shall not relieve the CONTRACTOR of any of its obligations to perform the Work in strict compliance with the Contract Documents. The Engineer's review shall not be considered approval of safety precautions, means and methods, techniques, sequences or procedures that are the responsibility of the CONTRACTOR.

VII. CLAIMS OR DISPUTES

7.1 CLAIMS AGAINST OWNER AND ACTION THEREON.

No claim against the OWNER under the Contract or for breach of the Contract or additional compensation for extra or disputed work shall be made or asserted against the OWNER under the Contract or in any court action, unless the CONTRACTOR shall have strictly complied

with all requirements relating to the giving of notice and information with respect to such claim as required by the Contract.

7.2 CLAIM AGAINST OFFICERS, EMPLOYEES OR AGENT OF THE OWNER.

No claim whatsoever shall be made by the CONTRACTOR against any, past, present or future, officer, employee or agent of the OWNER for or on account of, anything done or omitted to be done in connection with this Contract.

VIII. MISCELLANEOUS PROVISIONS

8.1 FINANCIAL INTEREST IN ANY CONTRACT BY OWNER'S OFFICERS, EMPLOYEES OR AGENTS

No officer, employee or agent of the OWNER shall have a financial interest, direct or indirect, in any contract with the OWNER or be financially interested, directly or indirectly, in the sale to the OWNER of any land, materials, supplies or services, except on behalf of the OWNER as an officer or employee. Any willful violation of this article shall constitute malfeasance in office, and any officer or employee guilty thereof shall thereby forfeit his office or position. Any violation of this article with the knowledge, expressed or implied, of the persons, partnership, company, firm, association or corporation contracting with the OWNER shall render the contract involved voidable by the OWNER.

8.2 SERVICE OF NOTICES

The OWNER and the CONTRACTOR shall each designate addresses where all notices, directions or other communication may be delivered or to which they may be mailed.

Notices to the surety or sureties on contract bonds shall be directed or delivered to the home office, or to the agent or agents who executed the bonds on behalf of the surety or sureties, or to their designated agent for delivery of notices.

Actual delivery of any such notice, direction or communication to the aforesaid places or depositing it in a postpaid wrapper addressed thereto in any post office regularly maintained by the United States Postal Service shall be conclusively deemed to be sufficient service thereof upon the above persons as of the date of such delivery or deposit.

The designated addresses may be changed at any time by an instrument in writing executed by the party changing the addresses and delivered to the other party.

Nothing herein contained shall, however, be deemed to preclude or tender inoperative the service of any notice, direction or communication upon the above parties personally or, if the CONTRACTOR be a corporation, upon any officer or director thereof.

8.3 UNLAWFUL PROVISIONS DEEMED STRICKEN

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect.

8.4 ALL LEGAL PROVISIONS INCLUDED

It is the intent and agreement of the parties to this contract that all legal provisions of law required to be inserted herein shall be and are inserted herein. If through mistake or oversight, however, any such provision is not herein inserted, or is not inserted in proper form, then upon application of either party, the contract shall be amended so as to strictly comply with the law and without prejudice to the rights of either party hereunder.

8.5 ASSIGNMENTS

The CONTRACTOR shall not assign, transfer, convey or otherwise dispose of this contract, or his right to execute it, or his right, title or interest in it or any part thereof without the previous written consent of the surety company and the written approval of the OWNER.

The CONTRACTOR shall not assign, either legally or equitably, by power of attorney or otherwise, any of the monies due or to become due under this Contract or its claim thereto without the prior written consent of the surety company and the written approval of the OWNER.

The approval of the OWNER of a particular assignment, transfer or conveyance shall not dispense with such approval to any further or other assignments.

The approval by the OWNER of any assignment, transfer or conveyance shall not operate to release the CONTRACTOR or surety hereunder from any of the Contract and bond obligations, and the CONTRACTOR shall be and remain fully responsible and liable for the defaults, negligent acts and omissions of his assignees, their agents and employees, as if they were his own.

8.6 STATE AND LOCAL SALES AND USE TAXES

The OWNER qualifies for exemption from the state and local sales and use taxes, pursuant to the provisions of Section 151.309 of the Texas Limited Sales, Excise and Use Tax Act. Therefore, the CONTRACTOR shall not pay such taxes which would otherwise be payable in connection with the performance of this Contract.

The CONTRACTOR shall issue an exemption certificate in lieu of the tax on the purchase, rental or lease of:

A. all materials, supplies, equipment and other tangible personal property incorporated into the real property being improved; and

B. all materials, supplies, equipment and other tangible personal property used or consumed by the CONTRACTOR in performing the Contract with the OWNER. Materials and supplies "used in the performance of a contract" include only those

materials actually incorporated into the property being improved and those supplies directly used to incorporate such materials into the property being improved. Overhead supplies and supplies used indirectly or only incidental to the performance of the Contract with the OWNER are not included in the exemption.

Under "reasons said purchaser is claiming this exemption" in the exemption certificate, the CONTRACTOR must name the OWNER and the project for which the equipment, material and supplies are being purchased, leased or rented.

8.7 VENUE AND GOVERNING LAW

The parties agree that the laws of the State of Texas shall govern the interpretation, validity, performance and enforcement of this Construction Agreement, and that the exclusive venue for any legal proceeding involving this Construction Agreement shall be in Collin County, Texas.

8.8 NO WAIVER OF LEGAL RIGHTS

Inspection by the Engineer, or OWNER; any order, measurement, quantity or certificate by the Engineer; any order by the OWNER for payment of money; any payment for or acceptance of any work; or any extension of time or any possession taken by the OWNER shall not operate as a waiver of any provisions of the contract or any power therein reserved to the OWNER of any rights or damages therein provided. Any waiver of any breach of contract shall not be held to be a waiver of any other or subsequent breach. The OWNER reserves the right to correct any error that may be discovered in any estimate that may have been paid and to adjust the same to meet the requirements of the Contract Documents. The OWNER reserves the right to recover by process of law sums as may be sufficient to correct any error or make good any deficiency in the Work resulting from such error, dishonesty or collusion by the CONTRACTOR or his agents, discovered in the Work after the final payment has been made.

Neither final acceptance of the Work, nor final payment shall relieve the CONTRACTOR of responsibility for faulty materials or workmanship, and the CONTRACTOR shall promptly remedy any defects due thereto and pay for any damage to other work resulting therefrom. Likewise, neither final acceptance nor final payment, nor partial or entire use or occupancy of the work by the OWNER shall constitute acceptance of work not done in accordance with the Contract Documents or relieve CONTRACTOR of liability with respect to any expressed or implied warranties or responsibility for faulty materials or workmanship, whether same be patently or latently defective.

8.9 OBLIGATION TO PERFORM FUNCTIONS

Any failure or neglect on the part of OWNER, Engineer or inspectors to enforce provisions herein dealing with supervision, control, inspection, testing or acceptance and approval of the work shall never operate to relieve CONTRACTOR from full compliance with the Contract Documents nor render OWNER liable to CONTRACTOR for money damages, extensions of time or increased compensation of any kind.

8.10 SUCCESSORS AND ASSIGNS

Subject to the limitations upon assignment and transfer herein contained, this contract shall be binding upon and inure to the benefit of the parties hereto, their respective successors and assigns.

8.11 HEADINGS

The title and headings contained in the Contract Documents and the subject organization are used only to facilitate reference, and in no way define or limit the scope of intent of any of the provisions of this Contract.

8.12 ENTIRE AGREEMENT; AMENDMENTS; BINDING EFFECT

This Construction Agreement, including the Contract Documents and all the documents incorporated therein represents the entire and integrated agreement between the OWNER, Collin County, and the CONTRACTOR, and supersedes all prior negotiations, representations, or agreements, either written or oral. This Construction Agreement may be amended only by written instrument signed by both, the OWNER, Collin County, and the CONTRACTOR acknowledges that no representations have been made to it, upon which it is relying in entering into this Contract, which are not expressly set forth in the Contract Documents.

8.13 INTERPRETATION

Although this Agreement is drafted by the OWNER, Collin County, should any part be in dispute, the parties agree that this Construction Agreement shall not be construed more favorable for either party. No rule of construction requiring that ambiguities in this Contract shall be construed more favorably for either party shall apply.

8.14 EXPENSES FOR ENFORCEMENT

In the event either Party hereto is required to employ an attorney to enforce the provisions of this Agreement or is required to commence legal proceedings to enforce the provisions hereof, the prevailing Party shall be entitled to recover from the other, reasonable attorney's fees and court costs incurred in connection with such enforcement, including collection.

IN WITNESS WHEREOF, the parties have executed this Construction Agreement upon the year and date indicated beneath their signatures hereto.

CONTRACTOR:

By:			
• -			

Date:

ATTEST:

Secretary

COLLIN COUNTY, TEXAS:

By: ______ Michalyn Rains, CPPO, CPPB, Purchasing Agent

Date:

Collin County Commissioners' Court Order No.

ATTEST:

Secretary

APPROVED AS TO FORM:

ACKNOWI	EDGN	AENTS
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STATE OF TEXAS § COUNTY OF _____ §

 BEFORE ME, ______ on this day personally appeared ______

 ______, of ______, a _____ corporation, known to me (or proved to me on the oath of) ______ or through ______

 (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of the corporation, for the purposes and consideration therein expressed and in the capacity therein stated. GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the day of , 2019 Notary Public, State of Texas Printed Name My Commission expires on the _____ day of ______, _____. STATE OF TEXAS § **COUNTY OF COLLIN** § FORE ME, ______ on this day personally appeared ______, Purchasing Agent of COLLIN COUNTY, TEXAS, a political subdivision of the State of **BEFORE ME.** Texas, known to me (or proved to me on the oath of) ______ or through _______ or through ________ or through _______ or through ________ or through _______ or through __ subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of COLLIN COUNTY, TEXAS, for the purposes and consideration therein expressed and in the capacity therein stated. GIVEN under my hand and seal of office this the day of , 2019. Notary Public, State of Texas Printed Name My Commission expires on the _____ day of ______, _____.



Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.				
page 2.	2 Business name/disregarded entity name, if different from above				
Print or type Specific Instructions on pa	Check appropriate box for federal tax classification; check only one of the following seven boxes: Individual/sole proprietor or C Corporation S Corporation Partnership single-member LLC Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partners)	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any)			
	Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the tax classification of the single-member owner.	Exemption from FATCA reporting code (if any)			
2 7	C Other (see instructions) ►	(Applies to accounts maintained outside the U.S.)			
pecific	5 Address (number, street, and apt. or suite no.)	Requester's name a	me and address (optional)		
See S	6 City, state, and ZIP code				
	7 List account number(s) here (optional)				
Par	t I Taxpayer Identification Number (TIN)				
Enter	your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avo	oid Social sec	curity number		
backu reside	p withholding. For individuals, this is generally your social security number (SSN). However, for ent alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other as, it is your employer identification number (EIN). If you do not have a number, see <i>How to get</i>	ora			
TIN o	n page 3.	or			
Note.	If the account is in more than one name, see the instructions for line 1 and the chart on page	4 for Employer	identification number		
guide	lines on whose number to enter.		-		
Par	t II Certification	······			

Under penalties of perjury, I certify that:

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

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign	Signature of
Here	U.S. person 🕨

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted. **Future developments**. Information about developments affecting Form W-9 (such as leaislation enacted after we release it) is at *www.irs.gov/fw9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- · Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- · Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Date 🕨
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.
- If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.
- By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

 Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See What is FATCA reporting? on page 2 for further information.

MAINTENANCE BOND

STATE OF TEXAS

COUNTY OF COLLIN

KNOW ALL BY THESE PRESENTS: That

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whose address is , being the General Contractor who constructed the public improvements including, but not necessarily limited to, streets, utilities, drainage, services, and facilities to serve the Property identified herein-below. hereinafter referred to as "Principal." and. __, a corporate surety/sureties organized under the laws of the State of and fully licensed to transact business in the State of Texas, as Surety, hereinafter referred to as "Surety" (whether one or more), are held and firmly bound unto the CITY OF McKINNEY, a Texas municipal corporation, hereinafter referred to as "Owner" or "City," in the penal sum of DOLLARS) (fifteen percent (15%) of the contract price of all public improvements, or (\$ in such amount as approved by the city engineer), in lawful money of the United States to be paid to Owner, its successors and assigns, for the payment of which sum well and truly to be made, we bind ourselves, our successors, heirs, executors, administrators and successors and assigns, jointly and severally; and firmly by these presents, the condition of this obligation is such that:

WHEREAS, ______ whose address is ______, hereinafter referred to as "Subdivider," filed a plat with the City of McKinney, Texas for recording with Collin County, Texas pursuant to Chapter 142, "Subdivision Regulations," of the Code of Ordinances, City of McKinney, Texas, as amended, (the "Subdivision Regulations") for the development of certain property identified as the

_____ Subdivision (the "Property")

situated within the corporate limits or extra-territorial jurisdiction of the City of McKinney, Texas, as more particularly described and designated in the plat of said Property, such plat being incorporated herein and made a part hereof as fully and to the same extent as if written herein word for word.

WHEREAS, the Subdivision Regulations require the Subdivider, as developer of the Property, to construct at Subdivider's sole cost the public improvements necessary for the adequate provision of streets, utilities, drainage, services, and facilities to the Property and to surrounding areas of the City of McKinney (the "Improvements") in accordance with and as required by the Subdivision Regulations, as such regulations may be amended from time to time.

WHEREAS, the Subdivision Regulations also require the Subdivider, as developer of the Property, to use first class materials and workmanship and of such kind and quality that for a period of two (2) full years from the completion and final acceptance of the Improvements by Owner the said Improvements shall require no repairs, the necessity for which shall be

occasioned by defects in workmanship or materials and during the period of two (2) full years following the date of final acceptance of the Improvements by Owner.

WHEREAS, the Subdivision Regulations also require the Subdivider, as developer of the Property, to provide a good and sufficient maintenance bond in the amount of 15 percent of the contract price of all Improvements, or in such amount as approved by the City Engineer, with a reputable and solvent corporate surety in favor of the City to indemnify the City against any repairs which may become necessary to any part of the construction of Improvements in connection with the Property, arising from defective workmanship or materials used therein, for a period of two full years from the date of final acceptance of the Improvements.

WHEREAS, the Subdivision Regulations also provide for the withholding of final acceptance of the Improvements until said Maintenance Bond is furnished to the City.

WHEREAS, Subdivider entered into that certain contract dated ______, 20____ with Principal ("Contract") whereby Principal agreed to furnish all permits, licenses, bonds, insurance, products, materials, equipment, labor, supervision, and other accessories necessary for the construction of the Improvements for the Property in accordance with and as required by the Subdivision Regulations, as such regulations may be amended from time to time.

WHEREAS, Principal agreed through the Contract to use first class materials and workmanship and of such kind and quality that for a period of two (2) years from the completion and final acceptance of the Improvements by City the said Improvements shall require no repairs, the necessity for which shall be occasioned by defects in workmanship or materials.

WHEREAS, Principal further agreed through the Contract to assume Subdivider's obligation, responsibility and liability to City to provide this Maintenance Bond to City and for a period of two (2) years following the date of final acceptance of the Improvements by City to repair or reconstruct said Improvements in whole or in part at any time within said period of time from the date of such notice as the City Engineer or Director of Public Works shall determine to be necessary for the preservation of the public health, safety or welfare.

WHEREAS, Principal hereby affirms and declares that Principal has been provided good and valuable consideration by Subdivider to both construct the Improvements and to assume Subdivider's obligations, responsibilities and liabilities to City regarding the provision of this Maintenance Bond and maintaining the Improvements for the Property for a period of two (2) years from the completion and final acceptance of the Improvements by City such that the said Improvements shall require no repairs, the necessity for which shall be occasioned by defects in workmanship or materials.

WHEREAS, Principal further recognizes that City's final acceptance of the Improvements, which final acceptance is a condition precedent to final payment of the Contract amount by Subdivider to Principal, serves as further consideration supporting Principal's assumption of the obligation to repair or reconstruct said Improvements for a period of two (2) years from the date of City's final acceptance in whole or in part at any time from the date of notice as the City Engineer or Director of Public Works shall determine to be necessary for the preservation of the public health, safety or welfare; and that if Principal does not repair or reconstruct the improvements within the time period designated, City shall be entitled to have said repairs made and charge Principal and/or Surety the cost of same under the terms of this Maintenance Bond.

NOW, THEREFORE, if Principal will maintain and keep in good repair the Improvements required by the Subdivision Regulations to be done and performed for a period of two (2) full years from the date of final acceptance and do and perform all necessary work and repair any defective condition (it being understood that the purpose of this section is to cover all defective conditions arising by reason of defective materials, work or labor performed by Principal) then this obligation shall be void; otherwise it shall remain in full force and effect and Owner shall have and recover from Principal and its Surety damages in the premises as provided in the Subdivision Regulations.

PROVIDED, that Principal hereby agrees with respect to this Maintenance Bond <u>only</u> to waive such claims, counterclaims, cross-claims and defenses that Principal may have against Subdivider which might negate City's ability to enforce and collect upon this Maintenance Bond should Principal fail or refuse to timely maintain and perform hereunder.

PROVIDED, further, however, that Principal hereby holds harmless and indemnifies Owner from and against any claim or liability for personal injury or property damage caused by and occurring during the performance of said maintenance and repair operation.

PROVIDED, further, that if any legal action be filed on this Bond, exclusive venue shall lie in Collin County, Texas.

PROVIDED, further, that nothing contained in this Maintenance Bond and/or the City's acceptance of this Maintenance Bond from Principal shall waive or be deemed or interpreted to waive any claims or causes of action that City may now have or which may hereafter accrue against Subdivider arising out of or related to the construction, maintenance, repair or replacement of the Improvements as provided by the City's Subdivision Regulations.

AND PROVIDED FURTHER, Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Subdivision Regulations or to the work performed thereunder, or the Plans, Specifications, Drawings, etc. accompanying the development of the Property or any breach by Subdivider of the Contract or any duty of any kind or nature owed to Surety shall in any way affect its obligation on this Bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Subdivision Regulations or to the work to be performed thereunder regarding the Improvements.

The undersigned and designated agent is hereby designated by Surety as the resident agent in either Collin or Dallas Counties to whom all requisite notice may be delivered and on whom service of process may be had in matters arising out of this suretyship.

[Remainder of page left blank intentionally.]

ATTEST:			PRINCIPAL:						
			Company Nam	e					
Ву:			By:						
Signatu	ure		Signature						
Typed/Prin	ted Name		Typed/Printed	Name					
Title			Title						
Address			Address						
City	State	Zip	City	State	Zip				
Phone		Fax	Phone		Fax				
ATTEST:			SURETY:						
Ву:			By:						
Signatu	ure		Signature						
Printed Na	me		Printed Name						
Title			Title						
Address			Address						
City	State	Zip	City	State	Zip				
Phone		Fax	Phone		Fax				

IN WITNESS WHEREOF, this instrument is executed in two copies, each one of which shall be deemed an original, on this the _____ day of _____, 20____.

The Resident Agent of the Surety in Collin County or Dallas County, Texas, for delivery of notice and service of the process is:

NAME:	
STREET ADDRESS:	
CITY, STATE, ZIP:	

NOTE: If Resident Agent is not a corporation, give a person's name.

STATE OF TEXAS COUNTY OF COLLIN

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heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents:

006111 PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That			, a corporation organized and existing	g_under the la	aws of
the State of	, and fully authorized	to transact business in the State of Te	exas, whose address is	of	the
City of	County of	, and State of	,(hereinafter referred to as "Principal"), and		
			(hereinafter referred to as "Surety", a corporation	on organized	under
the laws of the State of	and auth	norized under the laws of the State of	of Texas to act as surety on bonds for principals, are held	and firmly	bound
unto	(hereinafte	r referred to as "Owner") and unto a	ll persons, firms and corporations who may furnish mate	rials for or pe	erform
labor upon the buildings, stru	ctures or improvements re	ferred to in the attached Contract, , ir	n the penal sum of		
Dollars (§) (not less than 100% of the approxi	mate total amount of the Contract as evidenced in the pro-	posal plus	10-
percent of the stated penal	sum as an additional sum	of money representing additional	court expenses, attorneys' fees, and liquidated damage	s arising out	of or
connected with the below identified Contract) in lawful money of the United States, for the payment whereof, the said Principal and Surety bind themselves, and the					

WHEREAS, the Principal has entered into a certain written contract with the Owner, dated the ______ day of ______, 201_____, to which said Contract is hereby referred to and made a part hereof and as fully and to the same extent as if copied at length herein for the construction IFB 2019-133, CONSTRUCTION, COLLIN COUNTY AGGREGATE RINSE STATIONS.

CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal fully and faithfully executes the work and performance of the Contract in accordance with the plans specifications, and Contract Documents, including any extensions thereof which may be granted with or without notice to Surety, during the original term thereof, and during the life of any guaranty required under the Contract, and according to the true intent and meaning of said Contract and the plans and specifications hereto annexed, if the Principal shall repair and/or replace all defects due to faulty materials or workmanship that appear within a period of one year from the date of final completion and final acceptance of the work by OWNER; and if the Principal shall fully indemnify and save harmless the OWNER from all costs and damages which OWNER may suffer by reason of failure to so perform herein and shall fully reimburse and repay OWNER all outlay and expense which the OWNER may incur in making good any default or deficiency, then this obligation shall be void; otherwise, to remain in full force and effect; and in case said CONTRACTOR shall fail to do so, it is agreed that the OWNER may do said work and supply such materials and charge the same against said CONTRACTOR and Surety on this obligation. Provided further, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.

"PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions Texas Government Code, Chapter 2253, as amended, and Chapter 3503 of the Texas Insurance Code, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of said articles to the same extent as if they were fully copied at length herein.

Surety, for value received, stipulates and agrees that the bond shall automatically be increased by the amount of any Change Order or supplemental agreement which increases the Contract price with or without notice to the Surety, but in no event shall a Change Order or Supplemental Agreement which reduces the Contract price decrease the penal sum of the Bond. And further that no change, extension of time, alteration, or addition to the terms of the Contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder.

Surety agrees that the bond provides for the repairs and/or replacement of all defects due to faulty materials and workmanship that appear within a period of one (1) year from the date of completion and acceptance of the improvement by the OWNER.

The undersigned and designated agent is hereby designated by Surety herein as the agent resident to whom any requisite notice may be delivered and on whom service of process may be had in matters arising out of such suretyship.

IN WITNESS WHEREOF, the said Principal and Surety have signed ar	nd sealed this instrument thisday of 201
WITNESS	PRINCIPAL
	Printed/Typed Name
	Title:
	Company:
	Address:
WITNESS	SURETY
	Printed/Typed Name
	Title:
	Company:
	Address:
The Resident Agent of the Surety for delivery of notice and service of process is:	
Name:	
Address:	
Phone Number:	prior to date of contract.
	Revised 11/2008

006113 PAYMENT BOND

STATE OF TEXAS COUNTY OF COLLIN

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KNOW ALL MEN BY THESE PRESENTS:

That		, a corporation organized and existing_under the laws of
the State of	, and fully authorized to transact business in the State of Texas, with	hose address is
of the City of	County of	, and State of
,(hereinafter referred to as "Principal"), and	nd	
(hereinafter referred to as "Surety", a corp	poration organized_under the laws of the State of	and authorized under the laws of the State
of Texas to act as surety on bonds for prin	ncipals, are held and firmly bound unto	(hereinafter referred
to as "Owner") and unto all persons, firm	ns and corporations who may furnish materials for or perform labor u	pon the buildings, structures or improvements referred to
in the attached Contract, , in the penal sur	n of	
Dollars (\$) (not less than 100% of the approximate total amoun	nt of the Contract as evidenced in the proposal) in lawful
money of the United States, for the paym	nent whereof, the said Principal and Surety bind themselves, and their	r heirs, administrators, executors, successors, and assigns,
jointly and severally, firmly by these pres	sents:	

WHEREAS, the Principal has entered into a certain written contract with the Owner, dated the	day	of	, 201	, to which
said Contract is hereby referred to and made a part hereof and as fully and to the same extent as if copied at le	ength herein	for the	construction of IFB	2019-133,
CONSTRUCTION, COLLIN COUNTY AGGREGATE RINSE STATIONS.				

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that the bond guarantees the full and proper protection of all claimants supplying labor and material in the prosecution of the work provided for in said Contract and for the use of each claimant, and that conversely should the Principal faithfully perform said Contract and in all respects duly and faithfully observe and perform all and singular the covenants, conditions, and agreements in and by said Contract, agreed to by the Principal, and according to the true intent and meaning of said Contract and the claims and specifications hereto annexed, and any and all duly authorized modifications of said Contract that may hereafter be made, notice of which modification to Surety being hereby waived, then this obligation shall be void; otherwise, to remain in full force and effect. Provided further, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.

"PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions Texas Government Code, Chapter 2253, as amended, and Chapter 3503 of the Texas Insurance Code, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of said articles to the same extent as if they were fully copied at length herein.

Surety, for value received, stipulates and agrees that the bond shall automatically be increased by the amount of any Change Order or supplemental agreement which increases the Contract price with or without notice to the Surety and that no change, extension of time, alteration or addition to the terms of the Contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder.

The undersigned and designated agent is hereby designated by Surety herein as the agent resident to whom any requisite notice may be delivered and on whom service of process may be had in matters arising out of such suretyship.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this ______day of _____201____.

WITNESS	PRINCIPAL
	Printed/Typed Name
	Title:
	Company:
	Address:
WITNESS	SURETY
	Printed/Typed Name
	Title:
	Company:
	Address:
The Resident Agent of the Surety for delivery of notice and service of process is:	
Name:	
Address:	
Phone Number:	prior to date of contract.

SECTION 008000 – PROJECT SPECIFICATIONS

NCTCOG SPECIFICATIONS

Collin County, Texas has adopted the October 2004 Edition of the *Public Works Construction Standards - North Central Texas* as amended and published by the North Central Texas Council of Governments (the "NCTCOG Specifications"). The NCTCOG Specifications apply to this Project, except as noted herein. In the case of a contradiction between the NCTCOG Specifications and these Contract Documents, the information in these Contract Documents shall control.

Bidders are specifically directed to become thoroughly familiar with the NCTCOG Specifications prior to submitting a bid. The Specifications may be purchased from:

North Central Texas Council of Governments Regional Information Center 616 Six Flags Drive P.O. Box 5888 Arlington, Texas 76005-5888 817.695.9140

Unless otherwise specifically noted on the Plans, or in these Specifications, all applicable sections of the NCTCOG Specifications are in effect. In this case of a contradiction between the NCTCOG Specifications and these Contract Documents, the information in these Contract Documents shall control.

SECTION 009000 – SPECIAL CONDITIONS

SC.01 FUNDING

Funds for payment for Collin County expenditures have been provided through the Collin County budget approved by the Commissioners' Court for this fiscal year only. All other participating entities expenditures have been provided through their entity's governing body for this fiscal year only. State of Texas statutes prohibit any obligation of public funds beyond the fiscal year for which a budget has been approved. Therefore, anticipated orders or other obligations that arise past the end of the current fiscal year shall be subject to budget approval.

SC.02 DELIVERY/SETUP/INSTALLATION LOCATION

Location for delivery and installation is Collin County Central Plant, 4600 Community Ave., McKinney, TX 75071. Delivery, assembly, set-up and installation shall be included in the bid price.

SC.03 PROJECT REQUIREMENTS AND CLARIFICATIONS

- 1. Owner will occupy site during the project. Contractor shall perform work described in this specification with the least inconvenience to daily operations. Contractor shall give Owner sufficient notice of any activity that may conflict with daily operations.
- 2. Contractor shall not disrupt utilities servicing the facility without a minimum two (2) day prior written notice and shall obtain Owners prior permission. Contractor is responsible for coordinating with any utility provider, if necessary. Facility is occupied and shall not be without unscheduled power outage.
- 3. No substitutions will be accepted unless prior written request is obtained by Owner. Contractor shall submit substitution immediately upon discovery or need of change and shall allow Owner up to ten (10) calendar days for review. Owner will review and respond without delay to the project. Substitutions should offer Owner cost, time or performance advantage but no substitution of contractor convenience will be accepted. Contractor shall amend schedule, if affected.
- 4. Contractor shall prepare and submit in writing a Request For Information (RFI) once discovery of information is needed and coordinate the RFI in a prompt manner not to delay contractors or sub-contractors work. RFI's shall be numbered in sequence and contain: subject and information needed; reference to the Specification Section Number (if applicable); sketches, shop drawings, materials, photos and any other pertinent information. Contractor shall prepare and maintain a log of the RFI's in an organized manner.

- 5. Progress meetings shall be held bi-weekly or on an as needed basis. Meeting requirements are as follows: Contractor shall conduct meeting, prepare an agenda, prepare meeting minutes, RFI Log, Submittal Logs, schedules, change order logs, payment application, conflicts and Contractor Field Reports. Collin County will provide meeting space.
- 6. Working hours for this project are 8:00 AM to 5:00 PM with one hour lunch.
- 7. Contractor shall prepare a schedule of submittal and allow reasonable time for Owner review (no longer than ten days).
- 8. Contractor shall keep work area clean at all times and free of debris with final make ready cleaning. Fire lanes shall be clear at all times. Contractor may set a dumpster if needed; use of County dumpsters shall not be allowed. Dumpster location shall be approved by Collin County.
- 9. Contractor shall comply with State and Federal laws and safety regulations.
- 10. Contractor may utilize the job site area for storage during the project but Owner shall not be responsible for Contractor's material.
- 11. Contractor shall provide start-up, testing and adjust equipment for optimum performance.

SC.04 BARRICADES, WARNING SIGNS, DETOURS AND SEQUENCE OF WORK

1. General Construction - The CONTRACTOR shall plan his work sequence in a manner that will cause minimum interference with traffic during construction operations. Before beginning Work on this Project, the CONTRACTOR shall submit, for approval by the Engineer, a plan of construction operations outlining in detail a sequence of work to be followed; setting out the method of handling traffic on streets, roads and driveways along, across and adjacent to the Work. If at any time during the construction, the CONTRACTOR's proposed plan of operation for handling traffic does not provide for safe comfortable movement, the CONTRACTOR shall immediately change his operations to correct the unsatisfactory conditions and submit a revised plan of operations for approval to the Engineer,

CONTRACTOR shall provide Engineer at least 72 hours advance written notice of any road or lane closure, and obtain Engineer's written approval of such road or lane closure prior to closing said road or lane segment.

2. Safety - The CONTRACTOR shall provide, construct and maintain barricades and signs. In addition, he shall provide and maintain such other barricades and signs as deemed necessary by the Engineer, and provide and maintain, between sunset and

sunrise, a sufficient number of lights at barricades and points of danger for the protection of vehicular and pedestrian traffic.

Barricades shall be placed in such a manner as not to interfere with the sight distance of drivers entering or exiting the project site.

The CONTRACTOR shall keep traveled surfaces used in his hauling operation clear and free of dirt or other material.

The CONTRACTOR shall provide and maintain qualified flagmen at such points and for such periods of time as may be required to provide for the safety and convenience of public travel and CONTRACTOR's personnel.

SC.05 GRASS REPAIR

Contractor shall reseed all disturbed areas

SC.06 SPRINKLER REPAIR

The CONTRACTOR is responsible for the repair or replacement of any existing sprinkler irrigation system including sprinkler heads, control valves, etc. that are removed or damaged during the construction of the Project. Any such existing sprinkler irrigation system which is removed or damaged shall be put back to better or previous condition. No separate pay item shall be made for this work, as any such repair is subsidiary to the unit prices bid on this Project.

SC.07 DAMAGES TO CITY OR COUNTY PROPERTY

If the CONTRACTOR damages any City or County property, i.e., water mains, he will be assessed applicable charges. All charges will be deducted from the CONTRACTOR's monthly estimate per the Contract Documents.

Existing public and private utilities shown in the plans are schematic and shown per asbuilt plans and are for CONTRACTOR'S guidance. The CONTRACTOR shall verify location, size, and material of all existing utilities prior to construction.

SC.08 HAZARDOUS MATERIAL(S) INCIDENT

If any acts of the CONTRACTOR or its agents or employees cause County or City forces to respond to a hazardous materials incident, the CONTRACTOR will be assessed for the expenses incurred. All charges will be deducted from the CONTRACTOR's monthly estimate per the Contract Documents.

SC.09 EXISTING FACILITIES

The CONTRACTOR is responsible for contacting all private and public utilities for determining the location of existing facilities and compliance with the State of Texas' "call before you dig" program mandated by Texas Utility Code Chapter 251 prior to any digging or excavation.

Existing public and private utilities shown in the plans are schematic and shown per asbuilt plans and are for CONTRACTOR'S guidance. The CONTRACTOR shall verify location, size, and material of all existing utilities prior to construction.

SC.10 STREET CLEANUP

CONTRACTOR shall be responsible for keeping streets adjacent to the Project free of mud and construction debris at all times or as requested by the City. The CONTRACTOR shall not use a power broom type device on streets outside the construction improvements. The CONTRACTOR shall utilize a mechanical or air generated pickup broom with water application.

SC.11 UTILITY SUPPORT

All costs associated with existing utility support shall be considered subsidiary to the other bid items.

SC.12 RESTORATION OF PAVEMENT SURFACES

- 1. <u>General</u>.
 - a. Restore (unless otherwise specified or directed by the OWNER's Representative in writing) permanent type pavements, curbs, gutters, and surface structures removed or disturbed during or as a result of construction operations to a condition which is equal in appearance and quality to the condition that existed before the work began.

SC.13 EROSION CONTROL

It shall be the full responsibility of the CONTRACTOR to acquire and comply with any and all permits as may be required to avoid delay of the Project. No separate payment will be made for this item and it will be considered subsidiary to the other items bid.

Every soil disturbing activity shall have at minimum an accompanying Erosion Control Plan ("ECP"). Erosion control measures to be incorporated in the ECP are detailed in the construction Plans. The bid item for the temporary erosion control include the installation, maintenance (throughout the Project duration) and removal of erosion control measures.

The site shall be reviewed by the CONTRACTOR or his representative weekly, and after any major storm. Adjustments/repairs to the erosion control measures will then be made as needed.

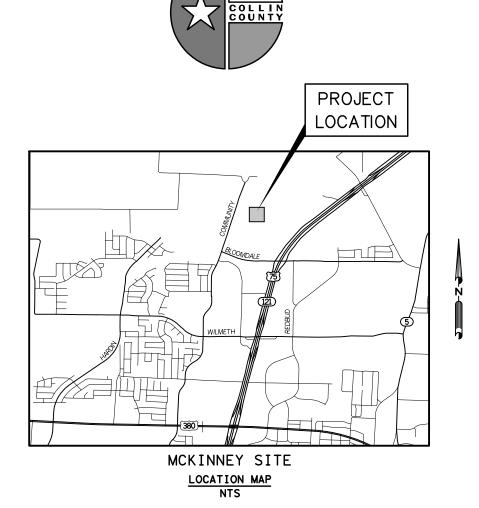
Tree protection will not be paid for separately but will be considered subsidiary to the erosion control bid item.

CIVIL ENGINEERING PLANS FOR COLLIN COUNTY AGGREGATE RINSE STATIONS

COLLIN COUNTY, TEXAS

GENERAL NOTES:

- 1. THE ENGINEERING PLANS ARE DESIGNED TO AND SHALL BE CONSTRUCTED TO COLLIN COUNTY AND THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG), STANDARDS.
- 2. ALL CONTRACTORS SHALL CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS ONTO DEVELOPED OR UNDEVELOPED AREAS WILL BE ALLOWED. ANY DAMAGE RESULTING THERE FROM SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR.



DEV2018-01-00202

REVISED DRAWING RELEASED FOR CONSTRUCTION CITY OF MCKINNEY ENGINEERING DEPARTMENT

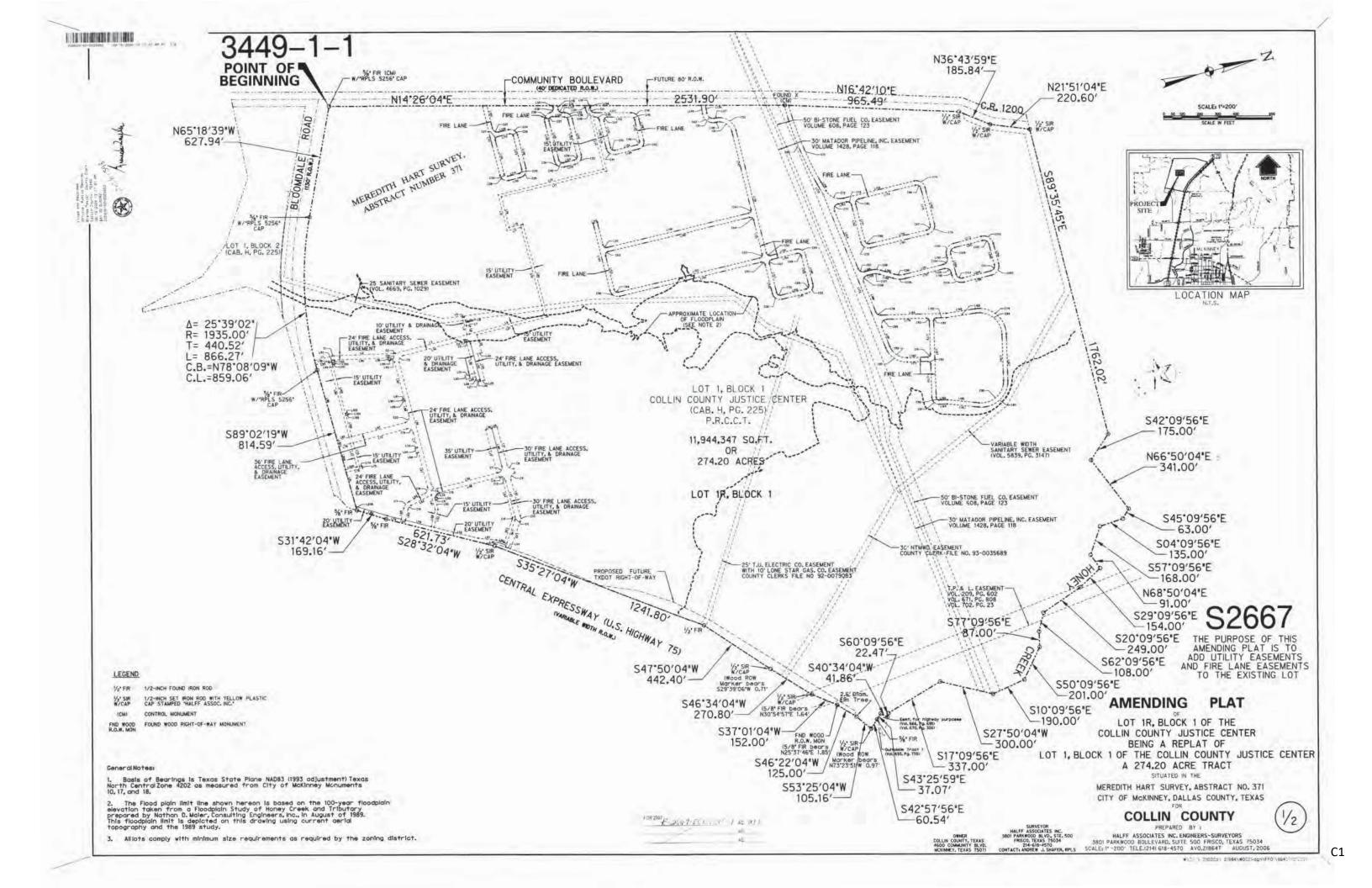
April 09, 2019 by ENG- J. Jackson

Prior to commencing construction, the owner or their representative shall hol a Pre-Construction Conference with and be issued a Development Permit by the City of McKinney Engineering Department. A copy of the Development Permit and these stamped construction drawings shall be maintained on the construction site at all times. If a conflict is found between these construction ings and the City of McKinney Construction Standards, the City of McKinney Construction Standards shall govern.



INDEX OF SHEETS

SHEET NO.	DESCRIPTION				
	TITLE SHEET				
C1	AMENDING PLAT (COLLIN COUNTY JUSTICE CENTER)				
C2	MCKINNEY GENERAL NOTES				
С3	MCKINNEY TREE SURVEY & PRESERVATION PLAN				
C4	MCKINNEY EXISTING UTILITY LAYOUT				
C5	MCKINNEY EROSION CONTROL PLAN				
C6	MCKINNEY SITE AND UTILITY PLAN				
C7	MCKINNEY TEST HOLE DATA				
C8	AGGREGATE RINSE STATION STANDARD DETAILS				
С9	AGGREGATE RINSE STATION MISCELLANEOUS DETAILS				
C10-C12	EC(9)-16 (TXDOT STANDARD)				
C13	AGGREGATE RINSE STATION ROCK CHECK DAM STANDARD				
	DETAILS				



GENERAL ITEMS

- Prior to any construction the Contractor shall be familiar with the Contract Documents and Specifications, the Plans (including all notes), the City of McKinney Specifications and any other applicable standards or specifications relevant to the proper completion of the work specified. Failure on the part of the Contractor to be familiar with all Standards and Specifications pertaining to this work shall in no way relieve the Contractor of responsibility for performing the work in accordance with all such applicable Standards and Specifications.
- Prior to construction, Contractor shall have in their possession all necessary permits, plans, licenses, etc. Contractor shall have at least one set of approved Engineering Plans and Specifications on-site at all times.
- 3. All work shall conform to the City of McKInney design manuals and standards. In the event an Item is not covered in the plans or the City of McKInney design manuals and standards, the most current North Central Texas Council of Governments (NCTCOG) Standard Specifications for Public Works Construction shall apply with concurring notification to the City Engineer and Project Engineer. The Engineer shall have the final decision on all construction materials, methods, and procedures.
- All work within TxDOT ROW shall conform to the latest edition of TxDOTs Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges.
- 5. Construction inspection will be performed by representatives of the Owner, Engineer, City, Geotechnical Engineer, and reviewing authorities and agencies. Unrestricted access shall be provided to them at all times. Contractor Is responsible for understanding and scheduling required inspections. Testing samples shall be collected and processed by certified technicians.
- All contractors must confine their activities to the work area. No encroachments onto developed or undeveloped areas will be allowed. Any damage resulting therefrom shall be Contractor's responsibility to repair.
- Developer shall be responsible for obtaining all offsite easements prior to commencement of offsite and relevant on-site construction activities.
- 8. It will be the responsibility of each contractor to protect all existing public and private utilities throughout the construction of this project. Contractor shall contact the appropriate utility companies for line locations prior to commencement of construction and shall assume full liability to those companies for any damages caused to their facilities.

DIGTESS	800-DIG-TESS (or 811)
Atmos Energy (Gas)	800-460-3030
Oncor Electric Delivery	888-313-6862
AT & T	972-569-3061
City of McKinney	972-547-7360
Time Warner Cable	214-320-5435
Grande Communications	972-410-0592
CoServ Electric	800-274-4014
CoServ Gas	940-321-7800
Capco Fiber	903-531-9670
GCEC Overhead Electric	903-482-7118
GCEC Underground Electric	903-482-7141
GCEC Telecom	903-482-7000 ext. 7274

 Trench Safety Design will be the responsibility of the Utility Contractor. Contractor shall submit a trench safety design approved by a professional engineer to the City Engineering Inspector for review prior to the start of any underground utility construction.

10. Continuous access for mail service shall be provided during construction.

11. If any conflict arises between these generals notes and any other notes found in the plans, the City General Notes shall take precedence.

EROSION CONTROL & VEGETATION

- 1. Every soll disturbing activity shall have an accompanying Erosion Control Plan (ECP), and either Construction Site Notice (CSN) for those activities disturbing more than 1 but less than 5 acres, or Notice of Intent (NOI) for those activities disturbing 5 or more acres including those activities less than 5 acres, but are part of a common plan of development totaling 5 or more acres. A copy of the appropriate CSN or NOI shall be provided to the City of McKinney prior to Issuance of a grading permit. The ECP shall be provided to McKinney's Erosion Control Officer (ECO) prior to grading.
- The CSN or NOI shall be posted in a location viewable to the public until construction is complete and Notice of Termination (NOT) submitted. The Storm Water Pollution Prevention Plan (SWP3) shall be readily available for review by Federal, State, or local officials.
- No soll disturbing activities will occur prior to the SWP3, ECP, and associated Best Management Practices (BMP) being fully implemented, and then inspected by McKinney's Erosion Control Officer (ECO).
- The contractor shall comply with the City of McKInney's Storm Water Ordinance, the current NCTCOG iSVM/TM Technical Manual for Construction, the TPDES General Construction Permit TXR150000 and any other State and/or Local regulations.
- 5. The contractor shall employ measures as necessary to prevent dirt, mud, debris from being tracked off site. Any dirt, mud, debris tracked offsite shall be cleaned up by the contractor immediately.
- 6. The site shall be reviewed by the operator or his representative weekly, and after any major storm. Adjustments/repairs to the erosion control measures will be made as needed. The contractor shall notify McKinney's ECO of adjustments/repairs such that the adjustments/repairs may be inspected and approved by the ECO.
- 7. Along parkways and medians in the right-of-way, a four (4) foot strip of native sod shall be placed behind the curb on top of four (4) Inches of topsoll. Contractor shall be responsible for any temporary Irrigation or watering as needed. Areas adjacent to new residential lots, where the homebuilder will be disturbing this area, may be exempt from this requirement so long as adequate erosion control measures are installed and maintained behind the curb.
- 8. Contractor shall establish perennial vegetation on all other disturbed areas immediately upon completion of grading activities. An appropriate seed mix should be considered with respect to the season and the timing of final acceptance. A cool season seed mix should be used between September 15th and April 15th. Final acceptance of a site shall be contingent upon perennial vegetation being fully established in all disturbed areas.
- 9. A completed N.O.T. shall be submitted to the State and a copy of this N.O.T. shall be provided to the City of McKinney prior to final acceptance.

RETAINING WALLS

- Retaining walls greater than 2 feet in height must be an engineered design and require a separate permit issued through the Building Inspections Department.
- Retaining walls (including the footing) shall not be constructed to encroach upon City Right-of-Way, public easements, or public utilities without the consent of the City Engineer.

TREE PRESERVATION

- Prior to construction, the contractor or subcontractor shall construct and maintain a protective fence at the drip line of all protected existing trees, bushes, landscaping plants, sprinklers, and lawns unless noted otherwise on the construction drawings. Any damage to the existing trees, bushes, landscaping plants, sprinklers, and lawns caused by construction shall be replaced to the satisfaction of the City of McKinney at the contractor's exense.
- All protective measures shall be in place prior to commencement of any site or grading work and remain in place until all exterior work has been completed.
- The Clty Arborist shall be contacted to approve the placement of the Tree Preservation fencing prior to beginning of site work on property.
- 4. The following activities shall be prohibited within the limits of the primary root zone: material storage, equipment cleaning/liquid disposal, no tree attachments of signs or wires, and construction equipment/vehicular traffic is prohibited.
- Unless specifically allowed, no grade changes shall be allowed within the limits of the primary root zone of any protected tree unless the City Arborist approves adequate construction methods.
- 6. No trimming of trees may occur within the Tree Preservation fencing limits without prior consent of the City Arborlst.

TRAFFIC CONTROL (PUBLIC ROADWAYS)

- 1. When the normal function of the roadway is suspended through closure of any portion of the right-of-way, temporary construction work zone traffic control devices shall be installed to effectively guide the motoring public through the area. Consideration for road user safety, worker safety, and the efficiency of road user flow shall be an Integral element of every traffic control zone. All traffic control devices shall be in accordance with the latest T.M.U.T.C.D. and N.C.H.R.P. 350. Devices must contain either Type III Hi-Intensity sheeting or Type IV reboundable HI-Intensity.
- 2. Any traffic control plans not Included In the engineering plan set must be submitted for review a minimum of seven (7) working days prior to the anticipated lane closure. Construction activity shall not begin until the traffic control plan is approved by the City of McKinney. Traffic control plans may be required on other roadways as determined by the Traffic Engineer or the designee. All traffic control plans must be prepared by an individual that is certified in their preparation. Any deviation from an approved by the Traffic Engineer or their designated representative.
- The contractor shall be responsible for maintaining all traffic control devices on an around-the-clock basis, whether or not work is active. Any deficiencies shall be corrected by the contractor immediately, regardless of time of day.
- 4. Lane closures will not be permitted on arterial roadways before 9:00 am or after 4:00 pm. Vtolations may result in suspension of all work at the job site for a minimum of 48 hours. The traffic engineer reserves the right to deny a closure for a special event.
- 5. Lane closures will not be permitted on streets adjacent to private and/or public schools during the following
 - Elementary: 7:15am 8:15am, 2:45pm 3:45pm Middle School: 7:55am - 9:00am, 3:30pm - 4:40pm High School: 6:45am - 7:45am, 2:15pm - 3:15pm
- 6. All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work Is suspended for short periods of time at the end of the workday, temporary traffic control devices that are no longer appropriate shall be removed or covered. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours.
- 7. Existing permanent signs removed by the contractor for construction purposes other than stop, yield and street name signs shall be returned to the City of McKinney. All stop, yield and street name signs removed shall be temporarily erected in the appropriate locations (no less than 7 feet vertical from grade) until permanent signing can be installed. Any temporary stop or yield sign locations to be left in place overnight will require prior approval from the City Engineer.
- Any permanent sign or existing pavement markings that conflict with the approved traffic control plan shall be covered, obliterated or removed as directed by the City Engineer.
- 9. Access must be maintained to all drives and side streets or as indicated in the traffic control plan

PEDESTRIAN ACCESSIBILITY

- All newly constructed sidewalks, curb ramps and crosswalks installed within the project site and City of McKInney public rights-of-way shall be considered a pedestrian access route and shall conform to current ADA guidelines and with the most current "Draft" Guidelines for Public Rights-of-Way created by the United States Access Board. http://www.access-board.gov/guidelines-and-standards
- Curb Ramps shall conform to all federal guidelines, but shall generally adhere to the following criteria: a. 8.3% maximum running slope; 7.5% preferred
 - b. 2.0% maximum cross slope; 1.5% preferred
- c. Minimum 4.0 ft width
- d. Minimum 4.0 ft x 4.0 ft landings at top and bottom of ramps with 2.0% maximum running slope and
- cross slope. (1.5% preferred) e. Detectable warning surface placed at point of entry into roadway.
- e. Detectable warning surface placed at point of entry into
- 3. Detectable warning surface shall be pre-manufactured plates with truncated dome material built in. Only plates from TxDOT approved vendors shall be permitted and shall be installed per manufacturer's specifications. Brick pavers will not be allowed without approval of Director of Engineering. Final color shall be approved by the Director of Engineering, but shall generally be in the "RED" color family.
- 4. The contractor shall provide a clear and safe route for pedestrians to the site for the duration of construction. A temporary pedestrian route shall be provided when any existing pedestrian route is closed due to construction activity.
- Construction materials shall be kept off existing sidewalks and consolidated in areas within the property unless otherwise approved by the Owner.
- Sidewalks shall conform to all federal guidelines, but shall generally adhere to the following:
 a. Generally follow the street grade with a maximum 2.0% cross slope
 - b. Shall be free of any overhangs by landscaping or other items to a height of 7.0 feet.
 c. Sidewalks shall maintain a continuous (pedestrian access route) elevation through residential and
 - d. A minimum 5.0 ft x 5.0 ft passing zone shall be provided at a minimum of 200 ft intervals.

WATER

- Line and grade stakes for construction of all water and sanitary sewer lines and services shall be furnished by the following:
- a. Private Development: Developer's engineer, surveyor or their designated representative.
 b. Capital Improvement Projects: the Contractor, unless specified otherwise in the contract.
 Property lines and corners must be properly staked to verify the water line alignment. The City shall not be
- Property lines and corners must be properly staked to verify the water line alignment. The City shall not be lable for Improper alignment or delay of any kind caused by Improper or Inadequate surveys.
- 2. All water services and water meters shall be size on size. No reductions in water meter sizing are allowed for single services. All new water services shall be 1 inch minimum DR-9 (250 psi) HDPE poly pipe with PE4710 as specified in ASTM F714, 1 inch minimum compression fitting angle stop, and meter box, unless otherwise indicated on the plans. Curb stops will be located within the meter box and facing toward the lot.
- 3. In Residential developments, Bullhead water services are required. Bullhead water services shall be 2 Inch minimum DR-9 (250 psi) HDPE poly piew tith PE4710 as specified in ASTM F714, 2 Inch minimum compression service pipe Inlet and two 1 Inch minimum compression service pipe outlets with a "U" branch.
- 4. Each meter box shall be located adjacent to the curb and installed after street pavement has been completed and curbs backfilled. Meter boxes shall be DFW Plastics 1818TEX-EJ-1SAF-MCK or equal, lids shall be DFW Plastics 18AMR-1SAF-LID. A 2" minimum metal locator plate shall be placed in the recess of the meters.
- 5. All water services shall be located along the lot lines. Bullhead meter boxes shall be spaced no more than 2' apart centered at the lot line. Single services shall be placed no more than 2' inside the service lot at the lot line.
- 6. Detector pads embedded in sand shall be installed above all service connections.
- 7. Each Individual service location shall be sawcut into the face of the curb with a 4-Inch high "I" painted by the Contractor. If no curb exists, a similar mark shall be placed in the pavement near the edge of the roadway. After cleaning the sawcut via compressed air or brush, apply one coat of APWA Blue spray paint to mark the sawcut symbol.
- 8. All water service lines shall be embedded with 6 in. sand below and around the pipe and 1 ft. of sand over the top of the pipe; from the water main to the meter. Water service lines within City roadway right-of-way shall be compacted to a minimum of the 95% Standard Proctor density with a +/- 3% wet of optimum moisture content.
- 9. All 6-inch, 8-inch and 12-inch water mains shall be AWWA C900 PVC pipe or polywrapped ductile iron.
- 10. Minimum cover shall be 4 feet for 6-inch to 8-inch lines, 5 feet for 12-inch to 16-inch lines, and 6 feet for 20-inch and larger lines. Additional cover may be required in un-paved or un-developed areas.
- 11. Water mains in the right-of-way near storm inlets shall be constructed with a minimum clearance of 12 Inches behind the Inlet by pulling the pipe using longitudinal bending in accordance to 80% of the pipe manufacturers' requirements.
- 12. Standard embedment shall be NCTCOG Class "H" for all water lines.
- All blow-off (flush) valves shall be two (2) Inch and shall be provided in accordance with City of McKinney standards and/or NCTCOG standards.
- 14. Bolts and nuts for mechanical joints will be of a high-strength low-alloy corrosion resistant steel conforming to ASTM A325 (type 3).
- All water line fittings shall be ductile iron. All 6"-12" valves shall be AWWA approved resilient wedge gate valves.
- 16. In addition to thrust blocking, all fittings must be restrained.
- 17. Install 2' x 2' x 4" thick, concrete pad around all water valves outside of concrete pavement
- Valve extensions shall be provided on all valves with operating nuts greater than 5' below finished ground or paving grade.
- 19. All valves shall be marked with a "V" by sawcut on the curb or pavement The "V" shall point to the location of the valve as follows: If the valve is in the paving, the "V" shall be marked upright; if the valve is outside the paving, the "V" shall be marked upside down. After cleaning the sawcut via compressed air or brush, apply one coat of APWA Blue spray paint to mark the sawcut symbol.
- 20. NRS Resilient-Seated Gate Valves shall conform to AWWA C509 or AWWA C515. Rubber-Seated Butterfly Valves shall conform to AWWA C504. All valves shall have a 2 in. square operating nut and open to the left. All valves shall be Mueller, M&H, Clow or American Flow Control.

STORM SEWER

- When there is less than two feet of clearance between a water/sewer line and a storm sewer, the Contractor shall install concrete encasement around the sanitary sewer or water lines at the storm sewer crossing. The encasement shall be a minimum of 10 LF, and 6' thick centered at the crossing.
- 2. Manhole lids on storm sewer inlets shall be centered over the outgoing storm lateral
- 3. All bends and wyes for pipes less than 42" diameter must be factory manufactured bends and wyes
- 4. Inlet blockouts shall be placed three (3') feet from the back of standard curbs for the distance of ten (10') feet upstream (both sides in sag conditions) and flve (5') feet downstream from the Inside face of Inlet. Inlet blockouts shall be placed three and one-half (3.5') feet from the back of mountable curbs for the distance of fifteen (15') feet upstream (both sides in sag conditions) and flve (5') feet downstream from the Inside face of inlet. unless otherwise noted.
- 5. The contractor shall install City of McKinney standard stormwater disc markers on all new inlets.
- 6. The contractor shall install City of McKinney standard stormwater manhole lids on inlets and manholes.
- Structural concrete used for stormwater structures shall be in compliance with the latest version of the NCTCOG standards and specifications.
- 8. Prior to final acceptance, all storm sewers shall be television filmed and cleared of any sediment and debris.
- 9. Standard embedment shall be NCTCOG Class "B" for all public storm lines.



FIRE HYDRANTS

- Fire hydrants shall be placed 3 to 6 feet from back of curb unless otherwise indicated on the plans, or as required to clear sidewalks. Fire hydrants shall not be located within a sidewalk.
- 2. Fire hydrants shall be three way breakaway type no less than 5-1/4 inches in size and must conform to AWWA specifications C-502. They shall be Mueller "Super Centurion", Clow "Medallion", American Flow Control "Waterous Pacer", M&H "Rellant 129" with all bronze to bronze moving parts. Two 2-1/2-Inch NST hose connections are required. The 4 inch diameter steamer connection shall be 4.800 pitch with 4 threads per Inch. The operating nut shall be 1-1/2-Inch P to F pentagon nut, open left. Mechanical joint connection is required. The steamer nozzle shall face the fire lane, adjacent roadway or as directed by the Fire Department.
- 3. A Blue Stimsonite, Fire-Lite reflector (or approved equal) shall be placed in the center of the street opposite each fire hydrant. The fire hydrant shall be painted with two coats of Themec Series 530 Omnithane paint or approved equal, and two coats of primer. Bornet to flange and nozzle caps of Fire Hydrant to be painted with 2 coats of Themec Safety Paint Series 2H "Hi-Build" according to the following:
- a. Hydrants having a rated capacity of 1500 gpm or greater at 20 psi should be painted light blue.
- b. Hydrants with capacities of 1000-1499 gpm at 20 psi should be painted green c. Hydrants with capacities of 500-999 gpm at 20 psi should be painted orange.
- d. Hydrants with capacities of less than 500 gpm at 20 psi should be painted orange.

SANITARY SEWER

1. Line and grade stakes for construction of all water and sanitary sewer lines and services shall be furnished by the following:

a. Private Development: Developer's engineer, surveyor or their designated representative.
 b. Capital Improvement Projects: the Contractor, unless specified otherwise in the contract.
 Property lines and corners must be properly staked to verify the sewer line alignment. The City shall not be liable for improper alignment or delay of any kind caused by improper or inadequate surveys.

- Unless otherwise noted on the plans, all sanitary sewer pipe shall be PVC ASTM Designation D3034 up through 15[°] In dlameter. Pipes larger than 15[°] In dlameter shall be designated PVC ASTM F679. Other pipe shall be subject to Approval by the City Engineer.
- 3. All residential sanitary sewer laterals shall include a 4" tee wye bend, pipe and stopper, and shall be installed downstream from the water service at the lot centerline and extended 10' beyond the property line onto private property. Sewer laterals shall be laid on a minimum slope of +2.00% from the main line to the street right-of-way.
- 4. After curb and paving has been completed, contractor shall cut a four (4) inch high "II" on the curb indicating the location of the deanout. After deaning the sawcut via compressed air or brush, apply one coat of APWA Green paint to mark the sawcut symbol.
- 5. All sanitary sewers and laterals shall be tested by pulling a mandrel, air pressure test, and television video. The television video shall be provided to the City Inspector In a DVD format and shall be labeled accordingly for City record.
- 6. All sanitary sewer manholes within flood plains or flood prone areas require type "S" manhole lids.
- 7. All manholes shall be vacuum tested where a 10" mercury vacuum is developed. The air vacuum shall then be monitored for a test period of 2 minutes. The allowance drop in air vacuum shall be no greater than 1" mercury over the test period.
- 8. The contractor shall install City of McKinney standard wastewater manhole lids on all manholes.
- 9. Unless otherwise noted, in open spaces, the top of the sanitary sewer manhole shall be installed a minimum of 12 Inches above the surrounding ground.
- Structural concrete used for wastewater structures shall be in compliance with the latest version of the NCTCOG standards and specifications.
- 11. Standard embedment shall be NCTCOG Class "H" for all public sanitary sewer lines.

PAVING

- 1. All mix designs shall be sealed by a professional engineer and submitted to the Engineer one week before a scheduled pour. Mix designs are subject to approval by the Engineer.
- 2. All concrete paving, including sidewalks, shall have a minimum compressive strength of 4000 psi, unless a higher compressive strength is specified.
- The temperature for all concrete shall not exceed 95°F. Any concrete exceeding this condition will be rejected. Refer to City Street Design Manual Section 7.5.2 for further temperature requirements.
- All fill shall be compacted to 98% Standard Proctor Density in a maximum of 6" (six) inch lifts or per the approved Geotechnical Engineers Report.
- 5. Subgrade shall be scarlfled to a depth of 8 Inches and recompacted to 98% Standard Proctor Density.
- 6. A subgrade density report must be presented to the Engineer prior to paying. Densities are only valid for 72 hours. Densities received on a Friday are valid until noon on the following Monday. Densities taken before Inclement weather may be required to be retaken at the Engineer's discretion. A minimum of four (4) test cylinders are required for breaks at 7 days, 2 at 28 days, and the last cylinder being an extra.
- 7. All City streets are required to be paved with the use of an approved slip form paving machine with mechanical vibration. Hand pours are only allowed at intersection returns or other non-standard areas as approved by the City Inspector. Hand pours shall be vibrated by an approved hand vibrator.
- 8. Construction joints, cold joints and curb returns shall have fabric installed to allow for expansion.
- Sawed joints shall be every 12 to 15 feet; and shall be constructed within the first 12 hours of concrete placement.
- 10. Expansion joints shall be placed at a maximum every 400 feet.
- 11. All landscape island noses shall be poured monolithically.
- 12. All Barrier Free Ramps shall comply with the current TDLR, ADA and TxDOT regulations.
- 13. All sidewalks shall be constructed per City of McKinney standards and/or the latest version of the NCTCOG standards and specifications.

GENERAL CONSTRUCTION NOTES

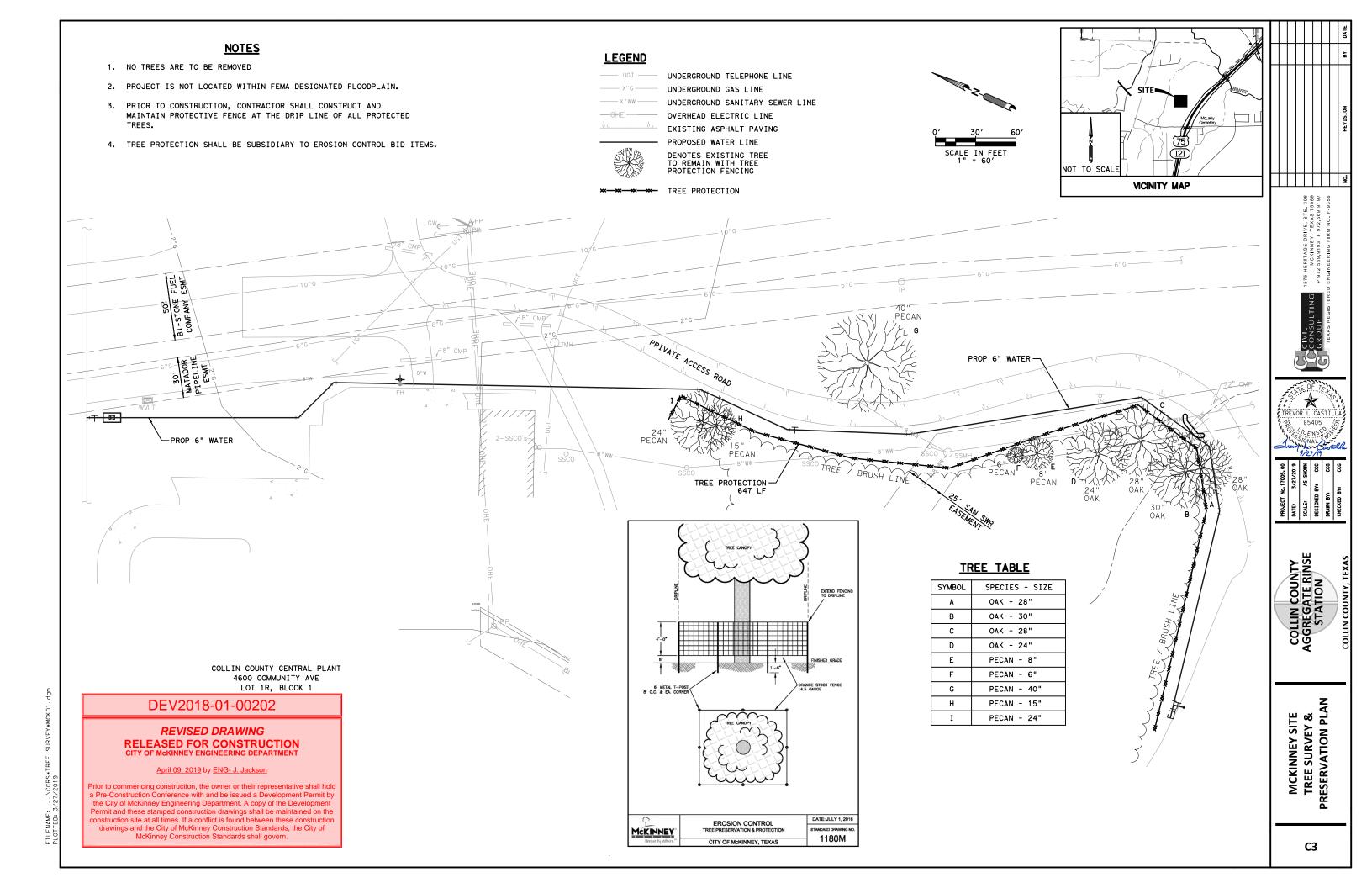
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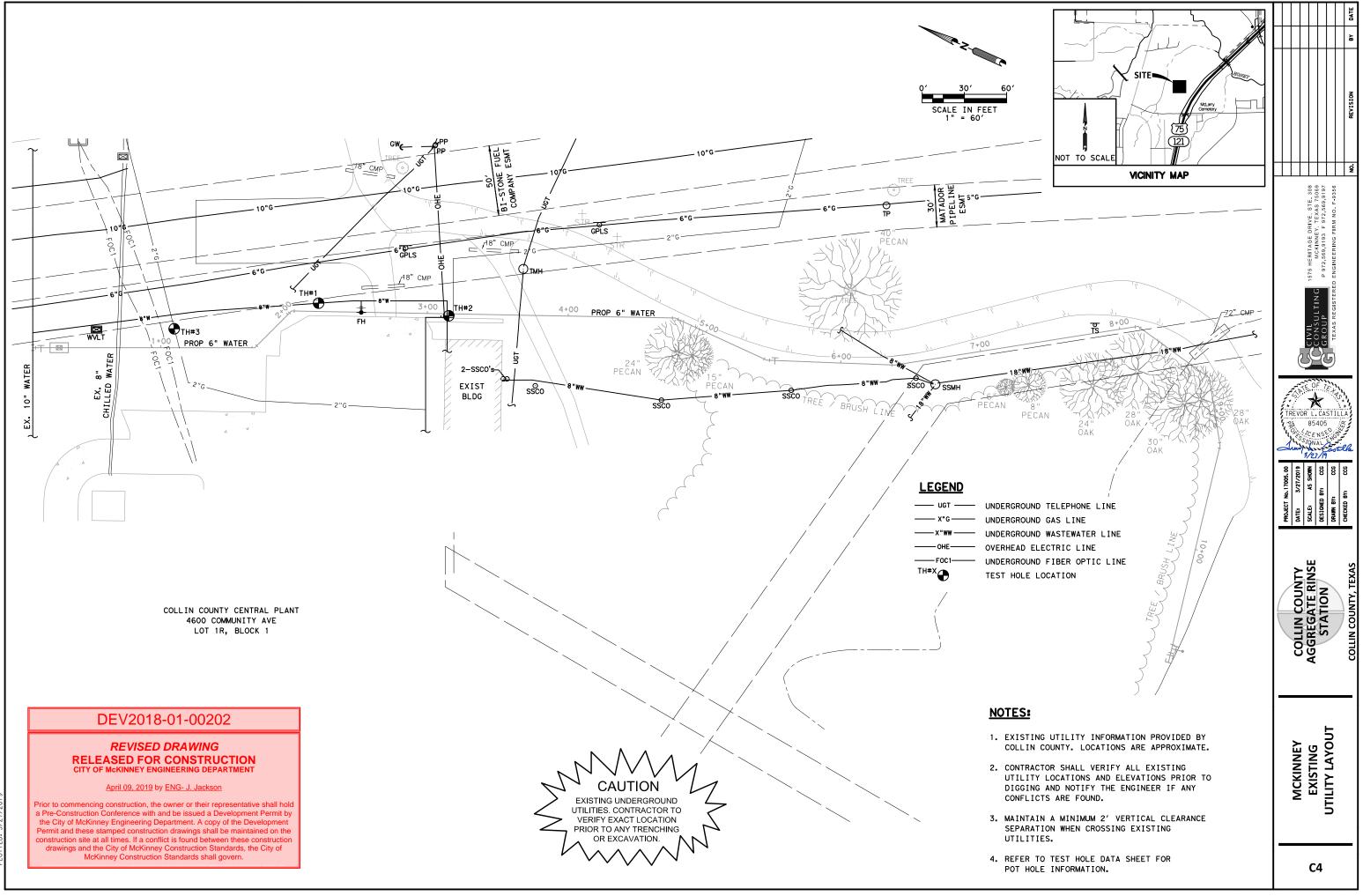
 CITY OF McKINNEY ENGINEERING DEPARTMENT

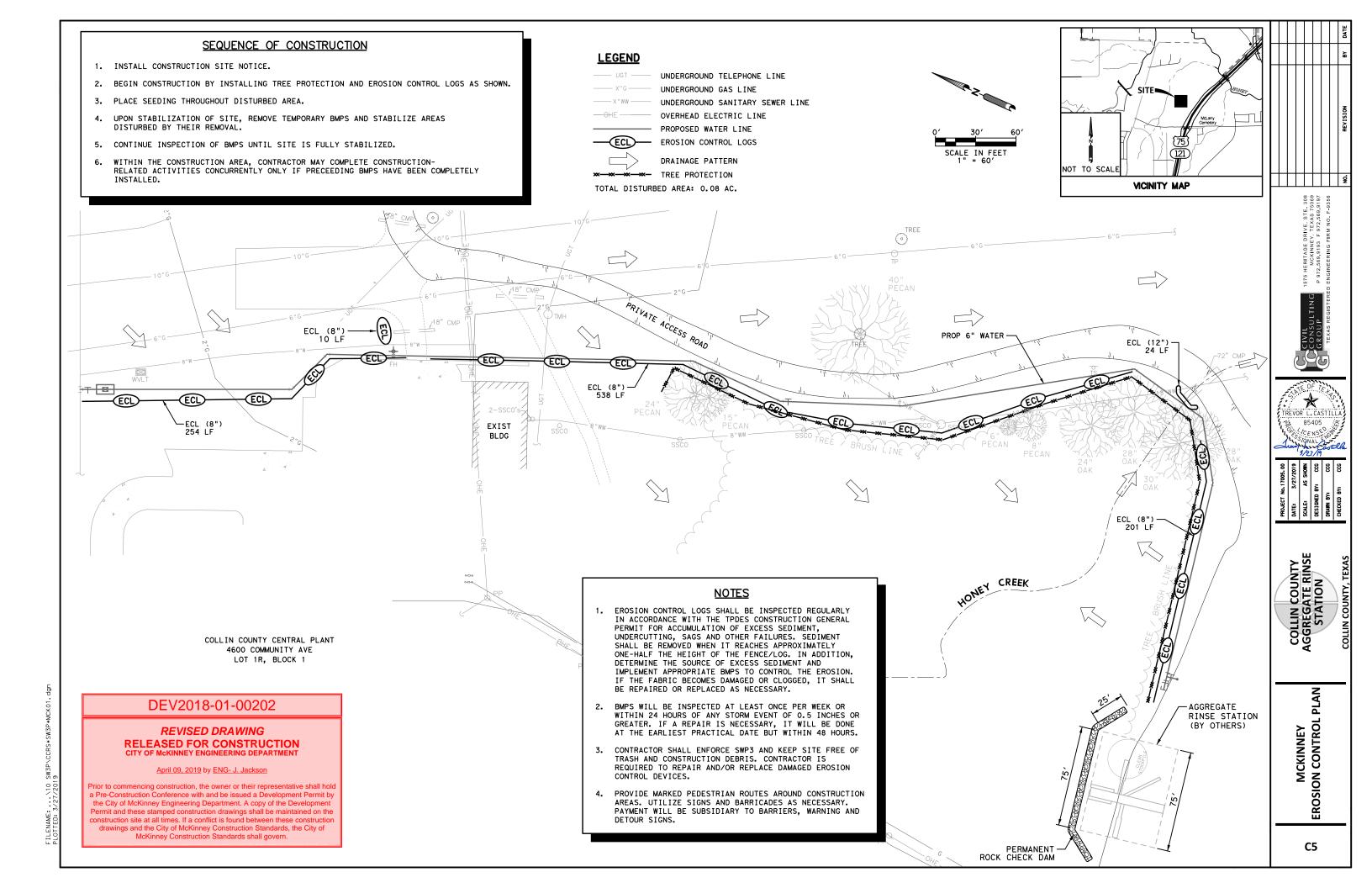
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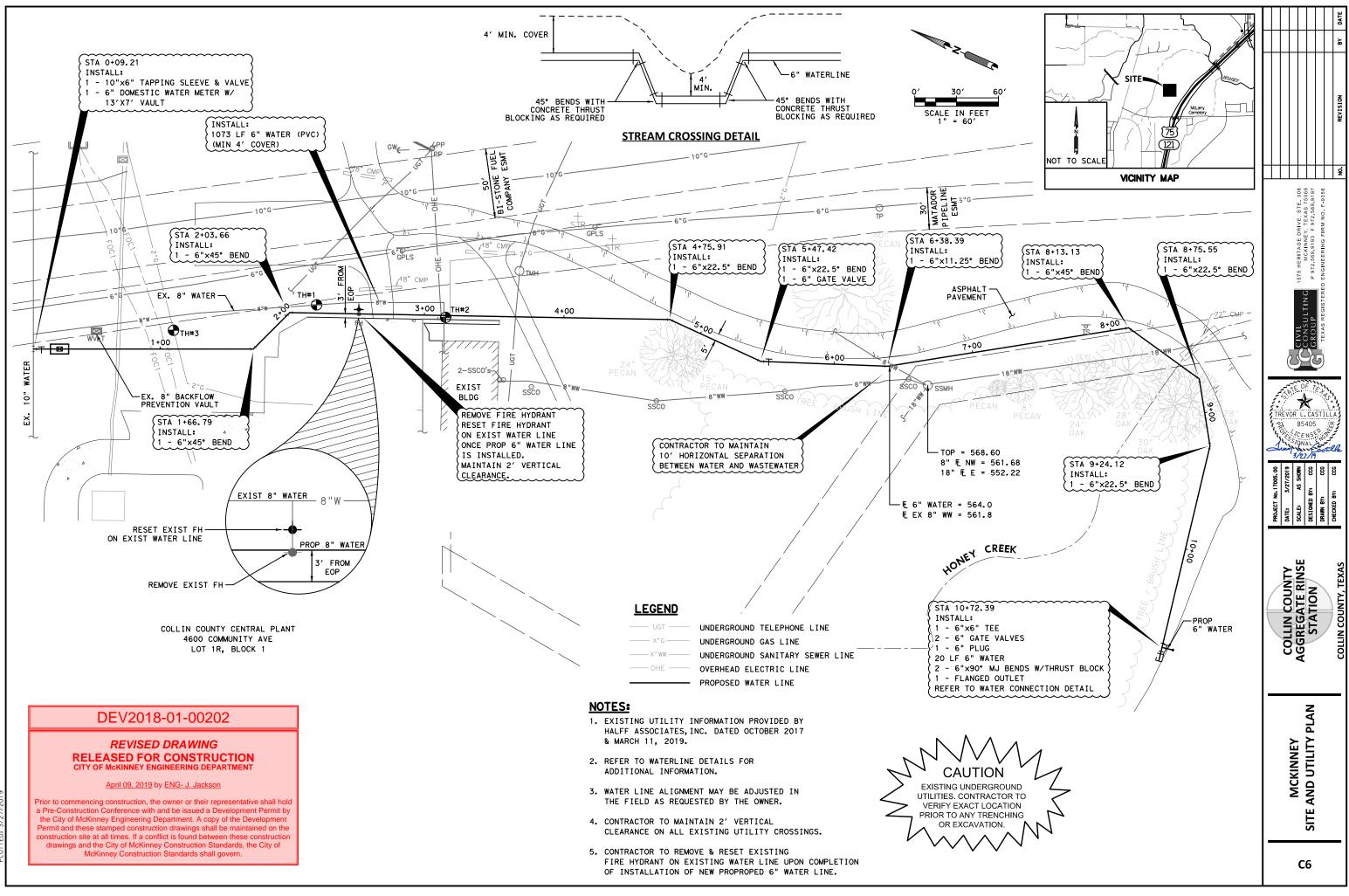
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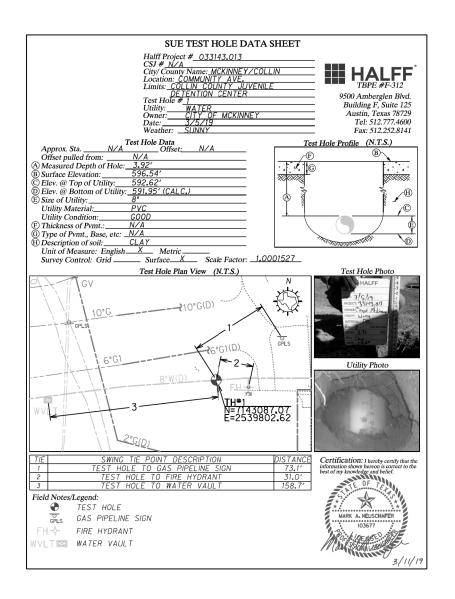


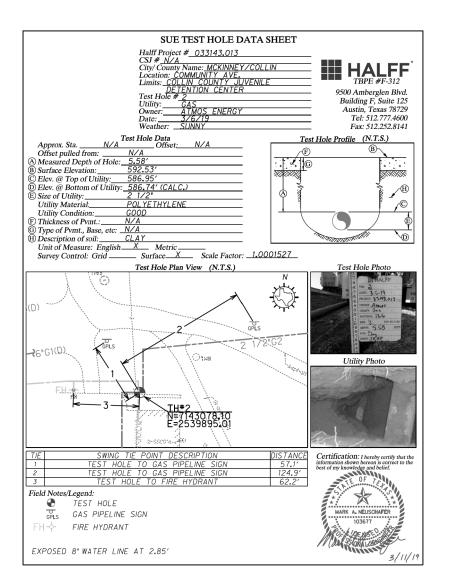


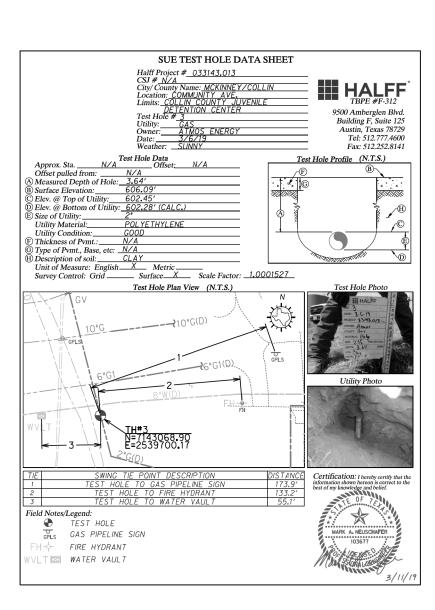








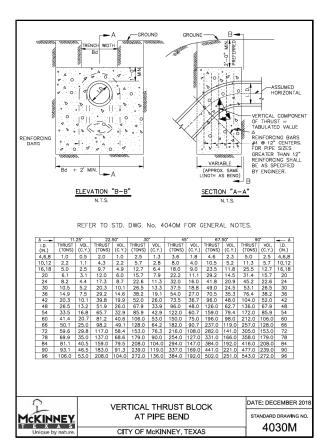




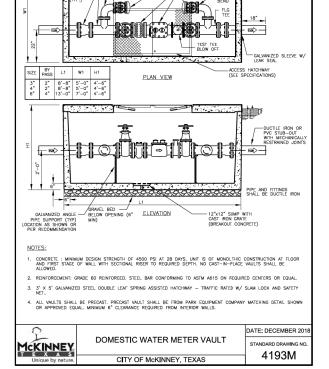


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	(IN.)	(TONS)	(FT.)	(FT.)	(C.Y.)	(FT.)	(C. ~.)	
	4,6,8	5.1	1.5	2.5	0.3	2.0	0.2	
	10,12	11.3	1.5	3.5	0.6	2.5	0.3	
	16,18	25.5 31.5	2.0	5.5 6.0	1.6	4.0	0.9	
	20	45.2	2.5	7.0	3.1	5.0	1.7	
	30	53.0	3.0	7.5	4.1	5.5	2.4	
	36	76.3	4.0	9.0	7.3	6.5	4.2	
	42	104.0	4.5	10.5	11.0	7.5	6.2	
	48	136.0	5.0	12.0	15.6	8.5	8.7	
	54	172.0	5.5	13.5	21.4	9.5	11.9	
	60	212.0	6.0	15.0	28.4	10.5	15.7	
	66	257.0	6.5	16.5	36.8	11.5	20.5	
	72	305.0 358.0	7.5	17.5 19.0	47.2 58.9	12.5 13.5	27.2 33.7	
	84	416.0	8.5	20.5	72.3	14.5	41.2	
	90	477.0	9.0	22.0	87.7	15.5	49.7	
	96	543.0	9.5	23.5	104.8	16.5	61.0	
RE	FER TO	STD. DW	/G. N	o. 4040	M FOR	GENER	AL NOT	ES.
Ω.	н	ORIZOI	NTA		UST BI	оск		DATE: DECEMBER 20
MCKINNEY					PLUG			
T E X A S Unique by nature.		CITY (OF M	cKINNE	Y, TEX	٩S		4020M



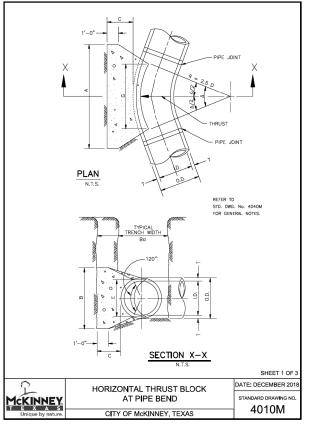
	GENERAL NOTES FOR ALL THRUST BLOCKS:					
	GENERAL NOTES FOR ALL THRUST BLOCKS:					
1.	CONCRETE FOR BLOCKING SHALL BE 2000 PSI MINIMUM.					
2.	ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 PSI FOR DUCTILE II P.V.C., AND 150 PSI FOR CONCRETE PIPE.					
3.	VOLUMES OF THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED. CORRESPONDING WEIGHT OF THE CONCRETE (CLASS "B") IS EQUAL TO OR GREATER THE VERTICAL COMPONENT OF THE THRUST ON THE VERTICAL BEND.					
4.	WALL THICKNESS (T) ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.					
5.	POUR CONCRETE FOR BLOCK AGAINST UNDISTURBED EARTH.					
6.	DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LITHAN SHOWN HERE.					
7.	THE SOIL BEARING PRESSURES ARE BASED ON 1000 LBS./S.F. IN SOIL AND 2000 LBS./S.F. IN ROCK.					
8.	USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND BEND, TEE, OR PLUC PREVENT THE CONCRETE FROM STICKING TO IT.					
9.	CONCRETE SHALL NOT EXTEND BEYOND JOINTS.					
10.	IN ADDITION TO THRUST BLOCKING, ALL FITTINGS MUST BE RESTRAINED.					
	SITE SPECIFIC CONDITIONS, AND INCORPORATE ANY NECESSARY IMPROVEMENTS.					
McK	THRUST BLOCK GENERAL NOTES					
E	X A S ique by nature. CITY OF McKINNEY, TEXAS 40					



90" BEN

NAMEPLATE INDICATING MFG: PHONE NO.: MODEL: DATE MANUFACTURED:

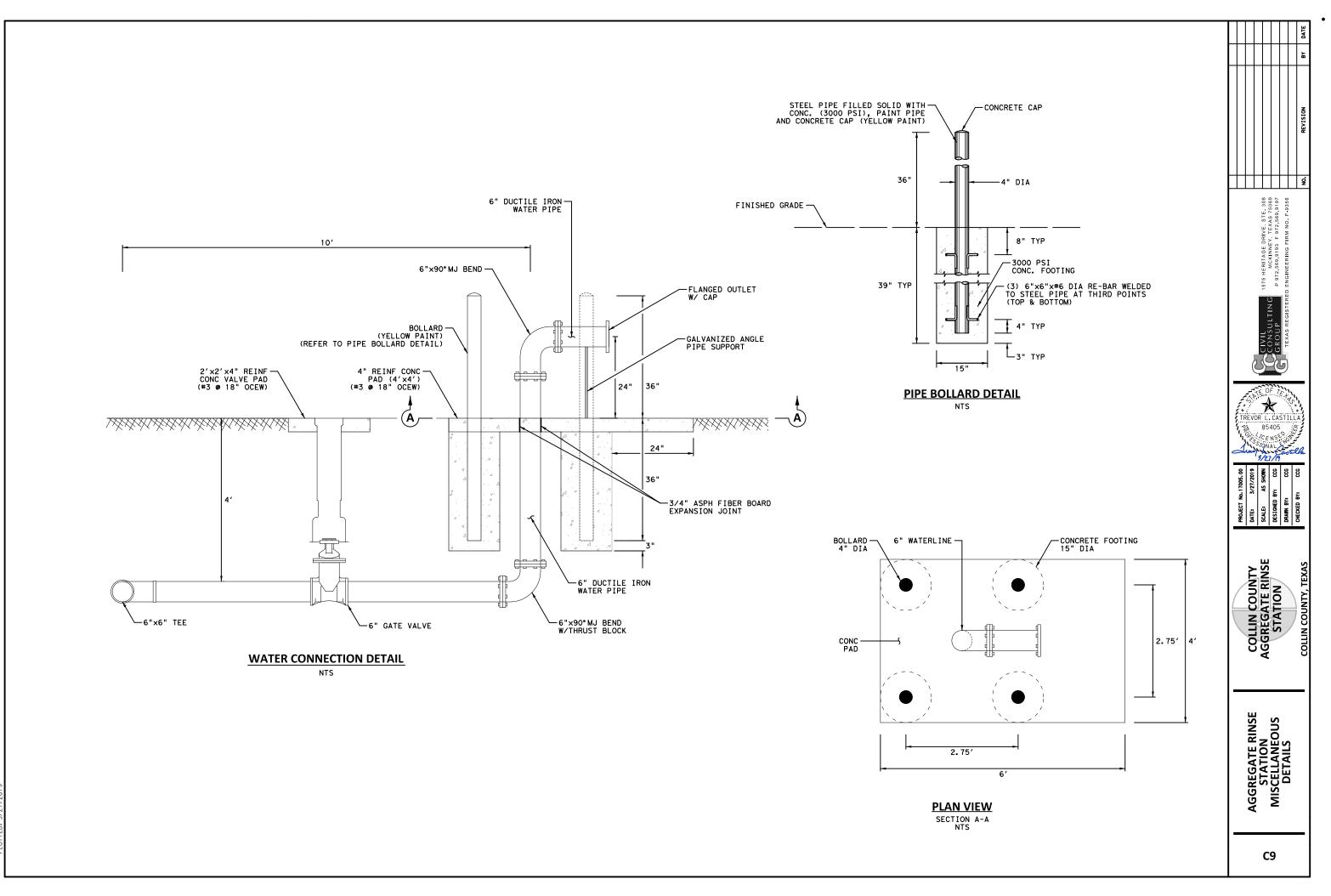
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									25 ∆≥:									
						LD.	Τ.	C			E							
						IN.)	(IN.)	(FT.)		T.)	(FT.)							
						.6,8 0,12	0.4	1.5		.5	0.9							
						5,18	0.6	1.5		.5	1.6							
						20	0.7	1.5		.5	1.8							
						24	0.9	1.5	1	.5	2.1							
						30	2.9	1.5	1	.9	2.6							
						36	4.5	1.5	2	.3	3.3							
						42	5.0	1.8	2	.6	3.8							
						48	5.5	2.0		.0	4.3							
						54	6.0	2.3		.4	4.8							
						60	6.5	2.5		.8	5.3							
						66	6.8	2.8		4	5.7							
						72 78	7.5	3.0		.5	6.3							
						78 84	7.5 8.0	3.3		.9	6.7 7.2							
						90	8.5	3.8		.5	7.7							
						96	9.0	4.0		.0	8.2							
				= 11 EARTH			ROCK					Δ	= 22 EARTI		ROCK			
LD.	G	THRUST	A	B	VOL.		B	VOL.	LD.	G	THRUST	A	B	1 VOL.		B	VOL.	
(IN.) ((FT.)	(TONS)	(FT.)	(FT.)	(C.Y.)	(FT.)	(FT.)	(C.Y.)	(N.)	(FT.)	(TONS)	(FT.)	(FT.)	(C.Y.)	(FT.)	(FT.)	(C.Y.)	
	0.4	1.0	1.0	1.5	0.1	1.0	1.0	0.1	4,6,8	0.8	2.0	1.5	1.5	0.1	1.0	1.0	0.1	
	0.6	2.2	1.5	1.5	0.1	1.0	1.5		10,12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1	
	0.8	5.0	2.0	2.5	0.3	1.5	2.0		16,18	1.6	9.9	3.0	3.5	0.6	2.0	2.5	0.3	
	0.9	6.2	2.0	3.5	0.4	1.5	3.0	0.3	20	1.8	12.3	3.5	3.5	0.7	2.0	3.0	0.4	
24	1.1	8.9	3.0	3.5	0.5	1.5	3.0	0.3	24	2.2	17.7	4.0	4.5	1.0	3.0	3.5	0.5	
	1.4	10.4	3.0 3.5	3.5 4.5	0.6	2.0	3.5	0.4	30 36	2.7	20.7	5.0 5.5	4.5 5.5	1.5	3.0 4.0	4.0	0.8	
	1.7	20.4	4.5	4.5	1.5	2.0	4.0	0.5	42	3.8	40.5	7.0	5.5	3.9	4.0	5.0	2.1	
	2.2	26.6	4.5	6.0	2.0	2.5	6.0	1.1	48	4.4	52.9	8.0	7.0	5.7	4.5	6.0	2.8	
	2.5	33.7	6.0	6.0	3.0	3.0	6.0	1.4	54	4.9	67.0	9.0	8.0	8.0	6.0	6.0	4.1	
	2.7	41.6	6.0	7.0	3.8	3.0	7.0	1.8	60	5.5	82.7	9.5	9.0	10.6	6.0	7.0	5.3	
	3.0	50.3	6.5	8.0	5.1	3.5	8.0	2.7	66	6.0	100.1	10.5	10.0	14.1	6.5	8.0	7.2	
72	3.3	59.9	7.5	8.0	6.3	4.0	8.0	3.3	72	6.6	119.1	11.0	11.0	17.6	7.5	8.0	9.1	
78	3.6	70.2	8.0	9.0	8.1	4.0	9.0	3.9	78	7.1	139.8	12.0	12.0	22.5	8.0	9.0	11.7	
/0	3.8	81.5	8.5	10.0	10.3	4.5	10.0	5.3	84	7.6	162.1	13.0	12.5	27.2	8.5	10.0	14.8	
84	4.1	93.5	9.5	10.0	12.2	5.0 5.0	10.0	6.3	90	8.2	186.1	14.0	13.5	33.7	9.5	10.0	17.7	
84 90	4.4	106.4	10.0				11.0	7.4	96	8.7	211.7	15.0	14.5	41.2	10.0	11.0	21.8	

7	Δ = 30*								Δ =	45'							
1				EART	н		ROCK					EAR		RTH		ROCK	
I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	В (FT.)	VOL. (C.Y.)	I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	(FT.)	В (FT.)	V0 (C.
4,6,8	1.0	2.6	2.0	1.5	0.2	1.0	1.5	0.1	4,6,8	1.5	3.9	2.0	2.0	0.2	1.5	1.5	0
10,12	1.5	5.9	2.5	2.5	0.3	2.0	1.5	0.2	10,12	2.2	8.7	3.5	2.5	0.5	2.0	2.5	0
16,18	2.2	13.2	3.5	4.0	0.8	2.5	3.0	0.4	16,18	3.2	19.5	4.5	4.5	1.2	3.0	3.5	0
20	2.4	16.3	4.5	4.0	1.0	3.0	3.0	0.5	20	3.6	24.1	5.5	4.5	1.5	3.5	3.5	0
24	2.9	23.4	6.0	4.0	1.4	3.5	3.5	0.7	24	4.3	34.6	8.0	4.5	2.3	4.5	4.0	1
30	3.6	27.5	6.5	5.0	1.9	3.5	4.0	0.9	30	5.4	40.6	8.5	5.0	3.2	5.5	4.0	1
36	4.4	39.5	7.0	6.0	3.4	4.5	4.5	1.6	36	6.5	58.5	10.0	6.0	5.3	6.5	4.5	2
42	5.1	53.8	8.0	7.0	5.1	5.5	5.0	2.5	42	7.5	79.6	11.5	7.0	8.1	8.0	5.0	4.
48	5.8	70.3	9.0	8.0	7.4	6.0	6.0	3.7	48	8.6	104.0	13.0	8.0	11.9	9.0	6.0	6.
54	6.5	89.0	10.0	9.0	10.3	7.0	6.5	5.3	54	9.7	131.5	15.0	9.0	17.1	10.5	6.5	8
60	7.3	110.0	11.0	10.0	13.9	7.5	7.5	7.3	60	10.7	162.4 196.5	16.5	10.0	23.1	11.0	7.5	12
66 72	8.0 8.7	132.9	12.5	11.0	18.9	8.5 9.0	8.0 9.0	9.6 12.3	66 72	11.8	233.9	18.0	11.0	30.1 38.6	12.0	8.5 8.5	16
72	8.7 9.4	158.2 185.6	13.5		24.0	9.0	9.0		72		233.9	19.5	12.0	38.6 49.8	14.0	8.5 9.5	
	011			13.0			010	15.6	78	13.9	27.110	2.110		1010			25
84 90	10.1	215.3	15.5 16.5	14.0	37.1 45.0	10.5	10.5	19.5 23.9	84 90	15.0 16.1	318.4 365.5	23.0	14.0	61.2 74.5	15.5 17.5	10.5	32
96	11.6	247.1	18.0	16.0	55.5	12.5	11.5	28.9	96	17.1	415.6	24.5	16.0	89.5	18.5	11.5	48
				= 67 EART			ROCK			-		= 91	EAR	TH ROCI		ROCK	_
I.D. (IN.)	G (FT.)	THRUST (TONS)	(FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)	I.D. (IN.)	G (FT.)	THRUST (TONS)	(FT.)	B (FT.)	VOL. (C.Y.)	(FT.)	B (FT.)	vc (c.
4.6.8	2.1	5.6	3.0	2.0	0.3	2.0	1.5	0.2	4,6,8	2.7	7.1	5.0	1.5	0.4	2.0	2.0	0
10,12	3.1	12.6	5.5	2.5	0.8	3.5	2.0	0.4	10,12	4.0	16.0	6.5	2.5	1.0	3.5	2.5	0
16,18	4.7	28.3	7.5	4.0	1.9	5.5	3.0	0.9	16,18	6.0	36.0	9.0	4.0	2.4	4.5	4.0	1
20	5.2	34.9	9.0	4.0	2.3	5.5	3.5	1.2	20	6.6	44.4	10.0	4.5	3.1	6.0		1.5
20	J.Z	34.9	9.0												0.0	4.0	1
20	6.2	50.3	9.0	4.5	3.5	6.5	4.0	1.6	24	7.9	64.0	14.5	4.5	5.0	8.0	4.0 4.0	-
				4.5 5.0		6.5 7.5	4.0 4.0	1.6			64.0 75.0						2
24	6.2	50.3	11.5		3.5				24	7.9		14.5	4.5	5.0	8.0	4.0	2
24 30	6.2 7.8	50.3 58.9	11.5 12.0	5.0	3.5 4.8	7.5	4.0	2.2	24 30	7.9 9.9	75.0	14.5 15.0	4.5 5.0	5.0 6.7	8.0 10.0	4.0 4.0	2 3 5
24 30 36 42 48	6.2 7.8 9.4 10.9 12.5	50.3 58.9 84.9 115.5 150.9	11.5 12.0 14.5 17.0 19.0	5.0 6.0 7.0 8.0	3.5 4.8 8.2 12.8 18.4	7.5 9.5 11.0 13.0	4.0 4.5 5.5 6.0	2.2 3.8 6.3 9.2	24 30 36 42 48	7.9 9.9 11.9 13.9 15.9	75.0 108.0 147.0 192.0	14.5 15.0 18.0 21.0 24.0	4.5 5.0 6.0 7.0 8.0	5.0 6.7 11.4 17.8 26.2	8.0 10.0 12.0 14.0 16.0	4.0 4.0 4.5 5.5 6.0	2 3 5 8 12
24 30 36 42 48 54	6.2 7.8 9.4 10.9 12.5 14.0	50.3 58.9 84.9 115.5 150.9 191.0	11.5 12.0 14.5 17.0 19.0 21.5	5.0 6.0 7.0 8.0 9.0	3.5 4.8 8.2 12.8 18.4 26.0	7.5 9.5 11.0 13.0 15.0	4.0 4.5 5.5 6.0 6.5	2.2 3.8 6.3 9.2 12.9	24 30 36 42 48 54	7.9 9.9 11.9 13.9 15.9 17.9	75.0 108.0 147.0 192.0 243.0	14.5 15.0 18.0 21.0 24.0 27.0	4.5 5.0 6.0 7.0 8.0 9.0	5.0 6.7 11.4 17.8 26.2 36.9	8.0 10.0 12.0 14.0 16.0 18.0	4.0 4.0 4.5 5.5 6.0 7.0	2 3 5 8 12
24 30 36 42 48 54 60	6.2 7.8 9.4 10.9 12.5 14.0 15.6	50.3 58.9 84.9 115.5 150.9 191.0 235.8	11.5 12.0 14.5 17.0 19.0 21.5 24.0	5.0 6.0 7.0 8.0 9.0 10.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6	7.5 9.5 11.0 13.0 15.0 16.0	4.0 4.5 5.5 6.0 6.5 7.5	2.2 3.8 6.3 9.2 12.9 17.6	24 30 36 42 48 54 60	7.9 9.9 11.9 13.9 15.9 17.9 19.9	75.0 108.0 147.0 192.0 243.0 299.8	14.5 15.0 18.0 21.0 24.0 27.0 30.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3	8.0 10.0 12.0 14.0 16.0 18.0 20.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5	2 3 5 8 12 11 24
24 30 36 42 48 54 60 66	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3	11.5 12.0 14.5 17.0 19.0 21.5 24.0 26.0	5.0 6.0 7.0 8.0 9.0 10.0 11.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0	7.5 9.5 11.0 13.0 15.0 16.0 18.0	4.0 4.5 5.5 6.0 6.5 7.5 8.0	2.2 3.8 6.3 9.2 12.9 17.6 23.0	24 30 36 42 48 54 60 66	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8	75.0 108.0 147.0 192.0 243.0 299.8 362.8	14.5 15.0 21.0 24.0 27.0 30.0 33.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2	8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5	2 3 5 8 12 11 24 32
24 30 36 42 48 54 60 66 72	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5	11.5 12.0 14.5 17.0 19.0 21.5 24.0 26.0 28.5	5.0 6.0 7.0 9.0 10.0 11.0 12.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8	7.5 9.5 11.0 13.0 15.0 16.0 18.0 19.0	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4	24 30 36 42 48 54 60 66 72	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8	14.5 15.0 21.0 24.0 27.0 30.0 33.0 36.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6	8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0 24.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0	2 3 5 8 11 11 11 2 4
24 30 36 42 48 54 60 66 72 78	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7 20.2	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5 398.5	11.5 12.0 14.5 17.0 21.5 24.0 26.0 28.5 31.0	5.0 6.0 7.0 9.0 10.0 11.0 12.0 13.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8 75.7	7.5 9.5 11.0 13.0 15.0 16.0 18.0 19.0 21.0	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0 9.5	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4 37.4	24 30 36 42 48 54 60 66 72 78	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8 25.7	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8 506.7	14.5 15.0 21.0 24.0 27.0 30.0 33.0 36.0 39.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6 108.2	8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0 24.0 26.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0 10.0	2 3 5 8 1 1 1 1 1 1 1 2 4 3 2 4 5
24 30 36 42 48 54 60 66 72 78 84	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7 20.2 21.8	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5 398.5 462.1	11.5 12.0 14.5 17.0 21.5 24.0 26.0 28.5 31.0 33.5	5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8 75.7 94.7	7.5 9.5 11.0 13.0 15.0 16.0 18.0 19.0 21.0 22.0	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0 9.5 10.5	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4 37.4 46.5	24 30 36 42 48 54 60 66 72 78 84	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8 25.7 27.7	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8 506.7 587.7	14.5 15.0 21.0 24.0 27.0 30.0 33.0 36.0 39.0 42.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6 108.2 134.4	8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0 24.0 24.0 26.0 28.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0 10.0 10.5	2 3 5 8 1 1 1 1 1 2 4 3 5 4 5 5 6
24 30 36 42 48 54 60 66 72 78 84 90	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7 20.2 21.8 23.3	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5 398.5 462.1 530.5	11.5 12.0 14.5 17.0 21.5 24.0 26.0 28.5 31.0 33.5 35.5	5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8 75.7 94.7 114.4	7.5 9.5 11.0 13.0 15.0 16.0 18.0 19.0 21.0 22.0 24.5	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0 9.5 10.5 11.0	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4 37.4 46.5 58.2	24 30 36 42 48 54 60 66 72 78 84 90	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8 25.7 27.7 29.0	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8 506.7 587.7 674.6	14.5 15.0 21.0 24.0 27.0 30.0 33.0 36.0 39.0 42.0 45.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6 108.2 134.4 164.9	8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0 24.0 26.0 28.0 30.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0 10.0 10.5 11.5	2 3 5 8 1 1 1 1 1 1 1 1 2 4 3 2 4 5 3 2 4 8
24 30 36 42 48 54 60 66 72 78 84	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7 20.2 21.8	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5 398.5 462.1	11.5 12.0 14.5 17.0 21.5 24.0 26.0 28.5 31.0 33.5	5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8 75.7 94.7	7.5 9.5 11.0 13.0 15.0 16.0 18.0 19.0 21.0 22.0	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0 9.5 10.5	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4 37.4 46.5	24 30 36 42 48 54 60 66 72 78 84	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8 25.7 27.7	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8 506.7 587.7	14.5 15.0 21.0 24.0 27.0 30.0 33.0 36.0 39.0 42.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6 108.2 134.4	8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0 24.0 24.0 26.0 28.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0 10.0 10.5	2 3 5 1 1 1 2 3 4 5 6
24 30 36 42 48 54 60 66 72 78 84 90	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7 20.2 21.8 23.3	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5 398.5 462.1 530.5	11.5 12.0 14.5 17.0 21.5 24.0 26.0 28.5 31.0 33.5 35.5 38.0	5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 13.0 15.0 16.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8 75.7 94.7 114.4	7.5 9.5 11.0 13.0 15.0 16.0 18.0 19.0 21.0 22.0 24.5 25.5	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0 9.5 10.5 11.0 12.0	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4 37.4 46.5 58.2	24 30 36 42 48 54 60 66 72 78 84 90 96	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8 25.7 27.7 29.0 31.6	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8 506.7 587.7 674.6	14.5 15.0 21.0 24.0 27.0 30.0 33.0 36.0 39.0 42.0 45.0 48.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6 108.2 134.4 164.9 199.0	8.0 10.0 12.0 14.0 16.0 20.0 22.0 24.0 26.0 28.0 30.0 32.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0 10.0 10.5 11.5 12.0	2 3 5 1 1 1 2 3 4 5 6 8 9
24 30 36 42 48 54 60 66 72 78 84 90	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7 20.2 21.8 23.3	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5 398.5 462.1 530.5	11.5 12.0 14.5 17.0 21.5 24.0 26.0 28.5 31.0 33.5 35.5 38.0	5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 13.0 15.0 16.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8 75.7 94.7 114.4 138.9	7.5 9.5 11.0 13.0 15.0 16.0 18.0 19.0 21.0 22.0 24.5 25.5	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0 9.5 10.5 11.0 12.0	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4 37.4 46.5 58.2 70.0	24 30 36 42 48 54 60 66 72 78 84 90 96	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8 25.7 27.7 29.0 31.6	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8 506.7 587.7 674.6 767.5	14.5 15.0 21.0 24.0 27.0 30.0 33.0 36.0 39.0 42.0 45.0 48.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6 108.2 134.4 164.9 199.0	8.0 10.0 12.0 14.0 16.0 20.0 22.0 24.0 26.0 28.0 30.0 32.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0 10.0 10.5 11.5	2 3 5 1 1 1 2 3 4 5 6 8 9
24 30 36 42 48 54 60 66 72 78 84 90	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7 20.2 21.8 23.3	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5 398.5 462.1 530.5	11.5 12.0 14.5 17.0 21.5 24.0 26.0 28.5 31.0 33.5 35.5 38.0	5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8 75.7 94.7 114.4 138.9 5 0	7.5 9.5 11.0 13.0 15.0 16.0 19.0 21.0 22.0 24.5 25.5 D	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0 9.5 11.0 12.0 ME	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4 37.4 46.5 58.2 70.0 NSIC	24 30 36 42 48 54 60 66 72 78 84 90 96 0NS	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8 25.7 27.7 29.0 31.6 AN	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8 506.7 587.7 674.6 767.5	14.5 15.0 18.0 21.0 24.0 27.0 30.0 33.0 33.0 33.0 42.0 45.0 48.0 48.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6 108.2 134.4 164.9 199.0	8.0 10.0 12.0 14.0 16.0 20.0 22.0 24.0 26.0 28.0 30.0 32.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0 10.0 10.5 11.5 12.0	2 5 11 1 2 3 4 5 6 8 9 9
24 30 36 42 48 54 60 66 72 78 84 90	6.2 7.8 9.4 10.9 12.5 14.0 15.6 17.1 18.7 20.2 21.8 23.3	50.3 58.9 84.9 115.5 150.9 191.0 235.8 285.3 339.5 398.5 462.1 530.5	11.5 12.0 14.5 17.0 21.5 24.0 26.0 28.5 31.0 33.5 35.5 38.0	5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0	3.5 4.8 8.2 12.8 18.4 26.0 35.6 46.0 57.8 75.7 94.7 114.4 138.9 5 0	7.5 9.5 11.0 13.0 15.0 16.0 19.0 21.0 22.0 24.5 25.5 D	4.0 4.5 5.5 6.0 6.5 7.5 8.0 9.0 9.5 11.0 12.0 ME	2.2 3.8 6.3 9.2 12.9 17.6 23.0 28.4 37.4 46.5 58.2 70.0 NSIC	24 30 36 42 48 54 60 66 72 78 84 90 96	7.9 9.9 11.9 13.9 15.9 17.9 19.9 21.8 23.8 25.7 27.7 29.0 31.6 AN	75.0 108.0 147.0 192.0 243.0 299.8 362.8 431.8 506.7 587.7 674.6 767.5 D QU	14.5 15.0 18.0 21.0 24.0 27.0 30.0 33.0 33.0 33.0 42.0 45.0 48.0 48.0	4.5 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0	5.0 6.7 11.4 17.8 26.2 36.9 50.3 66.2 85.6 108.2 134.4 164.9 199.0 S	8.0 10.0 12.0 14.0 16.0 18.0 22.0 22.0 24.0 24.0 26.0 28.0 30.0 32.0	4.0 4.0 4.5 5.5 6.0 7.0 7.5 8.5 9.0 10.0 10.5 11.5 12.0 SHEE CEMB	2 5 6 8 9 7 3 4 5 6 8 9 9





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ADDITIONAL UPSTREAM STAKES FOR HEAVY RUNOFF EVENTS SECURE END OF LOG TO STAKE AS DIRECTED PLAN VIEW TEMP. EROSION-CONTROL LOG (TYP.) COMPOST CRADLE UNDER EROSION CONTROL LOG SECTION A-A EROSION CONTROL LOG DAM LEGEND CL-D - EROSION CONTROL LOG DAM

> -(CL-BOC)- EROSION CONTROL LOG AT BACK OF CURB (CL-ROW) - EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY

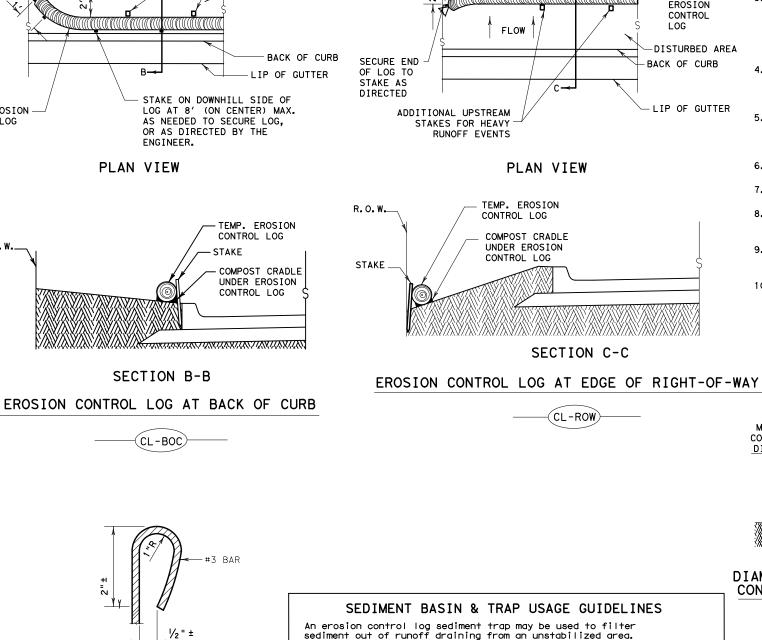
CL-D

MIN.

-(cl-sst EROSION CONTROL LOGS ON SLOPES STAKE AND TRENCHING ANCHORING

FLOW

- EROSION CONTROL LOGS ON SLOPES STAKE AND LASHING ANCHORING (CL-SSL
- -(CL-DI) - EROSION CONTROL LOG AT DROP INLET
- (CL-CI EROSION CONTROL LOG AT CURB INLET
- ´cl-gi)— EROSION CONTROL LOG AT CURB & GRATE INLET



ADDITIONAL UPSTREAM

STAKES FOR HEAVY

RUNOFF EVENTS

DISTURBED AREA

(TYP.)

ENGINEER.

R.O.W.

FLOW

REBAR STAKE DETAIL

R. O. W

TEMP. EROSION

SECURE END

TEMP. EROSION

R.O.W.

CONTROL LOG

OF LOG TO

STAKE AS

DIRECTED

CONTROL LOG

STAKE LOG ON DOWNHILL

SIDE AT THE CENTER,

AT EACH END, AND AT

ADDITIONAL POINTS AS

NEEDED TO SECURE LOG

STAKE LOG ON DOWNHILL

SIDE AT THE CENTER.

AT EACH END, AND AT

ADDITIONAL POINTS AS

NEEDED TO SECURE LOG

AS DIRECTED BY THE

ENGINEER.

(4' MAX. SPACING), OR

ADDITIONAL UPSTREAM

STAKES FOR HEAVY

RUNOFF EVENTS

(4' MAX. SPACING),

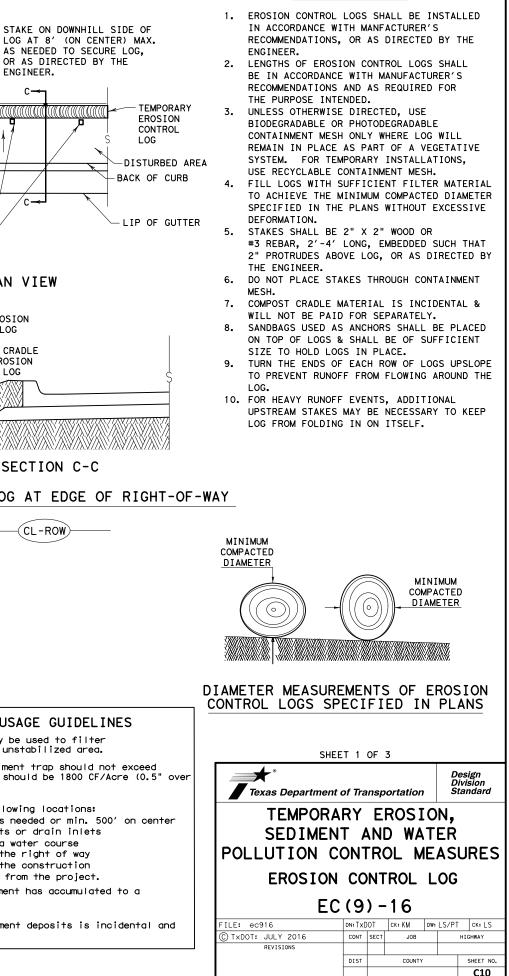
OR AS DIRECTED BY

THE ENGINEER.

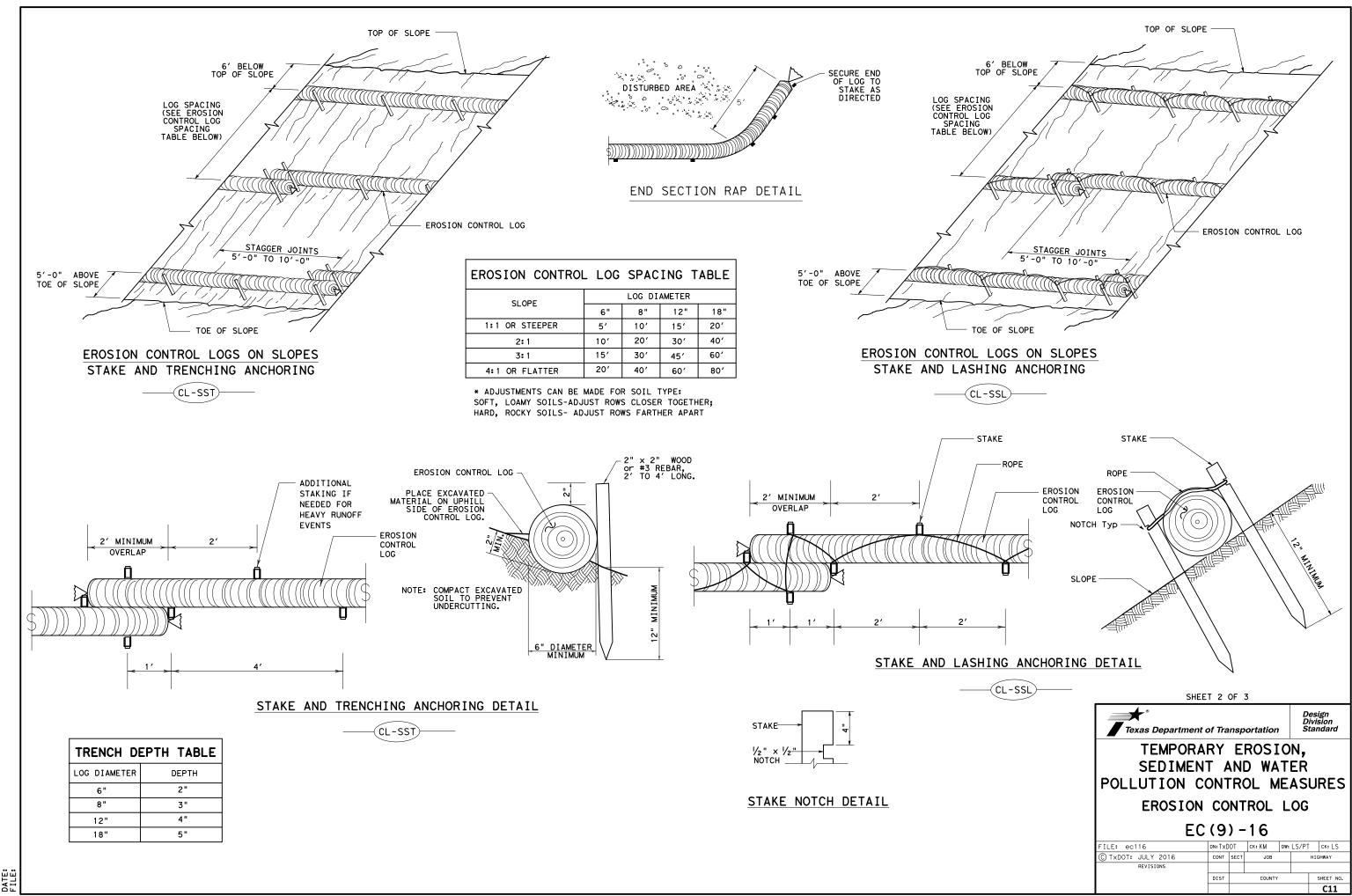
- The drainage area for a sediment trap should not exceed Log Traps: 5 acres. The trap capacity should be 1800 CF/Acre (0.5" over the drainage area).
- Control logs should be placed in the following locations: 1. Within drainage ditches spaced as needed or min. 500' on center
 - 2. Immediately preceding ditch inlets or drain inlets
 - 3. Just before the drainage enters a water course
 - 4. Just before the drainage leaves the right of way 5. Just before the drainage leaves the construction
- limits where drainage flows away from the project.
- The logs should be cleaned when the sediment has accumulated to a depth of 1/2 the log diameter.

Cleaning and removal of accumulated sediment deposits is incidental and will not be paid for separately.

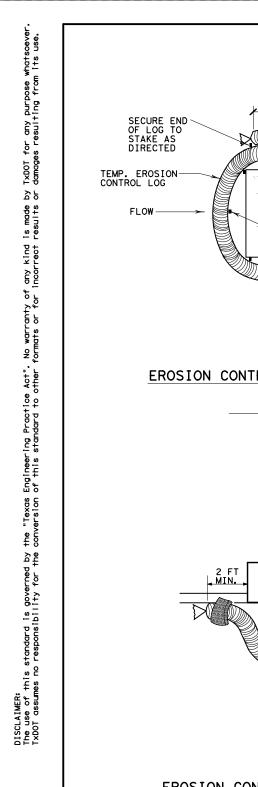
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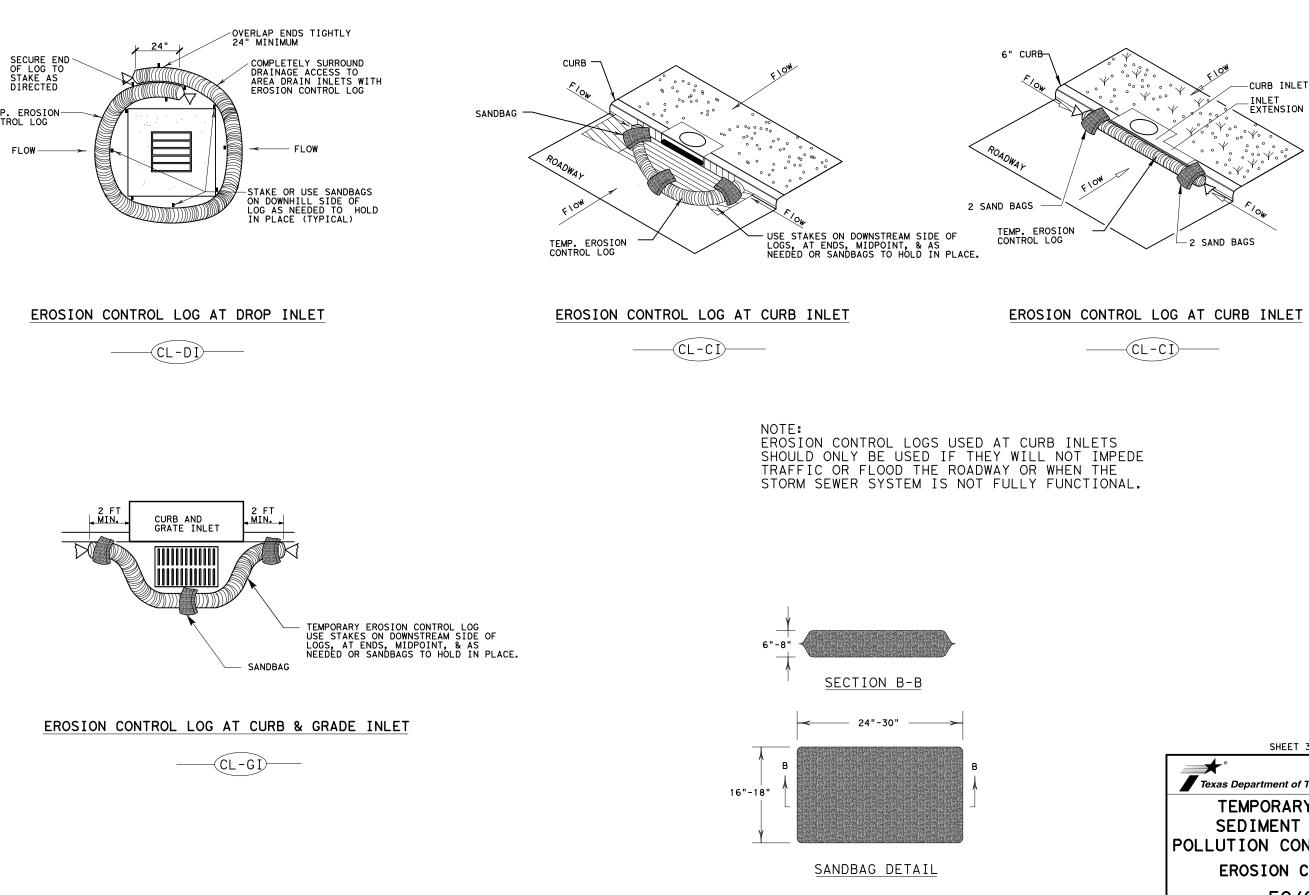


GENERAL NOTES:



DATE: FILE:





SHEET 3 OF 3									
Texas Department	of Tra	nsp	ortation	D	esign ivision tandard				
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES EROSION CONTROL LOG									
EC	EC (9) -16								
FILE: ec916	dn: TxC	OT	ск: КМ	DW: LS/P1	Г ск: LS				
C TXDOT: JULY 2016	CONT	SECT	JOB		HIGHWAY				
REVISIONS									
	DIST		COUNTY		SHEET NO.				
					C12				

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		SHEET 2 OF 2
MCKINNEY	ROCK CHECK DAM NOTES	DATE: DECEMBER 2018 STANDARD DRAWING NO. 1060M
Unique by nature.	CITY OF McKINNEY, TEXAS	TUOUM

- ROCK CHECK DAM SHOULD BE USED AS CHECK DAMS FOR CONCENTRATED FLOW AND ARE NOT INTENDED FOR USE IN PERIMETER PROTECTION.
- WHEN THE SITE IS COMPLETELY STABILIZED, THE ROCK CHECK DAM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
- WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE ROCK CHECK DAM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
- 4. THE ROCK CHECK DAM SHALL BE INSPECTED EVERY TWO WEEKS OR AFTER EVERY RAIN EVENT AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
- THE ROCK CHECK DAM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING A MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE SIZE OF 20 GAUGE AND SHALL BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP.
- IF RECYCLED CONCRETE IS USED, IT SHALL BE CLEAN GRADED CRUSHED CONCRETE FREE OF REINFORCING STEEL AND OTHER OBJECTIONABLE MATERIAL AND HAVE AT MOST 1.5% DELETERIOUS MATERIAL CONFORMING TO TXDOT'S RECYCLED MATERIAL SPECIFICATIONS.
- 1. USE ONLY OPEN GRADED ROCK 4-8 INCHES IN DIAMETER FOR STREAM FLOW CONDITION. USE OPEN GRADED ROCK 3-5 INCHES IN DIAMETER FOR OTHER CONDITIONS.

ROCK CHECK DAM GENERAL NOTES:

