

COUNTY OF GALVESTON

SPECIFICATIONS AND CONTRACT DOCUMENTS

GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS

ITB #B201034

**GLO #13-465-000-7974
PROJECT #P21473-5**



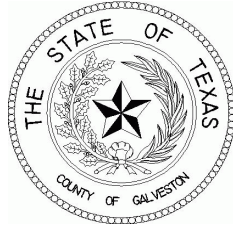
Stephen Sparks

JUNE 22, 2020

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**GALVESTON COUNTY
PURCHASING DEPARTMENT**



INVITATION TO BID

ITB #B201034

GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS

BID DUE DATE: 07/28/2020

2:00 P.M. CST

***Rufus Crowder, CPPO, CPPB
Purchasing Agent
Galveston County
722 Moody (21st Street)
Fifth (5th) Floor
Galveston, Texas 77550
(409) 770-5372***



**INVITATION TO BID
GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

Sealed bids in **sets of three (3), one (1) unbound original and two (2) copies** will be received in the office of the County Purchasing Agent until **2:00 P.M. CST, on Tuesday, July 28, 2020** and opened immediately in that office in the presence of the Galveston County Auditor and the Purchasing Agent. Sealed bids are to be delivered to Rufus G. Crowder, CPPO CPPB, Galveston County Purchasing Agent at the Galveston County Courthouse, 722 Moody (21st Street), Floor 5, Purchasing, Galveston, Texas 77550, (409) 770-5372. **The time stamp clock located in the Purchasing Agent's office shall serve as the official time keeping piece for this solicitation process. Any bids received after 2:00 P.M. CST on the specified date will be returned unopened.**

Purpose:

Galveston County is seeking a company to provide drainage improvements to the Gum Bayou Tributary. Work includes clearing, earthwork installation of precast reinforced concrete boxes, construction of concrete headwalls and hydromulching.

All bids must be marked on the outside of the envelope:

ITB #B201034, Gum Bayou Tributary Channel Improvements

Bids name and return address, should be prominently displayed on the bid package for identification purposes.

Bid Specifications can be obtained by visiting the Galveston County website @

<http://www.galvestoncountytexas.gov/pu/Pages/BidListing.aspx>

Bid prices shall be either lump sum or unit prices as shown on the bid sheet, if applicable. The net price will be delivered to Galveston County, including all freight, shipping, and license fees. Galveston County is tax exempt and no taxes should be included in your proposal pricing.

A non-mandatory pre-bid conference will be held on Wednesday, July 15, 2020 at 10:00 a.m.

Due to the COVID-19 pandemic, the County of Galveston has instituted measures to guard against the spread of the virus. This includes the prohibition of in-person meetings, social distancing, and stay-at-home requirements for employees.

The Pre-Bid Conference shall take place via video/tele-conference and the instructions are listed below and on the County's Purchasing website:

Minimum System Requirements for Video Conferencing:

1. High-resolution webcam;
2. Computer processing minimum: 2 GB of RAM and a quad-core processor;
3. Network bandwidth: 1 Mbps is sufficient for 15 fps at 720p resolution;

Calling from a mobile device:

1. Front facing camera;
2. In ear headphone with built in mic

Instructions for Video Conferencing:

1. [Click here](#) or navigate to <https://guest.lifesize.com/1907077>
2. Enter Name and email (optional);
3. Click the Terms of Service and Privacy Policy checkbox;
4. Click Join Meeting

***Note - be sure to enable audio and video.**

Copies of bid/Contract Documents may also be obtained from www.Civcast.com search Gum Bayou Tributary Channel Improvement. Bidders must register on this website in order to view and/or download specifications and plans for this project. There is NO charge to view or download documents. If copies of the bidding documents are to be mailed, please contact HR Green at 713.965.9996 for postage and handling. Return of documents is not required and no refund will be granted.

Upon satisfaction of contractual terms (e.g., goods delivered in promised condition, services rendered as agreed, etc.), contractor shall be paid via Galveston County's normal accounts payable process.

Bonding Requirements:

- **PROPOSAL GUARANTEE:** Evidencing its firm commitment to engage in the contract if Proposer is selected for award of contract, each Proposer is required to furnish with their proposal a Cashier's Check, or an acceptable Bidder's Bond, in the amount of five percent (5%) of the total contract price. The Bidder's Bond must be executed with a surety company authorized to do business in the State of Texas. Failure to furnish the bid/proposal guarantee in the proper form and amount, by the time set for opening of bids may be cause or rejection of the proposal.
- **PERFORMANCE AND PAYMENT BONDS:** Successful proposer, before beginning work, shall execute a performance bond and a payment bond, each of which must be in the amount of the contract. The required payment and performance bonds must each be executed by a corporate surety in accordance with Section 1, Chapter 87, Acts of the 56th Legislature, Regular Session, 1959 (Article 7.19-1, Vernon's Texas Insurance Code).

Attention is called to the fact that not less than, the federally determined prevailing (Davis-Bacon and Related Acts) wage rate, as issued by the Office of Rural Community Affairs and contained in the contract documents, must be paid on this project. In addition, the successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex age or national origin.

The Galveston County Commissioners' Court reserves the right to waive any informality and to reject any and all bids and to accept the bid or bids which, in its opinion, is most advantageous to Galveston County with total respect the governing laws.

All contractors/subcontractors that are debarred, suspended or otherwise excluded from or ineligible for participation on federal assistance programs may not undertake any activity in part or in full under this project

Rufus G. Crowder, CPPO CPPB
Purchasing Agent
Galveston County

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GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
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1. BID PACKAGE

*The Invitation to Bid, general and special provisions, drawings, specifications/line item details, contract documents and the Bid sheet are all part of the Bid package. **BIDs must be submitted in sets of three (3), one (1) original and two (2) copies** on the forms provided by the County if County forms are provided, including the Bid sheets completed in their entirety and signed by an authorized representative by original signature. Failure to complete and sign the Bid sheets/contract page(s) may disqualify the Bid from being considered by the Commissioners' Court. Any individual signing on behalf of the Bidder expressly affirms that he or she is duly authorized to tender this Bid and to sign the Bid sheet/contract under the terms and conditions in this bid on behalf of the Bidder and to bind the Bidder to the terms and conditions of this bid and the Bidder's response hereto. Bidder further understands that its' signing of the contract shall be of no effect unless the contract is subsequently awarded by the Commissioners' Court and the contract properly executed by the Commissioners' Court. All figures must be written in ink or typed. Figures written in pencil or with erasures are not acceptable. However, mistakes may be crossed out, corrections inserted, and initialed in ink by the individual signing the bid. If there are discrepancies between unit prices quoted and extensions, the unit price shall prevail. Each Bidder is required to thoroughly review this entire Bid package to familiarize themselves with the Bid procedures, the plans and specifications for the requested work, as well as the terms and conditions of the contract the successful Bidder will execute with the County.*

2. BIDDER'S RESPONSIBILITY

The Bidder must affirmatively demonstrate its responsibility. The Bidder must also meet the following minimum requirements:

- A. have adequate financial resources or the ability to obtain such resources as required;
- B. be able to comply with all federal, state, and local laws, rules, regulations, ordinances and orders regarding this Invitation to Bid;
- C. have a satisfactory record of performance;
- D. have a satisfactory record of integrity and ethics; and
- E. be otherwise qualified and eligible to receive an award.

3. TIME FOR RECEIVING BIDS

Bids may be submitted by mail or hand delivery and **must be submitted only to the Galveston County Purchasing Agent**. If by delivery, the Bidder must deliver to the reception desk in the County Purchasing Agent's Office. The delivery and mailing instructions for the Galveston County Purchasing Agent are the following:

**Rufus Crowder, CPPO CPPB
Galveston County Purchasing Agent
722 Moody, Fifth (5th) Floor
Galveston, Texas 77550**

Bids will **not** be accepted by facsimile transmission or by electronic mail (email) unless superseded by instructions within the Special Provisions sections of this solicitation. Bids must be received by the County Purchasing Agent on or before the deadline for the opening of the bids. For clarity, mailing date/postmark is **not** sufficient – bids **must be received** by the County Purchasing Agent on or before the deadline. Late bids will not be accepted and will be

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returned to the bidder unopened. Bids received prior to the submission deadline will be maintained unopened until the specified time for opening.

The County Purchasing Agent will accept bids from 8:00 a.m. to 5:00 p.m. on each business day up to the submission deadline. Business days do not include Saturdays and Sundays, and do not include other days in which the County is closed for business in observance of holidays or for other reasons.

The time-stamp clock within the County Purchasing Agent's Office shall be the official time-clock for the purpose of this solicitation and thus shall be the determinant of whether the bid was timely received.

The bidder should prominently identify the procurement number and name on the outside of the envelope/ mailing package. A label shall be provided for this purpose and usage of the label is preferred. If the bidder fails to identify the bid on the outside of the envelope as required, the Purchasing Agent will open the envelope for the sole purpose of identifying the bid number for which the submission was made. The envelope will then be resealed. No liability will attach to a County office or employee for the premature opening of a bid.

If a bid is not submitted, return this Invitation to Bid and state reason (s), otherwise your name may be removed from the Purchasing Agent's mailing list.

4. COMPETITIVENESS, INTEGRITY, INQUIRIES AND QUESTIONS

To prevent biased evaluations and to preserve the competitiveness and integrity of the procurement process, **bidders are to direct all communications regarding this invitation to bid only to the Galveston County Purchasing Agent**, unless otherwise specifically noted.

Do not contact the requesting department. Attempts by offering firms to circumvent this requirement will be viewed negatively and may result in rejection of the bid of the firm found to be in non-compliance.

All questions regarding this Invitation to Bid must be submitted in writing to:

**Rufus Crowder, CPPO CPPB, Purchasing Agent
722 Moody
Fifth (5th) Floor
Galveston, Texas 77550
Fax: (409) 621-7997
E-mail: purchasing.bids@co.galveston.tx.us**

All questions received and the responses thereto will be mailed, emailed, or faxed to all prospective bidders by addendum. No inquiries except clarification of instructions will be addressed by telephone.

Bidder is advised to carefully review this Invitation to Bid – it provides specific information necessary to aid participating firms in formulating a thorough response. Bidder's failure to examine all documents shall not entitle the bidder to any relief from the conditions imposing in the Invitation to Bid and the resultant contract.

An authorized person from the bidder must sign the bid. This signatory must be a person from the submitting firm who is duly authorized to tender and sign the bid on behalf of the bidder and to bind the bidder to the terms and conditions of this Invitation to Bid, the bidder's response, and all other terms and conditions of the contract. By this

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signature, the bidder further acknowledges that the bidder has read the bid documents thoroughly before submitting a bid and will fulfill the obligations in accordance to the terms, conditions, and specifications detailed herein.

5. BID OPENING

The Purchasing Agent shall open the bids on the date and time specified herein. Information read aloud at the bid opening is at the sole discretion of the Purchasing Agent. The Purchasing Agent will examine bids promptly and thoroughly.

6. WITHDRAWAL OF BID/FIRM BID RULE

Bidders may request withdrawal of their sealed bid prior to the scheduled bid opening time provided the request for withdrawal is submitted to the Purchasing Agent in writing. No bids may be withdrawn for a period of sixty (60) calendar days after opening of the bids.

7. COMMISSIONERS COURT

No contract is binding on the County until it is properly placed on the Commissioners Court agenda, approved in open Court, authorized to be executed by the County Judge, and fully executed by both parties.

Department heads and elected officials are not authorized to enter into any type of agreement or contract on behalf of the County. Only the Commissioners Court acting as a body may enter into a contract on behalf of and contractually bind the County. Additionally, department heads and elected officials are not authorized to agree to any type of supplemental agreements or contracts for goods or services. Supplemental agreements are subject to review by the County Legal Department prior to being accepted and signed by the County's authorized representative.

8. REJECTION OF BIDS/DISQUALIFICATION

Galveston County, acting through its Commissioners Court, reserves the right to:

- reject any and all Bids in whole or in part received by reason of this Invitation to Bid;
- waive any informality in the Bids received;
- disregard the Bid of any Bidder determined to be not responsible;
- disregard the Bid of any Bidder determined to have not submitted its Bid timely; and/or;
- discontinue its efforts for any reason under this Bid package at any time prior to actual execution of contract by the County.

Bidders may be disqualified and rejection of Bids may be recommended to the Commissioners Court for any of (but not limited to) the following causes:

- A. Failure to use the bid forms furnished by the County, if applicable;
- B. Lack of signature by an authorized representative of bidder;
- C. Failure to properly complete the bid;
- D. Engaging in communications regarding this procurement during the pendency of this procurement with County officials and/or personnel who are not within the Purchasing Agent's Office;
- E. Failure to meet the mandatory requirements of this invitation to bid; and/or

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F. Evidence of collusion among bidders.

9. RESTRICTIVE OR AMBIGUOUS SPECIFICATIONS

It is the responsibility of the prospective Bidder to review the entire Invitation to Bid packet and to notify the Purchasing Agent if the specifications are formulated in a manner that would restrict competition or appear ambiguous. Any protest or question(s) regarding the specifications or Bid procedures must be received in the Purchasing Agent's Office not less than seventy-two (72) hours prior to the time set for Bid opening. Bidders are to submit their Bid as specified herein or propose an approved equal.

10. SUBSTITUTES/DESCRIPTION OF MATERIALS AND EQUIPMENT

Any brand name or manufacturer reference used herein is intended to be descriptive and not restrictive, unless otherwise noted, and is used to indicate the type and quality of material. The term "or equal" if used, identifies commercially produced items that have the essential performance and salient characteristics of the brand name stated in the item description. All supplies, material, or equipment shall be new and of the most suitable grade for the purpose intended. For clarification, "new" includes products containing recovered materials that are EPA-designated items and additionally see Section 63 of these General Provisions on contracts involving federal funds. It is not the County's intent to discriminate against any materials or equipment of equal merit to those specified. However, if Bidder desires to use any substitutions, prior written approval must be obtained from the Purchasing Agent and sufficiently in advance such that an addendum may be issued. All material supplied must be one hundred percent (100%) asbestos free. Bidder, by submission of its bid, certifies that if awarded any portion of this procurement, the bidder will supply only material and equipment that is 100% asbestos free.

11. EXCEPTIONS TO BID

The Bidder will list on a separate sheet of paper any exceptions to the conditions of the bid. This sheet will be labeled, "Exceptions to Bid Conditions", and will be attached to the bid. If no exceptions are stated, it will be understood that all general and special conditions will be complied with, without exception.

The Bidder must specify in its Bid any alternatives it wishes to propose for consideration by the County. Each alternative should be sufficiently described and labeled within the Bid and should indicate its possible or actual advantage to the program being offered.

The County reserves the right to offer these alternatives to other Bidders.

12. PRICING

Bids will be either lump sum or unit prices as shown on the Bid sheet. The net priced items will be delivered to Galveston County, including all freight, shipping, and delivery charges.

Cash discount must be shown on bid, otherwise prices will be considered net. Unless prices and all information requested are complete, Bid may be disregarded and given no consideration.

In case of default by the contractor, the County of Galveston may procure the articles or services from other sources and may deduct from any monies due, or that may thereafter become due to the contractor, the difference between the

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price named in the contract of purchase order and the actual cost thereof to the County of Galveston. Prices paid by the County of Galveston shall be considered the prevailing market price at the time such purchase is made. Periods of performance may be extended if the facts as to the cause of delay justify such extension in the opinion of the Purchasing Agent and the Commissioners' Court.

13. PROCUREMENT CARD (P-CARD) PROGRAM

The County of Galveston participates in a Procurement Card (P-Card) program that allows payments made to a vendor by credit card. This method typically results in substantially faster bill payments, sometimes within three (3) to five (5) days of the actual transaction date. All transaction fees from the card provider are to be paid by the successful contractor. If your company will accept payment via credit card (Visa, MasterCard), please notate this in your Bid submittal.

14. PASS THROUGH COST ADJUSTMENTS

Except in instances of extreme extenuating circumstances Contractor prices shall remain firm throughout the contract period and any renewals. Examples of extreme extenuating circumstances include such situations as a nationwide rail strike, oil shortage or oil embargo.

In extreme extenuating circumstances, Contractors may be allowed to temporarily "pass through" additional costs they are forced to incur through no fault of their own. A request for a pass through cost increase will not be considered unless a Contractor's cost for the Contractor's product exceeds 10% over the original cost for the product. Also, the increase in cost must be nationwide and consistent for a minimum period of sixty (60) days. Costs that historically are anticipated to rise over a period of time (for example only, such as wages or insurance costs) do not qualify for pass through. If a Contractor thinks he will be asking for a pass through cost adjustment during the term of the contract, then the original cost of the product to Contractor must be stated in Contractor's original bid.

A request for a pass through cost does not guarantee that one will be granted. Contractors must submit such information on each request as required by the County Purchasing Agent. The County Purchasing Agent will review each request on a case-by-case basis and if valid, submit the request to Commissioners Court for authorization and determination of the appropriateness of each request as well as amount and duration of increase. Contractors will not be permitted any additional compensation for mark-ups or profits based on the increase in price. Rather, such additional compensation will be limited to the actual increase in original cost to the Contractor as such increase is reflected by the original cost stated in the bid. But in no event will the amount of additional compensation exceed 25% increase in Contractor's original cost for the product as such cost is reflected in Contractor's original Bid or the duration exceed a period of sixty (60) days. In addition should the cost, during the period of the pass through, return to normal or decrease to below pre pass through prices, appropriate downward adjustments shall be made. No more than one pass through adjustment will be permitted per year.

15. MODIFICATION OF BIDS

A Bidder may modify a bid by letter at any time prior to the submission deadline for receipt of Bids. Modification requests must be received prior to the submission deadline. Modifications made before opening time must be initialed by Bidder guaranteeing authenticity. Bids may not be amended or altered after the official opening with the single exception that any product literature and/or supporting data required by the actual specifications, if any, will be accepted at any time prior to the Commissioners' Court considering of same.

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16. PRE-BID CONFERENCE

A pre-bid conference for the purpose of discussing contract requirements and answering questions of prospective bidders may be conducted in this procurement. A pre-bid conference may be mandatory or voluntary. If the pre-bid conference is mandatory, then the County is authorized to condition acceptance of a bid on compliance with attendance. The Special Provisions of this procurement shall specify if a pre-bid conference is to be held and shall specify whether the pre-bid conference is mandatory or voluntary. Only a principal, officer, or employee of the bidder may represent the bidder at the pre-bid conference and no person may represent more than one bidder at the pre-bid conference.

17. SIGNATURE OF BIDS

Each Bid shall give the complete mailing address of the Bidder and be signed by an authorized representative by original signature with the authorized representative's name and legal title typed below the signature line. Each bid shall include the Bidder's Federal Employer Identification Number (FEIN). Failure to sign the Contract page(s) and bid response sheets may disqualify the bid from being considered by the County. The person signing on behalf of the Bidder expressly affirms that the person is duly authorized to tender the bid and to sign the bid sheets and contract under the terms and conditions of this Invitation to Bid and to bind the Bidder thereto and further understands that the signing of the contract shall be of no effect until it is properly placed on the Commissioners' Court agenda, approved in open Court, authorized to be executed by the County Judge, and fully executed by both parties.

18. AWARD OF BIDS – EVALUATION CRITERIA AND FACTORS

The award will be made to the responsible Bidder whose bid is determined to be the lowest and best evaluated offer demonstrating the best ability to fulfill the requirements set forth in this Invitation to Bid. **The proposed cost to the County will be considered firm and cannot be altered after the submission deadline.**

“Lowest and best” means a bid or offer providing the best value considering associated direct and indirect costs, including transport, maintenance, reliability, life cycle, warranties, and customer service after a sale.

In determining the lowest and best bid for a contract for the purchase of earth-moving, material-handling, road maintenance, or construction equipment, the Commissioners Court may also consider the information submitted under Section 262.0255 of the Local Government Code; and in determining the lowest and best bid for a contract for the purchase of road construction material, the Commissioners Court may consider the pickup and delivery locations of the bidders and the cost to the county of delivering or hauling the material to be purchased. The Commissioners Court may award contracts for the purchase of road construction material to more than one bidder if each of the selected bidders submits the lowest and best bid for a particular location or type of material.

Each Bidder, by submitting a bid, agrees that if its' bid is accepted by the Commissioners' Court, such Bidder will furnish all items and services upon which prices have been tendered and upon the terms and conditions in this bid and contract.

The contractor shall commence work only after the transmittal of a fully executed contract and after receiving written notification to proceed from the County Purchasing Agent. The contractor will perform all services indicated in the bid in compliance with this contract.

Neither department heads nor elected officials are authorized to sign any binding contracts or agreements prior to being properly placed on the Commissioners' Court agenda and approved in open court. Department heads and other elected officials are not authorized to enter into any type of agreement or contract on behalf of Galveston County. Only the Commissioners' Court, acting as a body, may enter into a contract on behalf of the County. Additionally,

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department heads and other elected officials are not authorized to agree to any type of supplemental agreements or contracts for goods or services. Supplemental agreements are subject to review by the County Legal Department prior to being signed by the County's authorized representatives.

The County of Galveston reserves the right to accept bids on individual items listed, or group items, or on the bid as a whole; to reject any and all bids; to waive any informality in the bids; to disregard the bids that are not submitted timely; to disregard the bids of bidders determined to be not responsible; and to accept the bid that appears to be in the best interest of the County. The selection process may, however, include a request for additional information or an oral presentation to support the written bid.

In determining and evaluating the best bid, the pricing may not necessarily be controlling, but quality, equality, efficiency, utility, general terms, delivery, suitability of the service offered, and the reputation of the service in general use will also be considered along with any other relevant items. The Commissioners' Court shall be the sole judge in the determination of these matters.

The County reserves the right to reject any or all Bids in whole or in part received by reason of this Invitation to Bid and may discontinue its efforts under this Invitation to Bid for any reason or no reason or solely for the County's convenience at any time prior to actual execution of the contract by the County.

A Bidder whose bid does not meet the mandatory requirements set forth in this Invitation to Bid may be considered non-compliant.

The invitation to submit a bid which appears in the newspaper, or other authorized advertising mediums, these general provisions, the specifications which follow, the Bid sheets, and any addenda issued are all considered part of the Bid.

Each Bidder, by submitting a bid, agrees that if its bid is accepted by the Commissioners' Court, such Bidder will furnish all items and services upon the terms and conditions in this Invitation to Bid and the resultant contract.

Notice of contract award is anticipated to be made within ninety (90) days of opening of Bids to the lowest responsive and responsible contractor, whose bid complies with all the requirements in the Invitation to Bid.

Contractor shall submit to the County, for approval, within ten (10) days from notice of contract award, all Certificates of Insurance evidencing the required coverage as described under Section 35, Requirement of and Proof of Insurance, or if different, then as described within the Special Provisions or resultant contract.

The contractor shall not commence work under these terms and conditions of the contract until all applicable Purchase Orders, Certificates of Insurance, Performance and Payment Bonds, and Irrevocable Letters of Credit (if required) have been approved by the County of Galveston and the Contractor has received notice to proceed in writing and an executed copy of the contract from the County Purchasing Agent.

19. DISPUTE AFTER AWARD/PROTEST

Any actual or prospective Bidder who is allegedly aggrieved in connection with the solicitation of this Invitation to Bid or award of a contract resulting therefrom may protest. The protest shall be submitted in writing to the Purchasing Agent within seven (7) calendar days after such aggrieved person knows of or should have known of the facts giving rise thereto. If the protest is not resolved by mutual agreement, the Purchasing Agent will promptly issue a decision in writing to the protestant. If the protestant wishes to appeal the decision rendered by the Purchasing Agent, such appeal must be made to the Commissioners' Court through the Purchasing Agent. The decision of the

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Commissioners' Court will be final. The Commissioners' Court need not consider protests unless this procedure is followed.

20. PUBLIC INFORMATION ACT (f/k/a Open Records Act)

The bidder acknowledges that the County is a government body for purposes of the Public Information Act, codified as Chapter 552 of the Texas Government Code, and as such is required to release information in accordance with the provisions of the Public Information Act.

If bidder considers any of its submitted information to be proprietary in nature, trade secret, or otherwise confidential, then it must clearly and conspicuously mark such information as proprietary, trade, secret, or confidential. By the submission of its bid, Bidder expressly affirms that it has clearly and conspicuously marked any information within its submission that Bidder considers confidential, proprietary, and/or trade secret.

In the event the County receives a request for information under the Public Information Act seeking information that the Bidder has marked as confidential, proprietary, and /or trade secret, then the County agrees that it shall provide notice to the Bidder of the request for information and the request for decision process under the Public Information Act. Thus, the County will submit the initial correspondence to the Texas Attorney General – however, the burden is and shall be on the Bidder to submit correspondence to the Attorney General if the Bidder wishes its information to be withheld. Bidder is deemed to have knowledge of the Public Information Act. **By the submission of its bid, bidder expressly acknowledges that the burden to withhold its' information from public disclosure lays with the bidder;** thus, bidder further acknowledges and agrees that it shall submit comments to the Texas Attorney General in the request for decision process if bidder wishes to have its' information withheld from public disclosure.

21. BIDDER'S E-MAIL ADDRESSES – CONSENT TO DISCLOSURE

Notwithstanding the foregoing Section 19, Bidder acknowledges and agrees that the confidentiality of any and all email addresses Bidder uses or discloses in communicating with the County are **open** to the public in accordance with Section 552.137 of the Government Code and Bidder consents to the release of its email addresses.

22. RESULTANT CONTRACT

Bidder shall correctly and fully execute the resultant contract first. After this, the contract shall be set for consideration by the Commissioners' Court. If the Commissioners' Court authorizes the execution of the contract, the resultant contract shall become effective upon the Commissioners' Court execution of same, provided that the contract is executed by all parties to the contract. Contract documents shall consist of the contract, the General and Special Provisions, drawings, bid package (including best and final offer(s) if such is utilized), any addenda issued, and any change orders issued during the work. If applicable to the attached bid, bidder must sign three (3) original contracts and return all three with their bid submittal.

Bidder should submit a proposed contract with its Bid or its sample material terms and conditions for review and consideration.

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23. CONTRACT TERM

The term of the resultant contract will begin on the date of full execution or the execution by the Commissioners' Court, whichever is later, and will terminate on the date specified in the resultant contract unless terminated earlier as herein set forth.

24. TERMINATION FOR DEFAULT

Failure of either party in the performance of any of the provisions of this contract shall constitute a breach of contract, in which case either party may require corrective action within ten (10) business days from date of receipt of written notice citing the exact nature of such breach. Failure of the party being notified to take corrective action within the prescribed ten (10) business days, or failure to provide written reply of why no breach has occurred, shall constitute a Default of Contract.

All notices relating to default by Bidder of the provisions of the contract shall be issued by the County through its Legal Department, and all replies shall be made in writing to the County Legal Department. Notices issued by or issued to anyone other than the County Legal Department shall be null and void and shall be considered as not having been issued or received.

Galveston County reserves the right to enforce the performance of this contract in any manner prescribed by law in the event of breach or default of this contract, and may contract with another party, with or without solicitation of bids or further negotiations. At a minimum, Bidder shall be required to pay any difference in service or materials, should it become necessary to contract with another source, plus reasonable administrative costs and attorney fees.

In the event of Termination for Default, Galveston County, its agents or representatives shall not be liable for loss of any profits anticipated to be made by Bidder.

In addition to the remedies stated herein, the County has the right to pursue other remedies permitted by law or in equity.

No waiver by either party of any event of default under this agreement shall operate as a waiver of any subsequent default under the terms of this agreement.

County reserves the right to terminate this contract immediately in the event Bidder:

- A. Fails to meet delivery or completion schedules; and/or
- B. Fails to otherwise perform in accordance with the accepted Bid and the contract.

25. TERMINATION FOR CONVENIENCE

County may terminate this contract upon at least thirty (30) calendar days prior written notice for its convenience or for any reason deemed by the County to serve the public interest. As well, County may terminate this contract upon thirty (30) calendar days prior written notice for any reason resulting from any governmental law, order, ordinance, regulation, or court order. In no event shall County be liable for loss of any profits anticipated to be made hereunder by Bidder should this contract be terminated early.

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26. FORCE MAJEURE

If by reason of Force Majeure either Party shall be rendered unable, wholly or in part, to carry out its responsibilities under this contract by any occurrence by reason of Force Majeure, then the Party unable to carry out its responsibility shall give the other Party notice and full particulars of such Force Majeure in writing within a reasonable time after the occurrence of the event, and such notice shall suspend the Party's responsibility for the continuance of the Force Majeure claimed, but for no longer period.

Force Majeure means acts of God, floods, hurricanes, tropical storms, tornadoes, earthquakes, or other natural disasters, acts of a public enemy, acts of terrorism, sovereign conduct, riots, civil commotion, strikes or lockouts, and other causes that are not occasioned by either Party's conduct which by the exercise of due diligence the Party is unable to overcome and which substantially interferes with operations.

27. ESTIMATED QUANTITIES

Any reference to quantities shown in the Invitation to Bid is an estimate only. Since the exact quantities cannot be predetermined, the County reserves the right to adjust quantities as deemed necessary to meet its requirements.

28. CONTRACTOR INVESTIGATION

Before submitting a bid, each Bidder shall make all investigations and examinations necessary to ascertain all site conditions and requirements affecting the full performance of the contract and to verify any representations made by the County upon which the contractor will rely. Bidder shall exercise due diligence and is further charged with knowledge of the local, State, and Federal laws, rules, and regulations applicable to this contract. If the bidder receives an award as a result of its bid submission in this procurement, the bidder's failure to have made such investigations and examinations will in no way relieve the bidder from its obligation to comply in every detail with all provisions and requirements of the contract, nor will a plea of ignorance of such conditions and requirements be accepted as a basis for any claim whatsoever by the contractor for additional compensation and/or for excused nonperformance.

29. NO COMMITMENT BY COUNTY OF GALVESTON

This Invitation to Bid does not commit the County of Galveston to award any costs or pay any costs, or to award any contract, or to pay any costs associated with or incurred in the preparation of a bid in response to this Invitation to Bid and does not commit the County of Galveston to procure or contract for services or supplies.

30. BID COSTS BORNE BY BIDDER

Galveston County shall not be liable for any costs incurred by Bidder in preparation, production, or submission of a bid, including but not limited to best and final offer if applicable. As well, Galveston County shall not be liable for any work performed by Bidder prior to issuance of fully executed contract and properly issued notice to proceed. Galveston County shall not be liable for any costs incurred by Bidder by reason of attending a pre-Bid conference. Galveston County shall not be liable for any costs incurred by Bidder by reason of the County invoking use of best and final offers.

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31. BEST AND FINAL OFFIERS (BAFO)

Not applicable.

32. SINGLE BID RESPONSE

If only one bid is received in response to the Invitation to Bid, a detailed cost bid may be requested of the single bidder. A cost/price analysis and evaluation and/or audit may be performed of the cost bid in order to determine if the price is fair and reasonable.

33. CHANGES IN SPECIFICATIONS

If it becomes necessary to revise any part of this bid, a written notice of such revision will be provided to all Bidders in the form of addenda. The County is not bound by any oral representations, clarifications, or changes made in the written specifications by the County's employees or officials, unless such clarification or change is provided to Bidders in a written addendum from the Purchasing Agent. Bidders are advised to inquire prior to the submission deadline as to whether any addenda to this invitation to bid have been issued, as the successful bidder will be required to abide by such addenda.

The County of Galveston reserves the right to revise or amend the specifications up to the time set for opening of bids. Such revisions and amendments, if any, shall be announced by form of addenda. Copies of such addenda (or addendum in the event only one addendum is issued in the procurement) shall be furnished to all prospective contractors. Prospective contractors are defined as those contractors listed on the County's Invitation to Bid list for this material/service or those who have obtained documents from the Purchasing Agent's Office subsequent to the advertisement. If revisions and amendments require changes in quantities or prices proposed, or both, the date set for opening of bids may be postponed by such number of days as in the opinion of the County shall enable contractors to revise their bids. In any case, the bid opening shall be at least seven (7) business days after the last revising or amendment addendum and the addendum shall include an announcement of the new date, if applicable, for the opening of bids.

34. BID IDEAS AND CONCEPTS

The County reserves to itself the right to adopt or use for its benefit, any concept, plan, or idea contained in any bid.

35. BID DISCLOSURES

While this procurement is pending, the names of those who submitted bids will not be made public unless in conformity with the County Purchasing Act. Likewise, no pricing or staffing information will be released unless in conformity with the County Purchasing Act. Bidders are requested to withhold all inquiries regarding their bid or other submissions until after an award is made. No communication is to be had with any County employee or official, other than the County Purchasing Agent, regarding whether a bid was received - violations of this provision may result in the rejection of a bid.

36. INDEMNIFICATION

The contractor agrees to assume all risks and responsibility for, and agrees to indemnify, defend, and save harmless, the County of Galveston, its elected and appointed officials and department heads, agents and

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employees from and against all claims, demands, suits, actions, recoveries, judgments, and costs and expenses including reasonable attorney's fees for the defense thereof arising out of or in connection therewith on account of the loss of life, property or injury or damage to the person which shall arise from contractor's operations under this contract, its use of County facilities and/or equipment or from any other breach on the part of the contractor, its employees, agents or any person(s), in or about the County's facilities with the expressed or implied consent of the County. Contractor shall pay any judgment with cost which may be obtained against Galveston County resulting from contractor's operations under this contract.

Contractor agrees to indemnify and hold the County harmless from all claims of subcontractors, laborers incurred in the performance of this contract. Contractor shall furnish satisfactory evidence that all obligations of this nature herein above designated have been paid, discharged or waived. If Contractor fails to do so, then the County reserves the right to pay unpaid bills of which County has written notice direct and withhold from Contractor's unpaid compensation a sum of money reasonably sufficient to liquidate any and all such lawful claims.

37. REQUIREMENT OF AND PROOF OF INSURANCE

The successful Bidder shall furnish evidence of insurance to the County Purchasing Agent and shall maintain such insurance as required hereunder or as may be required in the Special Provisions or resultant contract, if different. Contractor shall obtain and thereafter continuously maintain in full force and effect, commercial general liability insurance, including but not limited to bodily injury, property damage, and contractual liability, with combined single limits as listed below or as may be required by State or Federal law, whichever is greater.

- A. For damages arising out of bodily injury to or death of one person in any one accident :
ONE HUNDRED THOUSAND AND NO/100 (\$100,000.00) DOLLARS.
- B. For damages arising out of bodily injury to or death of two or more persons in any one accident:
THREE HUNDRED THOUSAND AND NO/100 (\$300,000.00) DOLLARS.
- C. For any injury to or destruction of property in any one accident :
ONE HUNDRED THOUSAND AND NO/100 (\$100,000.00) DOLLARS.

Insurance shall be placed with insurers having an A.M. Best's rating of no less than A. Such insurance must be issued by a casualty company authorized to do business in the State of Texas, and in standard form approved by the Board of Insurance Commissioners of the State of Texas, with coverage provisions insuring the public from loss or damage that may arise to any person or property by reason of services rendered by Contractor.

Galveston County shall be listed as the additional insured on policy certificates and shall be provided with no less than thirty (30) calendar days prior notice of any changes to the policy during the contractual period.

Certificates of Insurance, fully executed by a licensed representative of the insurance company written or countersigned by an authorized Texas state agency, shall be filed with the County Purchasing Agent within ten (10) business days of issuance of notification from the County Purchasing Agent to Bidder that the contract is being activated as written proof of such insurance and further provided that Bidder shall not commence work under this contract until it has obtained all insurance required herein, provided written proof as required herein, and received written notice to proceed issued from the County Purchasing Agent.

Proof of renewal/replacement coverage shall be provided prior to the expiration, termination, or cancellation date of any policy and Galveston County shall be named as an additional insured on any such renewal/replacement coverage

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and a certificate of insurance showing such shall be provided to the Purchasing Agent. Said insurance shall not be cancelled, permitted to expire, or changed without at least thirty (30) days prior written notice to the County.

Insurance required herein shall be maintained in full force and effect during the life of this contract and shall be issued on an occurrence basis. Contractor shall require that any and all subcontractors that are not protected under the Contractor's own insurance policies take and maintain insurance of the same nature and in the same amounts as required of Contractor and provide written proof of such insurance to Contractor. Proof of renewed/replacement coverage shall be provided prior to the expiration, termination, or cancellation date of any policy. Contractor shall not allow any subcontractor to commence work on the subcontract until such insurance required for the subcontractor has been obtained and approved.

Workers' Compensation Insurance: Successful Bidder shall carry in full force Workers' Compensation Insurance Policy(ies), if there is more than one employee, for all its' employees, including but not limited to full time, part time, and emergency employees employed by the successful Bidder. Current insurance certificates certifying that such policies as specified above are in full force and effect shall be furnished by successful Bidder to the County.

Insurance is to be placed with insurers having a Best rating of no less than A. The Bidder shall furnish the County with certificates of insurance and original endorsements affecting coverage required by these insurance clauses within ten (10) business days of receiving notification from the County Purchasing Agent that the contract is being activated. The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. The Bidder shall be required to submit annual renewals for the term of this contract prior to expiration of any policy.

In addition to the remedies stated herein, the County has the right to pursue other remedies permitted by law or in equity.

The County agrees to provide Bidder with reasonable and timely notice of any claim, demand, or cause of action made or brought against the County arising out of or related to utilization of the property. Bidder shall have the right to defend any such claim, demand, or cause of action at its sole cost and expense and within its sole and exclusive discretion. The County agrees not to compromise or settle any claim or cause of action arising out of or related to the utilization of the property without the prior written consent of the Bidder.

In no event shall the County be liable for any damage to or destruction of any property belonging to the Bidder.

Subrogation Waiver. Bidder and Bidder's insurance carrier waive any and all rights to subrogation against Galveston County in regard to any suit or claim arising out of personal injury or property damage resulting from Bidder's performance under this agreement.

38. BID GUARANTEE

Unless specified differently within the Special Provisions of this procurement, each Bidder shall be required to submit a bid guarantee with its bid as required within this Section.

Evidencing its firm commitment to engage in contract if Bidder is selected for award of contract, each Bidder is required to furnish with their bid a cashier's check or an acceptable Bidder's bond in the amount of five percent (5%) of the total contract price. If Bidder is using a bond, then the Bidder bond must be executed with a surety company authorized to do business in the State of Texas. Failure to furnish the bid guarantee in the proper form and amount, by the time set for opening of bids may be cause for rejection of the bid.

The cashier's check or Bidder/bid bond (as applicable) will be returned to each respective unsuccessful Bidder(s) subsequent to the Commissioners Court award of contract, and shall be returned to the successful Bidder upon the

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completion and submission of all contract documents. Provided however, that the cashier's check or Bidder bond will be forfeited to the County as liquidated damages should successful Bidder fail to execute the contract within thirty (30) days after receiving notice of the acceptance of its bid.

39. PERFORMANCE AND PAYMENT BONDS (if required)

Successful Bidder, before beginning work, shall execute a performance bond and a payment bond, each of which must be in the amount of the contract. The required payment and performance bonds must each be executed by a corporate surety authorized to write surety bonds in the State of Texas and in accordance with Chapter 3503 of the Insurance Code (codified in 2005 and originally within Section 1, Chapter 87, Acts of the 56th Leg., R.S., 1959, and in Article 7.19-1, Vernon's Texas Insurance Code).

The performance and payment bonds must each clearly and prominently display on the bond or on an attachment to the bond:

- a.) The name, mailing address, physical address, and telephone number, including the area code, of the surety company to which any notice of claim should be sent; or
- b.) The toll-free telephone number maintained by the Texas Department of Insurance under Subchapter B, Chapter 521, Insurance Code, and a statement that the address of the surety company to which any notice of claim should be sent may be obtained from the Texas Department of Insurance by calling the toll free-telephone number.

The performance bond shall be solely for the protection of Galveston County, in the full amount of the contract, and conditioned on the faithful performance of the work in accordance with the plans, specifications, and contract documents. The payment bond is solely for the protection and use of payment bond beneficiaries who have a direct contractual relationship with the prime contractor or a subcontractor to supply labor or material, and in the amount of the contract.

The payment and performance bonds required to be furnished herein must be furnished before the contractor begins work and are a requirement for issuance of a Notice to Proceed. Such bonds must be furnished to the Galveston County Purchasing Agent within thirty (30) calendar days after the date of the full execution of the contract or, if applicable, as required under Chapter 2253, Government Code, whichever is earlier. Contractor's failure to provide the required payment and performance bonds within such time period shall constitute an event of default under this contract. Contractor shall not commence work until all applicable certificates of insurance, performance bonds, and payment bonds have been received and approved by the County Purchasing Agent and the Contractor receives notice to proceed in writing that has been issued by the County Purchasing Agent.

Additionally, if this request for bid is for the award of a public works contract, then compliance with Chapter 2253 of the Texas Government Code, which is known as the McGregor Act, is mandatory. Performance and payment bonds are required to be furnished in accordance with Chapter 2253 of the Texas Government Code. Bidder should familiarize itself with the entire provisions of Chapter 2253 of the Texas Government Code.

40. PATENT AND COPYRIGHT PROTECTION

The Bidder agrees at its sole expense to protect the County from claims involving infringement of patents, copyright, trademark, trade secret, or other intellectual property rights. **Bidder shall indemnify and save harmless the County of Galveston, its officers, employees, and agents, from liability of any nature and kind whatsoever, including without limitation cost and expenses, for or on account of any copyrighted, trademarked, trade secret, patented or un-patented invention, process, or article manufactured or used in the performance of the contract, or other intellectual property rights, including its use by the County.** Bidder also agrees that if Bidder is awarded this

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contract, that no work performed hereunder shall be subject to patent, copyright, or other intellectual property by Bidder.

41. CONFLICT OF INTEREST DISCLOSURE REPORTING (FORM CIQ)

Bidder may be required under Chapter 176 of the Texas Local Government Code to complete and file a conflict of interest questionnaire (CIQ Form). The CIQ Form pertains to business relationship, gift giving and family relationship reporting. If bidder is required to file a CIQ Form, then the completed CIQ Form must be filed with the County Clerk of Galveston County, Texas.

Business relationship. If Bidder has an employment or other business relationship with a local government officer of Galveston County or with a family member of a local government officer of Galveston County that results in the officer or family member of the officer receiving taxable income that exceeds \$2,500.00 during the preceding 12-month period, then Bidder **MUST** complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County.

Gift-giving. If Bidder has given a local government officer of Galveston County or a family member of a local government officer of Galveston County one or more gifts with an aggregate value of more than one-hundred dollars (\$100.00) during the preceding 12-months, then Bidder **MUST** complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County.

Family member. For purposes of the business relationship and gift giving reporting requirements, a “family member” means a person related to another person with the first degree of consanguinity or affinity, as described by Subchapter B, Chapter 573, Texas Government Code. Examples of persons within the first degree by consanguinity or affinity include a son, daughter, father, mother, spouse, son-in-law, daughter-in-law, father-in-law, mother-in-law, stepson, stepdaughter, stepmother, and stepfather.

Family relationship. If Bidder has a “family relationship” with a local government officer of Galveston County then Bidder **MUST** complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County, regardless of whether Bidder has a business relationship or has given gifts to the local government officer or a family member of the local government officer. For this purpose, “family relationship” means Bidder is related within the third degree by consanguinity or the second degree by affinity, as those terms are defined under Chapter 573 of the Texas Government Code, to a local government officer of Galveston County. Examples of such relationships include a son, daughter, mother, father, brother, sister, grandchild, great-grandchild, grandparent, great-grandparent, niece, nephew, uncle, aunt, spouse, mother-in-law, father-in-law, daughter-in-law, son-in-law, spouse’s grandchild, spouse’s grandparent, grandparent’s spouse, grandchild’s spouse, stepson, stepdaughter, stepmother, and stepfather.

Bidder must file its original CIQ Form with the Galveston County Clerk. The Galveston County Clerk has offices at the following locations:

Galveston County Clerk
Galveston County Justice Center, Suite 2001
600 59th Street
Galveston, Texas 77551

Galveston County Clerk
North County Annex, 1st Floor
174 Calder Road
League City, Texas 77573

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Again, if Bidder is required to file a CIQ Form, the original completed form is filed with the Galveston County Clerk (**not the Purchasing Agent**).

For Bidder's convenience, a blank CIQ Form is enclosed with this bid package. Blank CIQ Form(s) may also be obtained by visiting the Purchasing Agent's website – this website is linked from the Galveston County homepage, at <http://www.galvestoncountytexas.gov>.

Chapter 176 specifies deadlines for the filing of CIQ Forms (both initial filings and updated filings).

It is Bidder's sole responsibility to file a true and complete CIQ Form with the Galveston County Clerk if Bidder is required to file by the requirements of Chapter 176 of the Local Government Code. Bidder is advised that it is an offense to fail to comply with the disclosure reporting requirements dictated under Chapter 176 of the Texas Local Government Code, and the failure to file may be grounds to void the contract, if Bidder is awarded a contract.

If bidder has any questions about compliance with Chapter 176, Bidder may wish to consult its' legal counsel. Compliance is the individual responsibility of each person, business, and agent who is subject to Chapter 176 of the Texas Local Government Code.

42. DISCLOSURE OF INTERESTED PARTIES/FORM 1295

Under Section 2252.908 of the Government Code, any business entity that enters into a contract with Galveston County that requires the approval of the Commissioners Court must submit a "Disclosure of Interested Parties" to the County prior to the execution of the contract. This form, the "Disclosure of Interested Parties" form was promulgated by the Texas Ethics Commission, and is the "Form 1295". **This procurement is subject to these requirements.**

The Texas Ethics Commission was charged with promulgating rules to implement Section 2252.908 of the Government Code. The rules adopted by the Texas Ethics Commission are located at Sections 46.1, 46.3, and 46.5 of Title 1 of the Texas Administrative Code. Thus, the law covering these requirements is located at Section 2252.908 of the Government Code, and in Title 1, Sections 46.1, 46.3, and 46.5 of the Texas Administrative Code.

The Texas Ethics Commission's website is: www.ethics.state.tx.us. The area of the Texas Ethics Commission website pertaining to Form 1295 is:

www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm.

Form 1295 must be completed electronically through the Texas Ethics Commission website (handwritten forms are not allowable). Once the business entity has completed their electronic filing of Form 1295, then the business entity must print out the electronically completed form, and sign and notarize the Form 1295. Once Form 1295 is signed and notarized, the business entity must submit their completed, signed, and notarized Form 1295 to the Galveston County Purchasing Agent.

Successful Proposer is and shall be subject to these requirements, and no resultant contract may be executed by the Commissioners Court until the completed, signed, and notarized Form 1295 is on file with the County Purchasing Agent.

No portion of the Form 1295 process commits the County to any type of award of contract whatsoever.

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After the Purchasing Agent's Office receives the completed, signed, and notarized Form 1295, the Purchasing Agent's Office will, within 30 days, go the Texas Ethics Commission website to submit electronic confirmation of the County's receipt of the completed, signed, and notarized Form 1295.

43. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS & REQUIREMENT TO REGISTER IN SAM

Bidder certifies that neither it, nor any of its Principals, are presently debarred, suspended, proposed for debarment, disqualified, excluded, or in any way declared ineligible for the award of contracts by any Federal agency. Contractor agrees that it shall refund Galveston County for any payments made to Contractor while ineligible. Contractor acknowledges that Contractor's uncured failure to perform under this Agreement, if such should occur, may result in Contractor being debarred from performing additional work for the County, the respecting State Agency administering the grant funding the contract, if applicable, the State, FEMA or HUD (as applicable), and other Federal and State entities. Further, Bidder has executed the Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters and returned the fully completed and executed original certification with the submission of its bid. **The truthful and fully completed and executed original of the Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters must be included with the submission of Bidder's Bid and is a mandatory requirement of this Invitation to Bid. Bidder's failure to include the fully completed and executed original of this Certification shall be considered non-compliance with the requirements of this Invitation to Bid and grounds for the rejection of Bidder's Bid.** Proposer shall immediately notify the County Purchasing Agent if it becomes debarred or suspended, placed on the Consolidated List of Debarred Contractors, or in any other way becomes ineligible for award of contract by any Federal agency. This Certification is a material fact relied upon by Galveston County; if it is later determined that the contractor did not comply with 2 C.F.R. Part 180 and 2 C.F.R. Part 3000, in addition to the remedies available to Galveston County and the State agency administering this grant, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment of contractor.

If the contract to be awarded pursuant to this procurement involves the use of Federal funds, then bidder must also be registered in the Federal Contractor Registry through the System for Award Management (SAM) to be eligible for award of contract pursuant to this procurement.

Information regarding the SAM is available at:

<http://www.federalcontractorregistry.com/?gclid=CIG1hf2rr8wCFYkCaQoducANZw> or at
<https://www.sam.gov/portal/SAM/#1>.

No contract involving the use of Federal funds may be awarded to any bidder unless and until such registration is current and in good standing under SAM. Successful bidder must maintain SAM registration throughout the entire term of the agreement with the County. If this contract involves the use of Federal funds, then bidder must enclose proof of such SAM registration within its response, which is also a mandatory requirement of this procurement; failure to enclose such proof shall be considered non-compliance with the requirements of this procurement and grounds for the rejection of bidder's response to this procurement (i.e., bid, proposal, or qualifications statement, as applicable).

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44. SOVEREIGN IMMUNITY

The County specifically reserves any claim it may have to sovereign, qualified, or official immunity as a defense to any action arising in conjunction with this contract.

45. CONTROLLING LAW AND VENUE

Bidder acknowledges and agrees that the contract is and shall be governed and construed by the laws of the State of Texas and that venue shall lie exclusively in a court of competent jurisdiction in Galveston County, Texas.

46. MERGERS, ACQUISITIONS

The Bidder shall be required to notify the County of any potential for merger or acquisition of which there is knowledge at the time that a bid is submitted.

If subsequent to the award of any contract resulting from this Invitation to Bid the Bidder shall merge or be acquired by another firm, the following documents must be submitted to the County:

- A. Corporate resolutions prepared by the awarded Bidder and the new entity ratifying acceptance of the original contract, terms, conditions and prices;
- B. New entity's Federal Identification Number (FEIN);
- C. New entity's proposed operating plans;
- D. New entity's proof of registration in SAM for contracts involving Federal funds;
- E. New entity's certification regarding debarment;
- F. New entity's certification regarding lobbying; and
- G. W-9 Form for new entity.

Moreover, Bidder is required to provide the County with notice of any anticipated merger or acquisition as soon as Bidder has actual knowledge of the anticipated merger or acquisition. The New Bidder's proposed plan of operation must be submitted prior to merger to allow time for submission of such plan to the Commissioners Court for its approval.

47. DELAYS

The County reserves the right to delay the scheduled commencement date of the contract if it is to the advantage of the County. There shall be no additional costs attributed to these delays should any occur. Bidder agrees it will make no claims for damages, for damages for lost revenues, for damages caused by breach of contract with third parties, or any other claim by Bidder attributed to these delays, should any occur. In addition, Bidder agrees that any contract it enters into with any third party in anticipation of the commencement of the contract will contain a statement that the third party will similarly make no claim for damages based on delay of the scheduled commencement date of the contract.

48. ACCURACY OF DATA

Information and data provided through this Invitation to Bid are believed to be reasonably accurate.

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49. SUBCONTRACTING/ASSIGNMENT

Bidder shall not assign, sell, or otherwise transfer its contract in whole or in part without prior written permission of the County acting by and through its Commissioners' Court. Such consent, if granted, shall not relieve the Bidder of any of its responsibilities under this contract.

50. INDEPENDENT CONTRACTOR

Bidder expressly acknowledges that it is an independent contractor. Nothing in this agreement is intended nor shall be construed to create an agency relationship, an employer/employee relationship, a joint venture relationship, or any other relationship allowing County to exercise control or direction over the manner or method by which Bidder or its subcontractors perform in providing the requirements stated in the Invitation to Bid.

51. MONITORING PERFORMANCE

The County shall have the unfettered right to monitor and audit the Bidder's work in every respect. In this regard, the Bidder shall provide its full cooperation and insure the cooperation of its employees, agents, assigns, and subcontractors. Further, the Bidder shall make available for inspection and/or copying when requested, original data, records, and accounts relating to the Bidder's work and performance under this contract. In the event any such material is not held by the Bidder in its original form, a true copy shall be provided.

52. SUBJECT TO APPROPRIATION OF FUNDS

State law prohibits the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved by the Commissioners' Court. Galveston County anticipates this to be an integral part of future budgets to be approved during the periods of this contract, except for unanticipated needs or events which may prevent such payments against this contract. However, Galveston County cannot guarantee the availability of funds, and enters into this contract only to the extent such funds are made available through appropriation (allocation) by the Commissioners' Court. This contract shall not be construed as creating any debt on behalf of the County of Galveston in violation of TEX. CONST. art. XI, § 7, and it is understood that all obligations of Galveston County are subject to the availability of funds.

53. CONTRACTS SUBJECT TO GRANT FUNDING

Notwithstanding the foregoing, if the contract to be awarded by this procurement is funded with Federal or State grant funds, the bidder acknowledges that the obligations of the County under the contract are contingent upon the continued availability of grant funding to meet the County's obligations. If the grant(s) to the County is reduced, de-obligated, or otherwise discontinued or terminated, Contractor agrees that the County may immediately terminate the contract without penalty or any liability whatsoever on the part of the County, the State, or the Federal awarding agency.

54. PROCUREMENT ETHICS

Galveston County is committed to the highest ethical standards. Therefore, it is a serious breach of the public trust to subvert the public purchasing process by directing purchases to certain favored vendors, or to tamper with the competitive bidding process, whether it's done for kickbacks, friendship or any other reason. Since misuse of the

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purchasing power of a local government carries criminal penalties, and many such misuses are from a lack of clear guidelines about what constitutes an abuse of office, the Code of Ethics outlined below must be strictly followed.

Galveston County also requires ethical conduct from those who do business with the County.

CODE OF ETHICS – Statement of Purchasing Policy:

Public employment is a public trust. It is the policy of Galveston County to promote and balance the objective of protecting the County's integrity and the objective of facilitating the recruitment and retention of personnel needed by Galveston County. Such policy is implemented by prescribing essential standards of ethical conduct without creating unnecessary obstacles to entering public office.

Public employees must discharge their duties impartially so as to assure fair competitive access to governmental procurement by responsible contractors. Moreover, they should conduct themselves in such a manner as to foster public confidence in the integrity of the Galveston County procurement organization.

To achieve the purpose of this Article, it is essential that those doing business with Galveston County also observe the ethical standards prescribed herein.

General Ethical Standards:

It shall be a breach of ethics to attempt to realize personal gain through public employment with Galveston County by any conduct inconsistent with the proper discharge of the employee's duties.

It shall be a breach of ethics to attempt to influence any public employee of Galveston County to breach the standards of ethical conduct set forth in this code.

It shall be a breach of ethics for any employee of Galveston County to participate directly or indirectly in a procurement when the employee knows that:

- The employee or any member of the employee's family, has a financial interest pertaining to the procurement;
- A business or organization in which the employee or any member of the employee's family, has a financial interest pertaining to the procurement; or
- Any other person, business, or organization with which the employee or any member of the employee's family is negotiating or has an arrangement concerning prospective employment is involved in the procurement.

Gratuities:

It shall be a breach of ethics for any person to offer, give, or agree to give any employee or former employee of Galveston County, or for any employee or former employee of Galveston County to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or bid pending before this government.

Kickbacks:

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It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for Galveston County, or to any person associated therewith, as an inducement for the award of a contract, subcontract or order.

Contract Clause:

The prohibition against gratuities and kickbacks prescribed above shall be conspicuously set forth in every contract and solicitation by Galveston County.

Confidential Information:

It shall be a breach of ethics for any employee or former employee of Galveston County to knowingly use confidential information for actual or anticipated personal gain, or for the actual or anticipated gain of any other person.

Prohibition against Contingent Fees:

It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a Galveston County contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies for the purpose of securing business. Failure to abide by this section constitutes a breach of ethical standards.

Representation:

Bidder represents and warrants, by signing and submitting its bid, that it has not retained anyone in violation of this section prohibiting contingent fees.

Contract Clause:

The representation prescribed above shall be conspicuously set forth in every contract and solicitation thereof.

55. NON-COLLUSION AFFIDAVIT

Bidder certifies, by signing and submitting a bid, that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the contractor has not directly or indirectly induced or solicited another contractor to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any contractor or anyone else to put in a sham bid or that anyone shall refrain from bidding; that the contractor has not in any manner, directly or indirectly, sought by agreement, communications, or conference with anyone to fix the bid price of the contractor of any other bidder, or to fix any overhead, profit or cost element of the bid price, or that of any other contractor, or to secure any advantage against the public body awarding the contract or anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the contractor has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any cooperation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

A blank Non-Collusion Affidavit is included with this Bid packet. Bidder must enclose a truthful and fully executed original Non-Collusion Affidavit with the submission of its bid. This is a mandatory requirement of this Invitation to Bid. Failure to include the truthfully and fully executed Non-Collusion Affidavit in the submission of its Bid shall be considered non-compliance with the requirements of this Invitation to Bid by the Bidder and grounds for the rejection of Bidder's submission.

No negotiations, decisions, or actions shall be initiated by any company as a result of any verbal discussion with any County employee prior to the opening of responses to this Invitation to Bid.

No officer or employee of the County of Galveston, and no other public or elected official, or employee, who may exercise any function or responsibilities in the review or approval of this undertaking shall have any personal or

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financial interest, direct or indirect, in any contract or negotiation process thereof. The above compliance request will be part of all County of Galveston contracts for this service.

56. CERTIFICATION REGARDING LOBBYING

Bidder certifies that:

- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the bidder, to any person for influencing or attempting to influence a department or employee of an agency, a member of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.
- b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence a department or employee of any agency, a member of Congress, a department or employee of congress, or an employee of a member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the bidder shall complete and submit Standard Form LLL, “Disclosure Form to Report Lobbying”, in accordance with its instructions.
- c. Bidder shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

The truthful and fully completed and executed original of the Certification Regarding Lobbying (included with bid packet) must be included with the submission of Bidder’s Bid and is a mandatory requirement of this Invitation to Bid. Bidder’s failure to include the fully completed and executed or original of this Certification shall be considered non-compliant with the requirements of this Invitation to Bid and grounds for the rejection of the Bidder’s Bid. Submission of the certification is a prerequisite for making or entering into a contract with Bidder and is imposed by Section 1352, Title 31, United States Code. Further, any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

57. NON-DISCRIMINATION

- a. **Equal Employment Opportunity:** Bidder will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, disability, genetic information or veteran status. Bidder will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, national origin, sex, disability, genetic information or veteran status. Such action shall include, but not be limited to, the following: employment; upgrading; demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Bidder agrees to post in conspicuous places, available to employees and applicants for employment, notices of employment.

Bidder will, in all solicitation or advertisements for employees placed by or on behalf of Bidder, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, disability, genetic information, or veteran status.

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Bidder will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this Agreement so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

Bidder will include the provisions herein in every subcontract or purchase order unless exempted.

- b. Drug Free Work Place Act: Bidder shall comply with all applicable requirements of the Drug-Free Workplace Act of 1988 (Public Law 100-690, Title V, Subtitle D; 41 U.S.C. § 8102, et seq.) and implementing regulations thereunder.
- c. Americans with Disabilities Act: Bidder shall comply with all applicable provisions of the Americans with Disabilities Act of 1990 (Public Law 101-136) and implementing regulations thereunder.
- d. OSHA Regulations: Bidder agrees to maintain and to display any applicable materials for its employees in accordance with OSHA regulations.
- e. Compliance with Immigration Laws and Use of E-Verify: Bidder agrees to comply with all requirements of the U.S. Immigration Reform and Control Act of 1986, as amended, and any implementing regulations thereto. Bidder further agrees to utilize the E-Verify system through the Department of Homeland Security on its employees. Bidder shall not employ unauthorized aliens, and shall not assign services to be performed to any supplier or subcontractor who are unauthorized aliens. If any personnel performing any services hereunder are discovered to be an unauthorized alien, then Bidder will immediately remove such personnel from performing services hereunder and shall replace such personnel with personnel who are not unauthorized alien(s).
- f. State and Federal Law Compliance: Bidder agrees to comply with all other State and Federal laws and regulations applicable to the provision of services under this contract.

58. RECORD RETENTION AND RIGHT TO AUDIT

Bidder shall keep and maintain all records associated with this contract for a minimum of five (5) years from the close of the contract or as required by Federal or State law or regulation, whichever period is longer. If awarded this contract, Bidder shall allow the County reasonable access to the records in Bidder's possession, custody, or control that the County deems necessary to assist it in auditing the services, costs, and payments provided hereunder. If this contract involves the use of Federal or State funds, then Bidder shall also allow reasonable access to representatives of the Office of Inspector General, the General Accounting Office, the State Auditor's Office, and the other Federal and/or State agencies overseeing the funds that such entities deem necessary to facilitate review by such agencies and Bidder shall maintain fiscal records and supporting documentation for all expenditures in a manner that conforms with OMB Circular A-87 (relocated to 2 C.F.R. Part 225) and this contract.

59. TITLE VI ASSURANCES/TxDOT

The County is subject to Title VI of the Civil Rights Act of 1964 and the Federal and State laws and regulations of the United States Department of Transportation and Texas Department of Transportation (TxDOT). Pursuant to these requirements, the County must have its contractors provide required assurances on compliance with non-discrimination by itself and its subcontractors. The Title VI Assurances within this Subsection are not exhaustive – whenever any Federal, State, or Local requirement requires additional clauses, this list shall not be construed as limiting. Contractor agrees as follows:

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- (1) **Compliance with Regulations:** The Contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, DOT) Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are incorporated herein by reference and made a part of this contract.
- (2) **Non-discrimination:** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the basis of race, color, national origin, religion, sex, age, disability or Veteran status in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- (3) **Solicitations for Subcontractors, Including Procurement of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, religion, sex, age, disability or Veteran status.
- (4) **Information and Reports:** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the Galveston County or the Texas Department of Transportation to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of the Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to Galveston County or the Texas Department of Transportation as appropriate, and shall set forth what efforts it has made to obtain the information.
- (5) **Sanctions for Non-compliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, Galveston County shall impose such contract sanctions as it or the Texas Department of Transportation may determine to be appropriate, including, but not limited to:
 - (a) withholding of payments to the Contractor under the contract until the Contractor complies, and/or;
 - (b) cancellation, termination, or suspension of the contract, in whole or in part.
- (6) **Incorporation of Provisions.** The Contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as Galveston County or the Texas Department of Transportation may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request Galveston County to enter into such litigation to protect the interests of Galveston County, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

60. SECTION 231.006, FAMILY CODE/DELINQUENT CHILD SUPPORT

Pursuant to Title 5, Section 231.006 of the Texas Family Code, as applicable, Bidder certifies that it, including all of its principals, is/are current in child support payments and that it is eligible to receive payments from State funds under a contract for property, materials, or services. Bidder acknowledges and agrees that if it is awarded this contract, then the ensuing agreement may be terminated and payment withheld if this certification is inaccurate.

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Finally, by the submission of its bid, the Bidder certifies that it has included the names and social security numbers of each person with at least 25% ownership interest in Bidder within its response to the Invitation to Bid and that all such persons are current in child support payments.

61. ANTITRUST

Pursuant to 15 U.S.C. § 1, et seq., and Texas Business and Commerce Code, Chapter 15, Contractor, by the submission of its bid, certifies that neither Contractor nor any natural person, proprietorship, firm, corporation, partnership, association, or institution represented by Contractor or anyone acting for such natural person, proprietorship, firm, corporation, partnership, association, or institution has violated any Federal or State antitrust laws or communicated the nature of the offer, directly or indirectly, to any competitor or other person engaged in a similar line of business.

62. LABOR STANDARDS

On contracts funded under a federal grant: Bidder acknowledges that the contract to be awarded pursuant to this solicitation is on a grant program funded with Federal funds. Bidder shall comply with the requirements of 29 CFR Part 5 and Part 30 and shall be in conformity with Executive Order 11246, entitled “Equal Employment Opportunity”, Copeland, “Anti-Kickback” Act (40 U.S.C. 3145, 29 C.F.R. Part 3), the Davis-Bacon and Related Acts (40 U.S.C. 3141-3148, 29 C.F.R. Parts 1,3, and 5), the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 et seq.), and all other applicable Federal, State, and local laws and regulations pertaining to labor standards, insofar as those acts apply to the performance of this Agreement. Bidder is also responsible for ensuring that all subcontractors comply with the requirements of 29 CFR Part 5 and Part 30 and shall be in conformity with Executive Order 11246, entitled “Equal Employment Opportunity”, Copeland “Anti-Kickback” Act, the Davis-Bacon and Related Acts (29 CFR Parts 1, 3 and 5), the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 et seq.), and all other applicable Federal, State, and local laws and regulations pertaining to labor standards, insofar as those acts apply to the performance of this Agreement.

63. PROCUREMENT LAWS

- a. Bidder shall comply with all applicable local, State, and Federal procurement laws, rules, and regulations.
- b. If this contract is made pursuant to a federal award, then Contractor acknowledges that the contract is subject, without limitation, to applicable provisions within 2 C.F.R. Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. Contractor shall comply with applicable provisions within 2 C.F.R., Sections 200.319 through 200.326, including but not limited to the following:
 - 1.) **Equal Employment Opportunity**, 41 C.F.R. Part 60-1.4(b) (applicable to federally assisted construction contracts).
 - (a) During the performance of this contract, the contractor agrees as follows:
 - (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national original, disability, or veteran status. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national original, disability or veteran status. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and

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applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, or veteran status.
 - (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and by rules, regulations, and relevant orders of the Secretary of Labor.
 - (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to contractor's books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
 - (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
 - (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.
- 2.) **Small and minority business, women's business enterprises, and labor surplus area firms (2 C.F.R. § 200.321).** The County is required to take affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. This includes requiring the prime contractor, if subcontracts are to be let in the performance of this contract, to itself take affirmative steps in letting the subcontract. Accordingly, if subcontracts are to be let in the performance of this contract, the contractor must take affirmative steps in the letting of the subcontract(s), which must include:
- (a) placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - (b) assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - (c) dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises; and

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- (d) using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

In accordance with FEMA procurement guidance:

A small business is a business that is independently owned and operated, not dominant in the field of operation in which it is bidding on Galveston County contracts, and qualified as a small business under the Small Business Administration criteria and size standards at 13 C.F.R. Part 121.

A women's business enterprise is a business enterprise that is: (a) at least 51 percent owned by one or more women or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more women; and (b) whose management and daily operations are controlled by one or more women.

A minority business is a business that is (a) at least 51 percent owned by one or more minority group members or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more minority group members; and (b) whose management and daily operations are controlled by one or more minority group members.

- 3.) **Davis-Bacon Act as amended (40 U.S.C. 3141-3148).** When required by Federal program legislation, all prime construction contracts in excess of \$2,000 must include a provision for compliance with the Davis-Bacon Act as supplemented by the Department of Labor regulations (29 C.F.R. Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractor must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity (the County) must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be condition upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contract must also include a provision for compliance with the Copeland Anti-Kickback Act (40 U.S.C. § 3145) as supplemented by the Department of Labor regulations (29 C.F.R. Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States").
- 4.) **Compliance with the Copeland "Anti-Kickback" Act.** Contractor is prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which the person is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. "Whoever, by force, intimidation, or threat of procuring dismissal from employment, or by any other manner whatsoever induces any person employed in the construction, prosecution, completion or repair of any public building, public work, or building or work financed in whole or in part by loans or grants from the United States, to give up any part of the compensation to which he is entitled under his contract of employment, shall be fined under this title [Title 18, U.S.C.] or imprisoned not more than five years, or both." 18 U.S.C. § 874.
- (a) Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. Part 3 as may be applicable, which are incorporated by reference into this contract.
- (b) The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the Federal awarding agency may be appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

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- (c) Breach. A breach of the contract clause above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.
- 5.) **Contract Work Hours and Safety Standards Act.**
- (a) Where applicable, all contracts awarded by the County in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by the Department of Labor regulations at 29 C.F.R. Part 5. Under 40 U.S.C. 3702 of the Contract Work Hours and Safety Standards Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.S. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies or material or articles ordinarily available on the open market, or contractors for transportation or transmission of intelligence.
- (b) Compliance with the Contract Work Hours and Safety Standards Act.
- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this subsection the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this subsection, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard work week of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this subsection.
- (3) Withholding for unpaid wages and liquidated damages. The awarding Federal agency, State agency, or the County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this subsection.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this subsection and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this subsection.

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6.) Rights to Inventions Made Under a Contractor Agreement.

- (a) If the Federal award meets the definition of “funding agreement” under 37 C.F.R. § 401.2(a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under the “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 C.F.R. Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.
- (b) Stafford Act Disaster Grants. This requirement does not apply to Public Assistance, Hazard Mitigation Grant Program, Crisis Counseling Assistance and Training Grant program, Disaster Case Management Grant Program, and Federal Assistance to Individuals and Households – Other Needs Assistance Grant Program, as FEMA awards under these programs do not meet the definition of “funding agreement.”
- (c) The regulations and 37 C.F.R. § 401.2(a) currently defines “funding agreement” as any contract, grant, or cooperative agreement entered into between any Federal agency, other than the Tennessee Valley Authority, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal government. This term also includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as defined in the first sentence of this paragraph.

7.) Clean Air Act (42 U.S.C. §§ 7401 – 7671q) and the Federal Water Pollution Control Act 933 U.S.C. §§ 1251-1387), as amended.

- (a) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401, et seq., and agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Contract Act, as amended, 33 U.S. C. § 1251, et seq.
- (b) The contractor agrees to report each violation of the Clean Air Act and/or the Federal Water Pollution Control Act to the Federal awarding agency, the State agency administering the grant, and the Regional Office of the Environmental Protection Agency (EPA) and understands and agrees that the Federal awarding agency, the State agency, and the EPA will, in turn, report each violation as required to assure notification to Galveston County, the Federal Emergency Management Agency, and the appropriate EPA Regional Office.

8.) Debarment and Suspension (Executive Orders 12549 and 12689). A contract award must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. Part 180 that implement Executive Orders 12549 and 12689. The Contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

Contractor must comply with 2 C.F.R. Part 180, Subpart C and 2 C.F.R. Part 3000, Subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into. Bidder agrees to comply with the requirements of 2 C.F.R. Part 180, Subpart C, and 2 C.F.R. Part 3000, Subpart C, while this offer is valid and through the period of any contract that may arise from this offer. The bidder further agrees to include a provision requiring such compliance in its lower tier covered transactions.

9.) Procurement of Recovered Materials.

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- (a.) A non-Federal entity that is a State agency or agency of a political subdivision of the State and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, Public Law No. 89-272 (1965) (codified as amended by the Resource Conservation and Recovery Act at 42 U.S.C. § 6962).
- (b.) In the performance of this contract, the contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
 - (1) Competitively within a timeframe providing for compliance with the contract performance schedule;
 - (2) Meeting contract performance requirements; or
 - (3) At a reasonable price.
- (c) Information about this requirement is available at EPA’s Comprehensive Procurement Guidelines website, <http://www.epa.gov/cpg/>. The list of EPA-designated items is available at <https://www.epa.gov/cpg/products.htm>.

In the event of any discrepancy between the provisions in this Section 61 of General Provisions and provisions on the same subject elsewhere within this procurement, the most stringent shall control.

64. ENTIRETY OF AGREEMENT AND MODIFICATION

This contract contains the entire agreement between the parties. Any prior agreement, promise, negotiation or representation not expressly set forth in this contract has no force or effect. Any subsequent modification to this contract must be in writing, signed by both parties.

An official representative, employee, or agent of the County does not have the authority to modify or amend this contract except pursuant to specific authority to do so granted by the Galveston County Commissioners’ Court.

65. NOTICE

All notices or other communications required or permitted under this contract shall be in writing and shall be deemed to have been duly given if delivered personally in hand, transmitted by facsimile, or mailed certified mail, return receipt requested with proper postage affixed and addressed to the appropriate party at the following address or at such other address as may have been previously given in writing to the parties (Bidder shall provide its notice information with its Bid submission). If mailed, the notice shall be deemed delivered when actually received, or if earlier, on the third day following deposit in a United States Postal Service post office or receptacle, duly certified, return receipt requested, with proper postage affixed. If delivered in person, notice shall be deemed delivered when receipted for by, or actually received by, the receiving Party. If transmitted by facsimile, notice shall be deemed delivered when receipt of such transmission is acknowledged.

To the County at:

Hon. Mark Henry,
County Judge of Galveston County
722 Moody (21st Street), Second (2nd) Floor
Galveston, Texas 77550
Fax: (409) 765-2653

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With copies to:

Rufus Crowder, CPPO CPPB,
Galveston County Purchasing Agent
722 Moody (21st Street), Fifth (5th) Floor
Galveston, Texas 77550
Fax: (409) 621-7997

To the Contractor at:

(Bidder to provide its contact name, address, and facsimile number for notice under the contract.)

66. USE OF DHS SEAL, LOGO, AND FLAGS PROHIBITED WITHOUT PRIOR APROVAL

Contractor must obtain permission from the U.S. Department of Homeland Security financial assistance office (DHS FAO) **prior** to using DHS seals(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials, including use of the United States Coast Guard seal, logo, crests or reproductions of flags or likenesses of Coast Guard Officials.

67. FEDERAL GOVERNMENT NOT A PARTY

Contractor acknowledges that the Federal Government is not a party to the contract and is not subject to any obligations or liabilities to Galveston County, contractor, or any other party pertaining to any matter resulting from the contract.

68. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

In contracts funded through Federal grants, Contractor acknowledges that 31 U.S.C. Chapter 38, Administrative Remedies for False Claims and Statements (31 U.S.C. § 3801, et seq.) and the implementing regulations thereunder, 49 C.F.R. Part 79, apply to Contractors actions pertaining to the contract.

69. LEAD AND ASBESTOS

If this invitation to bid involves remediation, demolition, reconstruction, rehabilitation, repair, or construction, or other applicable activities, the Contractor shall be responsible for performing investigations of lead and asbestos containing materials, and any required lead and asbestos abatement in compliance with Federal, State, and local laws, rules, regulations, ordinances and orders, relating to lead abatement and asbestos abatement as applicable, including but not limited to the Texas Asbestos Health Protection Act, codified as Chapter 1954 of the Occupations Code; the Texas Asbestos Health Protection Regulations, located at Title 25, Part 1, Chapter 295, Subchapter C of the Texas Administrative Code; Chapter 1955 of the Texas Occupations Code (lead-based paint abatement); the Texas Environmental Lead Reduction regulations, located at Title 25, Part 1, Chapter 295, Subchapter I of the Texas Administrative Code; the federal National Emission Standards for Asbestos regulations, located at Title 40, Part 61, Subpart M of the Code of Federal Regulations, and the National Emission Standards for Hazardous Air Pollutants. Contractor shall perform such inspections, encapsulation, remediation or other actions as required by federal, State, or local requirements in accordance with the federal Environmental Protection Agency (EPA), Texas Department of State Health Services (TXDSHS), and Texas Commission on Environmental Quality (TCEQ) requirements.

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70. ACKNOWLEDGMENT OF GOVERNMENT RECORD

Bidder acknowledges that its submission in this Invitation to Bid, including its response, bid, certifications, affidavits, Vendor Forms (i.e., PEID, W-9, CIQ, etc.) constitutes government records under Chapter 37 of the Texas Penal Code.

71. COMPLIANCE WITH GALVESTON COUNTY PURCHASING POLICIES AND PROCEDURES

Bidder acknowledges, by its submission in this Invitation to Bid, that it shall comply with the Galveston County Purchasing Policies & Procedures Manual approved by Order of the Galveston County Commissioners Court on March 7, 2018.

End of General Provisions Section

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**SPECIAL PROVISIONS
GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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The Special Provisions and the General Provisions of this Invitation to Bid and the Exhibits attached hereto are made a part of this agreement between the Parties. In the event of a conflict between the General Provisions and the Special Provisions, the terms of the Special Provisions shall control.

A. PURPOSE

Galveston County is seeking a company to provide drainage improvements to the Gum Bayou Tributary. The requested work includes clearing, earthwork installation of precast reinforced concrete boxes, construction of concrete headwalls, and hydro-mulching.

The engineer's construction cost estimate to complete this project is \$735,000.00

B. DEFINITIONS (As mentioned in FAR Subpart 52.2—Text of Provisions and Clauses)

52.202-1 Definitions.

Definitions (Nov 2013)

When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR [2.101](#) in effect at the time the solicitation was issued, unless—

- (a) The solicitation, or amended solicitation, provides a different definition;
- (b) The contracting parties agree to a different definition;
- (c) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or
- (d) The word or term is defined in FAR [Part 31](#), for use in the cost principles and procedures

C. BID SURETY

A Bid surety/bond is a requirement of this solicitation.

D. PERFORMANCE AND PAYMENT BONDS

Performance and Payment Bonds are a requirement of this solicitation.

E. DAVIS-BACON WAGE RATES

Attention is called to the fact that not less than, the federally determined prevailing (Davis-Bacon and Related Acts) wage rate, as issued by the Office of Rural Community Affairs and contained in the contract documents, must be paid on this project. In addition, the successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex age or national origin.

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F. BEST AND FINAL OFFERS (BAFO)

The Best and Final Offer process **is not applicable** to this solicitation.

G. PROCUREMENT TIMELINE

A timeline for this Bid and initial process is included below. Galveston County reserves the right to change these dates and will notify Bidders of any changes:

Advertise BID (first date of publication)	Wednesday, July 8, 2020
Advertise BID (second date of publication)	Wednesday, July 15, 2020
Pre-Bid Conference	Wednesday, July 15, 2020 at 10:00 a.m.
Deadline for Questions & Inquiries	Friday, July 17, 2020 by 5:00 p.m.
Bids due from public/Bid Opening	Tuesday, July 28, 2020 at 2:00 p.m.

H. PRE-BID CONFERENCE

A non-mandatory pre-bid conference will be held on Wednesday, July 15, 2020 at 10:00 a.m.

Due to the COVID-19 pandemic, the County of Galveston has instituted measures to guard against the spread of the virus. This includes the prohibition of in-person meetings, social distancing, and stay-at-home requirements for employees.

The Pre-Bid Conference shall take place via video/tele-conference and the instructions are listed below and on the County's Purchasing website:

Minimum System Requirements for Video Conferencing:

1. High-resolution webcam;
2. Computer processing minimum: 2 GB of RAM and a quad-core processor;
3. Network bandwidth: 1 Mbps is sufficient for 15 fps at 720p resolution;

Calling from a mobile device:

1. Front facing camera;
2. In ear headphone with built in mic

Instructions for Video Conferencing:

1. [Click here](https://guest.lifesize.com/1907077) or navigate to <https://guest.lifesize.com/1907077>
2. Enter Name and email (optional);
3. Click the Terms of Service and Privacy Policy checkbox;
4. Click Join Meeting

***Note - be sure to enable audio and video.**

I. PERSONNEL TO CONTACT

Bidders desiring an explanation or interpretation relative to this solicitation must request it in writing. Oral explanations or instructions will not be binding. Any information given to a Bidder, which in the opinion of the County affects all responders or would be prejudicial to other Bidders if not communicated, shall be furnished to all Bidders as an addendum to the solicitation. Bidders **must** direct all inquiries to the following:

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**Rufus G. Crowder, CPPO CPPB
Purchasing Agent
722 21st Street (Moody)
Galveston, Texas 77550
e-mail: purchasing.bids@co.galveston.tx.us**

Bidders must e-mail their requests (with the subject line “**Gum Bayou Tributary Channel Improvements – Bid# B201034– Questions**”) for additional information and/or clarification to the address listed above. The request must include the Bidder’s name and the BID number and title. ***Any request for additional information or clarification must be received in writing no later than seven (7) calendar days prior to the Bid due date.*** Late requests or those not delivered to the proper address may not receive a reply. Bidders shall not attempt to contact the County by any other means. The Purchasing Agent’s Office shall post the answers to the County website from the procurement web page and via addendum.

The County will issue responses to inquiries and any other corrections or amendments, it deems necessary, in the form of a written addendum, issued prior to the Bid Submission Date. The County, at its sole discretion, may not issue a response to a RFI submittal. Bidders should not rely on any oral or written representations, statements, or explanations, other than those made in this BID or in any written addendum to this BID. Where there appears to be conflict between the BID and any issued addenda, the last addendum issued will prevail. Addenda will be posted and made available on the County’s procurement web page. It is the Bidder’s sole responsibility to ensure receipt of all addenda prior to submitting its Bid. All Bidders should check the County’s procurement web page for all addenda prior to submitting a response. The County’s procurement web page is located at www.galvestoncountytexas.gov/pu/Pages/default.aspx, and current solicitations are at www.galvestoncountytexas.gov/pu/Pages/OpenSolicitations.aspx.

The Bidder must acknowledge the receipt of all addenda on the forms provided. In the event a Bidder fails to acknowledge receipt of such addenda, the County may, at its sole discretion, determine that such failure to acknowledge any or all addenda does not materially affect the Bid and waive the acknowledgement of one or more addenda.

Bidders who submit inquiries *after* the deadline date for receipt of questions indicated on the Procurement Timeline, risk that its response in the procurement will not be responsive or competitive because the County is not able to respond before the Bid receipt date or in sufficient time for the Bidder to prepare a responsive or competitive submittal.

All questions and responses as posted on the County website pertaining to this BID are considered an addendum to, and part of, this BID. Each Bidder shall be responsible to monitor the County website for new or revised BID information. The County shall not be bound by any verbal information nor shall it be bound by any written information that is not either contained within the BID or formally issued as an addendum by the Purchasing Agent’s Office.

J. PROGRAM ADMINISTRATION & CONTRACT MANAGEMENT

The Program Administrator/Contract Manager that will manage the work to be performed under the resultant contract for the purpose of this bid is:

**Michael Shannon
Galveston County Engineer
722 Moody, (21st St.), 1st Floor
Galveston, TX 77550
(409) 770-5453
Email: michael.shannon@co.galveston.tx.us**

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K. TYPE OF CONTRACT

It is the intent of this solicitation to enter into a contract that meets federal guidelines. It is imperative that all responders seeking a contract under this solicitation effort must familiarize and adhere to the procurement standards as referenced in 2 C.F.R. Part 200, Sections 200.317-200.326, and Appendix II, 2 C.F.R. Part 200. Sections 200.317–200.326 and Appendix II are attached hereto as **Attachment A**.

The resultant contract consists of the following documents: Invitation to Bid, General Provisions, Special Provisions, General Terms and Conditions (including specifications, drawings, and addenda), Bidder's Bid, Bid Sheets, contract award, and any other documents referenced herein or attached hereto for the work. Collectively these documents may also be referred to as the Plans and Specifications.

In an effort to satisfy cost reasonableness responsibilities at the time of any extension period, the County of Galveston reserves the right to obtain additional quotes and current pricing information from the successful contractor and other contractors to perform the work as stated per the specification listed herein and in the resultant. The solicited results may be used by the County to determine if the contract extensions will be considered or other service options be utilized.

L. COLLATERAL CONTRACT

The County reserves the right to provide by separate contract or otherwise, in such manner as not to delay its programs or damage said Contractor, all labor and material essential to the completion of the work that is not included in this contract.

Award prices include all royalties and costs arising from patents, trademarks, and copyrights in any way involved in the work. Whenever the Awardee is required or desires to use any design, device, material or process covered by letters of patent or copyright, the Awardee shall indemnify and save harmless the County, its officers, agents and employees from any and all claims for infringement by reason of the use of any such patented design, tool, material, equipment, or process, to be performed under the contract, and shall indemnify the County its officers, agents, and employees for any costs, expenses and damages which may be incurred by reason of any infringement at any time during the prosecution or after the completion of the work.

M. LABOR

Contractor is encouraged to use local labor, but not at the expense of poor workmanship and higher cost. Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. Contractor agrees to post in a conspicuous place a notice setting forth provisions of this non-discrimination clause.

N. INSURANCE

Bidder must submit, with its response, a current certificate of insurance evidencing coverage in the amounts specified below or greater. In lieu of submitting a certificate of insurance, Respondents may submit a notarized statement from an insurance company authorized to conduct business in the State of Texas guaranteeing that Respondent has such insurance. Provided however, that successful Respondent(s) shall be required to provide a current certificate of insurance to the Galveston County Purchasing Agent's Office before Respondent commences any work hereunder. **Insurance shall be placed with insurers having an A.M. Best's rating of no less than A**. Such insurance must be issued by a casualty company authorized to do business in the State of Texas, and in standard form approved by

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the Board of Insurance Commissioners of the State of Texas, with coverage provisions insuring the public from loss or damage that may arise to any person or property by reason of services rendered by Contractor.

Galveston County shall be listed as an additional insured on each policy and all certificates of insurance and Contractor shall provide Galveston County with no less than thirty (30) calendar days prior notice of any changes to the policy during the contractual period.

Certificates of Insurance, fully executed by a licensed representative of the insurance company written or countersigned by an authorized Texas state agency, shall be filed with the County Purchasing Agent within ten (10) calendar days of the execution of this Agreement as written proof of such insurance and further provided that Contractor shall not commence work under this Agreement until Contractor has obtained all insurance required herein, provided written proof as required herein, and received written notice to proceed issued from the County Purchasing Agent. **Failure to provide such evidence of insurance within the ten (10) calendar day period shall constitute an event of default.**

Workers' Compensation Insurance. Respondent shall carry in full force Workers' Compensation Insurance Policy(ies), if there is more than one employee, for all its employees, including but not limited to full time, part time, and emergency employees employed by the Contractor.

Commercial General Liability. Respondent shall carry in full force commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the aggregate. The Policy shall, minimally, cover liability for bodily injury, personal injury, and property damage.

Business Automobile Liability. Respondent shall carry in full force business automobile liability coverage with a combined bodily injury/property damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.

Professional Liability. Respondent shall carry in full force professional liability insurance with limits of not less than \$1,000,000.00.

Subrogation Waiver. Contractor and Contractor's insurance carrier shall waive any and all rights to subrogation against Galveston County in regard to any suit or claim arising out of personal injury or property damage resulting from Contractor's performance under this Agreement.

O. EXCEPTIONS

Any exceptions to Bid conditions should be listed on a separated sheet of paper, attached to Bid submittals and submitted with Bid at the specified date and time of Bid opening.

Remainder of page intentionally left blank

ATTACHMENT A
GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
GALVESTON COUNTY, TEXAS

PROCUREMENT STANDARDS

2 C.F.R. §§ 200.317 – 200.326 &
2 C.F.R. PART 200, APPENDIX II

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PROCUREMENT STANDARDS

2 C.F.R. §§ 200.317 – 200.326 &
2 C.F.R. PART 200, APPENDIX II

2 C.F.R. § 200.317. Procurements by states.

When procuring property and services under a Federal award, a state must follow the same policies and procedures it uses for procurements from its non-Federal funds. The state will comply with §200.322 Procurement of recovered materials and ensure that every purchase order or other contract includes any clauses required by section §200.326 Contract provisions. All other non-Federal entities, including sub-recipients of a state, will follow §§ 200.318 General procurement standards through 200.326 Contract provisions.

69 FR 26280, May 11, 2004; 78 FR 78608, Dec. 26, 2013

2 C.F.R. § 200.318. General procurement standards.

(a) The non-Federal entity must use its own documented procurement procedures which reflect applicable State, local and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this part.

(b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(c)

(1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.

(2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of

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relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.

- (d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.
- (e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services.
- (f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.
- (g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.
- (h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also § 200.213 Suspension and debarment.
- (i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.
- (j)
- (1) The non-Federal entity may use a time and materials type contract only after a determination that no other contract is suitable and if the contract includes a ceiling price that the contractor exceeds at its own risk. Time and materials type contract means a contract whose cost to a non-Federal entity is the sum of:
- (i) The actual cost of materials; and
 - (ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.
- (2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.

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(k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, state, or Federal authority having proper jurisdiction.

78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014; 80 FR 43309, July 22, 2015; 80 FR 45395, July 30, 2015

2 C.F.R. § 200.319. Competition.

(a) All procurement transactions must be conducted in a manner providing full and open competition consistent with the standards of this section. In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:

- (1) Placing unreasonable requirements on firms in order for them to qualify to do business;
- (2) Requiring unnecessary experience and excessive bonding;
- (3) Noncompetitive pricing practices between firms or between affiliated companies;
- (4) Noncompetitive contracts to consultants that are on retainer contracts;
- (5) Organizational conflicts of interest;
- (6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and
- (7) Any arbitrary action in the procurement process.

(b) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(c) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:

- (1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly

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restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a "brand name or equivalent" description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and

(2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(d) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.

78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014

2 C.F.R. § 200.320. Methods of procurement to be followed.

The non-Federal entity must use one of the following methods of procurement.

(a) Procurement by micro-purchases. Procurement by micro-purchase is the acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (§200.67 Micro-purchase). To the extent practicable, the non-Federal entity must distribute micro-purchases equitably among qualified suppliers. Micro-purchases may be awarded without soliciting competitive quotations if the non-Federal entity considers the price to be reasonable.

(b) Procurement by small purchase procedures. Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the Simplified Acquisition Threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources.

(c) Procurement by sealed bids (formal advertising). Bids are publicly solicited and a firm fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bid method is the preferred method for procuring construction, if the conditions in paragraph (c)(1) of this section apply.

(1) In order for sealed bidding to be feasible, the following conditions should be present:

(i) A complete, adequate, and realistic specification or purchase description is available;

(ii) Two or more responsible bidders are willing and able to compete effectively for the business; and

(iii) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

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(2) If sealed bids are used, the following requirements apply:

(i) Bids must be solicited from an adequate number of known suppliers, providing them sufficient response time prior to the date set for opening the bids, for local, and tribal governments, the invitation for bids must be publicly advertised;

(ii) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;

(iii) All bids will be opened at the time and place prescribed in the invitation for bids, and for local and tribal governments, the bids must be opened publicly;

(iv) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(v) Any or all bids may be rejected if there is a sound documented reason.

(d) Procurement by competitive proposals. The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:

(1) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals must be considered to the maximum extent practical;

(2) Proposals must be solicited from an adequate number of qualified sources;

(3) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and for selecting recipients;

(4) Contracts must be awarded to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and

(5) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(e) [Reserved]

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(f) Procurement by noncompetitive proposals. Procurement by noncompetitive proposals is procurement through solicitation of a proposal from only one source and may be used only when one or more of the following circumstances apply:

- (1) The item is available only from a single source;
- (2) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;
- (3) The Federal awarding agency or pass-through entity expressly authorizes noncompetitive proposals in response to a written request from the non-Federal entity; or
- (4) After solicitation of a number of sources, competition is determined inadequate.

78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014; 80 FR 54409, Sept. 10, 2015

2 C.F.R. § 200.321. Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

- (a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.
- (b) Affirmative steps must include:
 - (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
 - (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
 - (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
 - (6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (1) through (5) of this section.

69 FR 26280, May 11, 2004; 78 FR 78608, Dec. 26, 2013, unless otherwise noted

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2 C.F.R. § 200.322. Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014

2 C.F.R. § 200.323. Contract cost and price.

(a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.

(b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under Subpart E—Cost Principles of this part. The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.

(d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used.

69 FR 26280, May 11, 2004; 78 FR 78608, Dec. 26, 2013, unless otherwise noted

2 C.F.R. § 200.324. Federal awarding agency or pass-through entity review.

(a) The non-Federal entity must make available, upon request of the Federal awarding agency or pass-through entity, technical specifications on proposed procurements where the Federal awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been developed, the Federal awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

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(b) The non-Federal entity must make available upon request, for the Federal awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:

(1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;

(2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;

(3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a "brand name" product;

(4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or

(5) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.

(c) The non-Federal entity is exempt from the pre-procurement review in paragraph (b) of this section if the Federal awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.

(1) The non-Federal entity may request that its procurement system be reviewed by the Federal awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third party contracts are awarded on a regular basis;

(2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the Federal awarding agency's right to survey the system. Under a self-certification procedure, the Federal awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

69 FR 26280, May 11, 2004; 78 FR 78608, Dec. 26, 2013, unless otherwise noted

2 C.F.R. § 200.325. Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

(a) A bid guarantee from each bidder equivalent to five percent of the bid price. The "bid guarantee" must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.

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(b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

(c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

69 FR 26280, May 11, 2004; 78FR 78608, Dec. 26, 2013, unless otherwise noted

2 C.F.R. § 200.326. Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in Appendix II to Part 200—Contract Provisions for non-Federal Entity Contracts Under Federal Awards.

69 FR 26280, May 11, 2004; 78 FR 78608, Dec. 26, 2013, unless otherwise note

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2 C.F.R. Part, 200, Appendix II

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or

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dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of “funding agreement” under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

(G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(J) See §200.322 Procurement of recovered materials.

78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75888, Dec. 19, 2014

CERTIFICATION REGARDING LOBBYING
(31 U.S.C.A. § 1352)
This Certification must be completed, signed, dated and
returned to the Galveston County Purchasing Agent

Procurement Number and Description: _____

_____ ITB #B201034, Gum Bayou Tributary Channel Improvements _____

Proposer **CERTIFIES**, to the best of its knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the proposer, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the proposer shall complete and submit **Standard Form LLL**, "Disclosure Form to Report Lobbying", in accordance with its instructions.
3. Proposer shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Name of Organization/Corporation: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Signature of Authorized Signatory for Proposer: _____ Date Signed: _____

Title of Authorized Signatory of Proposer: _____

State of Texas

§

§

County of Galveston

§

NON-COLLUSION AFFIDAVIT

Before me, the undersigned notary, on this day personally appeared _____ (Affiant), whom being first duly sworn, deposes and certifies that:

- Affiant is the _____ of _____, that
(Individual, Partner, Corporate Officer) (Name of Qualifier)
submitted the attached Qualification in **Bid No. B201034 Gum Bayou Tributary Channel Improvements**
- Affiant is a duly authorized representative of Qualifier and is authorized to make this Non-Collusion Affidavit;
- The attached Qualification is genuine and is not a collusive or sham Qualification;
- The attached Qualification has been independently arrived at without collusion with any other qualifier, bidder, proposer, person, firm, competitor, or potential competitor;
- Qualifier has not colluded, conspired, connived or agreed, directly or indirectly, with any other qualifier, bidder, proposer, person, firm, competitor, or potential competitor, to submit a collusive or sham qualification or that such other qualifier, bidder, proposer, person, firm, competitor, or potential competitor shall refrain from qualifying;
- Qualifier has not in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other qualifier, bidder, proposer, person, firm, competitor, or potential competitor to fix the price or prices in the attached Qualification or of the qualification any other qualifier;
- Qualifier has not in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other qualifier bidder, proposer, person, firm, competitor, or potential competitor to fix the overhead, profit or cost element of the Qualification price or prices of any other qualifier, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against Galveston County or any person interested in the proposed contract;
- Affiant has not in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other qualifier, bidder, proposer, person, firm, competitor, or potential competitor, paid or agreed to pay any other qualifier, bidder, proposer, person, firm, competitor, or potential competitor any money or anything of value in return for assistance in procuring or attempting to procure a contract or in return for establishing the price or prices in the attached Qualification or the qualification of any other Qualifier; and
- Affiant certifies that Affiant is fully informed regarding the accuracy of the statements contained herein, and under penalties of perjury, certifies and affirms the truth of the statements herein, such penalties being applicable to the Qualifier as well as to Affiant signing on its behalf.

Signature of Affiant

SWORN TO and SUBSCRIBED before me this _____ day of _____, 2020.

Notary Public

My Commission Expires: _____

BID FORM
GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
COUNTY OF GALVESTON, TEXAS

By signing here, the firm does hereby attest that it has fully read the instructions, conditions and general and special provisions and understands them.

THE COMPANY OF: _____

ADDRESS: _____

FEIN (TAX ID): _____

The following shall be returned with your bid. Failure to do so may be ample cause for rejection of bid as non-responsive. It is the responsibility of the Bidder to ensure that bidder has received all addenda.

Items:	Confirmed (X):
1. References (if required)	_____
2. Addenda, if any	#1 _____ #2 _____ #3 _____ #4 _____
3. One (1) original and two (2) copies of submittal	_____
4. Bid Form	_____
5. Vendor Qualification Packet	_____
6. Debarment Certification Form	_____
7. Non-Collusion Affidavit	_____
8. Payment Terms:	_____ net 30 _____ Other
9. Lobbyist Certification	_____
10. Bid Bond	_____

Person to contact regarding this bid: _____

Title: _____ Phone: _____ Fax: _____

E-mail address: _____

Name of person authorized to bind the Firm: _____

Signature: _____ Date: _____

Title: _____ Phone: _____ Fax: _____

E-mail address: _____

BID FORM
GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
GALVESTON COUNTY, TEXAS

Bidder shall use this form to provide the information for notice.

1. Contact information for notice:

Name: _____
Address: _____

Telephone Number: _____ Facsimile number: _____

2. If a copy of notice is requested, please complete below:

Name: _____
Address: _____

Telephone Number: _____ Facsimile number: _____

3. If second or more copies are requested for notice, please supplement this form and clearly mark the supplement as "Supplementary Notice Information."

Bidder to submit reference information. Bidder shall use this form to provide minimum required reference information. If Bidder wishes to provide more than the minimum, Bidder should supplement this form and should clearly mark the supplement as "Supplementary Reference Information."

1. References who can attest to the Bidder's capability to carry out the requirements set forth in this bid:

Business Name of Organization: _____
Name of Person: _____
Title of Individual within Organization, if applicable _____
Business address: _____

Telephone number: _____ Facsimile number: _____

Business Name of Organization: _____
Name of Person: _____
Title of Individual within Organization, if applicable _____
Business address: _____

Telephone number: _____ Facsimile number: _____

Business Name of Organization: _____
Name of Person: _____
Title of Individual within Organization, if applicable _____
Business address: _____

Telephone number: _____ Facsimile number: _____

BID FORM
GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
GALVESTON COUNTY, TEXAS

References of major supplier of Bidder who can speak to the financial capability of the Bidder to carry out the requirements set forth in this bid:

1. Business Name of Supplier _____
Name of Person: _____
Title of Individual within business: _____
Business address: _____

Telephone number: _____ Facsimile number: _____

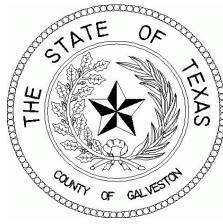
2. Business Name of Supplier _____
Name of Person: _____
Title of Individual within business: _____
Business address: _____

Telephone number: _____ Facsimile number: _____

3. Business Name of Supplier _____
Name of Person: _____
Title of Individual within business: _____
Business address: _____

Telephone number: _____ Facsimile number: _____

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County of Galveston

**ACKNOWLEDGMENT AND CERTIFICATION REGARDING DEBARMENT,
SUSPENSION, AND OTHER INELGIBILITY
Executive Orders 12549 & 12689 Certification, Debarment and Suspension**

Solicitation Number: ITB #B201034

Solicitation Title: Gum Bayou Tributary Channel Improvements

Contractor hereby CERTIFIES that:

Contractor, and all of its principals, is not presently debarred, suspended, proposed for debarment, proposed for suspension, or declared ineligible under Executive Order 12549 or Executive Order 12689, Debarment and Suspension, and is not in any other way ineligible for participation in Federal or State assistance programs;

Contractor, and all of its principals, were not and have not been debarred, suspended, proposed for debarment, proposed for suspension, or declared ineligible under Executive Order 12549 or Executive Order 12689, Debarment and Suspension, and were not and have not been in any other way ineligible for participation in Federal or State assistance programs at the time its' proposal was submitted in the procurement identified herein and at any time since submission of its' proposal;

Contractor has included, and shall continue to include, this certification in all contracts between itself and any sub-contractors in connection with services performed under this contract; **and**

Contractor shall notify Galveston County in writing immediately, through written notification to the Galveston County Purchasing Agent, if Contractor is not in compliance with Executive Order 12549 or 12689 during the term of its contract with Galveston County.

Contractor **Represents** and **Warrants** that the individual executing this Acknowledgment and Certification on its behalf has the full power and authority to do so and can legally bind the Contractor hereto.

Name of Business

Date

By: _____
Signature

Printed Name & Title



County of Galveston Purchasing Department Vendor Qualification Packet

(rev. 1.4, September 28, 2017)

All interested parties seeking consideration for qualified vendor status with the County of Galveston should complete and return only the following forms to:

Galveston County Purchasing Department
722 Moody Avenue, (21st Street), 5th Floor
Galveston, Texas 77550
(409) 770-5371 office
(409) 621-7987 fax

PEID Form: Person /Entity Information Data

W -9 Form: Request for Taxpayer Identification Number and Certification
(please note that the included form may not be the latest revised form issued by the Internal Revenue Service. Please check the IRS website at <http://www.irs.gov/pub/irs-rd/ffw9.pdf> for the latest revision of this form.)

CIQ Form: Conflict of Interest Questionnaire
(please note that the included form may not be the latest revised form issued by the State of Texas Ethics Commission. Please check the Texas Ethics Commission website at http://www.ethics.state.tx.us/whatsnew/conflict_forms.htm for the latest revision of this form. Please note that Galveston County Purchasing Agent is not responsible for the filing of this form with the Galveston County Clerk per instructions of the State of Texas Ethics Commission).

Debarment: **CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS & REQUIREMENT TO REGISTER IN SAM**
*Vendors/contractor certifies that neither it, nor any of its Principals, are presently debarred, suspended, proposed for debarment, disqualified, excluded, or in any way declared ineligible for the award of contracts by any Federal agency. Vendor agrees that it shall refund Galveston County for any payments made to Contractor while ineligible. Vendor acknowledges that Contractor's uncured failure to perform under any agreement with the County of Galveston, if such should occur, may result in Contractor being debarred from performing additional work for the County, the respecting State Agency administering the grant funding the contract, if applicable, the State, FEMA or HUD (as applicable), and other Federal and State entities. Further, Vendor has executed the Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters and returned the fully completed and executed original certification with the submission of this Vendor Qualification Packet. **The truthful and fully completed and executed original of the Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters must be included with the submission of this Vendor Qualification Packet and is a mandatory requirement to become a vendor of Galveston County. Vendor's failure to include the fully completed and executed original of this Certification shall be considered non-compliant with the requirements of this vendor qualification request and grounds for the rejection of vendor's request. Vendor shall immediately notify the County Purchasing Agent if it becomes debarred or suspended, placed on***

the Consolidated List of Debarred Contractors, or in any other way becomes ineligible for award of contract by any Federal agency. This Certification is a material fact relied upon by Galveston County; if it is later determined that the vendor did not comply with 2 C. F. R. Part 180 and 2 C.F.R. Part 3000, in addition to the remedies available to Galveston County and the State agency administering a grant, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment of contractor. If the contract to be awarded pursuant to a Galveston County procurement effort involves the use of Federal funds, then vendor must also be registered in the Federal Contractor Registry through the System for Award Management (SAM) to be eligible for award of contract pursuant to the procurement.

Information regarding the SAM is available at:

<http://federalcontractorregistry.com/?gclid=CIGlhF2rr8wCFYkCaQoducANZw> or at <http://sam.gov/portal/SAM/#1>.

No contract involving the use of Federal funds may be awarded to any vendor unless and until such registration is current and in good standing under SAM Successful vendors must maintain SAM registration throughout the entire term of any contractual agreement with the County. If a contract involves the use of Federal funds, then vendor must enclose proof of such SAM registration within its response, which is also a mandatory requirement of County procurement policy; failure to enclose such proof shall be considered non-compliant with the requirements of any procurement effort and grounds for the rejection of vendor's response to any procurement efforts (i.e., bid, proposal, or qualifications statement, as applicable).

Direct Deposit: Direct Deposit Authorization Form – Temporarily suspended until further notice

Certificate(s) of Insurance: If the person or entity seeking qualified vendor status with the County will be performing work at or on any County owned facility and/or property, Certificate(s) of Insurance are required to be submitted prior to performing any work.

Insurance requirements are as follows:

Public Liability and Property Damage Insurance:

Successful vendor agrees to keep in full force and effect, a policy of public liability and property damage insurance issued by a casualty company authorized to do business in the State of Texas, and in standard form approved by the Board of Insurance Commissioners of the State of Texas, with coverage provisions insuring the public from any loss or damage that may arise to any person or property by reason of services rendered by vendor. Vendor shall at its own expense be required to carry the following minimum insurance coverages:

1. For damages arising out of bodily injury to or death of one person in anyone occurrence - one hundred thousand and no/100 dollars (\$100,000.00);
2. For damages arising out of bodily injury to or death of two or more persons in anyone occurrence - three hundred thousand and no/100 dollars (\$300,000.00); and
3. For injury to or destruction of property in anyone occurrence - one hundred thousand and no/100 dollars (\$100,000.00).

This insurance shall be either on an occurrence basis or on a claims made basis. Provided however, that if the coverage is on a claims made basis, then the vendor shall be required to purchase, at the termination of this agreement, tail coverage for the County for the period of the County's relationship with the vendor under this agreement. Such coverage shall be in the amounts set forth in subparagraphs (1), (2), and (3) above.

Worker's Compensation Insurance:

Successful vendor shall also carry in full force Workers' Compensation Insurance policy(ies), if there is more than one employee, for all employees, including but not limited to full time, part time, and emergency employees employed by the vendor. Current insurance certificates certifying that such policies as specified above are in full force and effect shall be furnished by the vendor to the County.

The County of Galveston shall be named as additional insured on policies listed in subparagraphs above and shall be notified of any changes to the policy(ies) during the contractual period.

Insurance is to be placed with insurers having a Best rating of no less than A. The vendor shall furnish the County with certificates of insurance and original endorsements affecting coverage required by these insurance clauses. The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. The vendor shall be required to submit annual renewals for the term of any contractual agreement, purchase order or term contract, with Galveston County prior to expiration of any policy.

In addition to the remedies stated herein, the County has the right to pursue other remedies permitted by law or in equity.

The County agrees to provide vendor with reasonable and timely notice of any claim, demand, or cause of action made or brought against the County arising out of or related to utilization of the property. Vendor shall have the right to defend any such claim, demand, or cause of action at its sole cost and expense and within its sole and exclusive discretion. The County agrees not to compromise or settle any claim or cause of action arising out of or related to the utilization of the property without the prior written consent of the vendor.

In no event shall the County be liable for any damage to or destruction of any property belonging to the vendor unless specified in writing and agreed upon by both parties.

Procurement Policy - Special Note:

Understand that it is, according to Texas Local Government Code, Section 262.011, Purchasing Agents, subsections (d), (e), and (0), the sole responsibility of the Purchasing Agent to supervise all procurement transactions.

Therefore, be advised that all procurement transactions require proper authorization in the form of a Galveston County purchase order from the Purchasing Agent's office prior to commitment to deliver supplies, materials, equipment, including contracts for repair, service, and maintenance agreements. Any commitments made without proper authorization from the Purchasing Agent's office, pending Commissioners' Court approval, may become the sole responsibility of the individual making the commitment including the obligation of payment.

Code of Ethics - Statement of Purchasing Policy:

Public employment is a public trust. It is the policy of Galveston County to promote and balance the objective of protecting the County's integrity and the objective of facilitating the recruitment and retention of personnel needed by Galveston County. Such policy is implemented by prescribing essential standards of ethical conduct without creating unnecessary obstacles to entering public office.

Public employees must discharge their duties impartially so as to assure fair competitive access to governmental procurement by responsible contractors. Moreover, they should conduct themselves in such a manner as to foster public confidence in the integrity of the Galveston County procurement organization.

To achieve the purpose of these instructions, it is essential that those doing business with Galveston County also observe the ethical standards prescribed here.

General Ethical Standards: It shall be a breach of ethics to attempt to realize personal gain through public employment with Galveston County by any conduct inconsistent with the proper discharge of the employee's duties.

It shall be a breach of ethics to attempt to influence any public employee of Galveston County to breach the standards of ethical conduct set forth in this code.

It shall be a breach of ethics for any employee of Galveston County to participate directly or indirectly in procurement when the employee knows that:

- The employee or any member of the employee's immediate family has a financial interest pertaining to the procurement.
- A business or organization in which the employee, or any member of the employee's immediate family, has a financial interest pertaining to the procurement.
- Any other person, business or organization with which the employee or any member of the employee's immediate family is negotiating or has an arrangement concerning prospective employment is involved in the procurement.

Gratuities: It shall be a breach of ethics to offer, give or agree to give any employee of Galveston County, or for any employee or former employee of Galveston County to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of a program requirement or purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any program requirement or a contract or subcontract, or to any solicitation or proposal therefore pending before this government.

Kickbacks: It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for Galveston County, or any person associated therewith, as an inducement for the award of a subcontract or order.

Contract Clause: The prohibition against gratuities and kickbacks prescribed above shall be conspicuously set forth in every contract and solicitation by Galveston County.

Confidential Information: It shall be a breach of ethics for any employee or former employee of Galveston County to knowingly use confidential information for actual or anticipated personal gain, or for the actual or anticipated gain of any person.

Questions/Concerns:

If you have any questions or concerns regarding the information or instructions contained within this packet, please contact any member of the Purchasing Department staff at **(409) 770-5371**.

CONFLICT OF INTEREST DISCLOSURE REPORTING

Proposer may be required under Chapter 176 of the Texas Local Government Code to complete and file a conflict of interest questionnaire (CIQ Form). If so, the completed CIQ Form must be filed with the County Clerk of Galveston County, Texas.

If Proposer has an employment or other business relationship with an officer of Galveston County or with a family member of an officer of Galveston County that results in the officer or family member of the officer receiving taxable income that exceeds \$2,500.00 during the preceding 12-month period, then Proposer **MUST** complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County.

If Proposer has given an officer of Galveston County or a family member of an officer of Galveston County one or more gifts with an aggregate value of more than \$250.00 during the preceding 12-months, then Proposer **MUST** complete a CIQ Form and file the original of the CIQ Form with the County Clerk of Galveston County

The Galveston County Clerk has offices at the following locations:

Galveston County Clerk
Galveston County Justice Center, Suite 2001
600 59th Street
Galveston, Texas 77551

Galveston County Clerk
North County Annex, 1st Floor
174 Calder Road
League City, Texas 77573

Again, if Proposer is required to file a CIQ Form, the original completed form is filed with the Galveston County Clerk (not the Purchasing Agent).

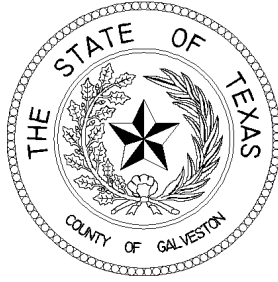
For Proposer's convenience, a blank CIQ Form is enclosed with this proposal. Blank CIQ Forms may also be obtained by visiting the Galveston County Clerk's website and/or the Purchasing Agent's website - both of these web sites are linked to the Galveston County homepage at <http://www.galvestoncountytexas.gov>

As well, blank CIQ Forms may be obtained by visiting the Texas Ethics Commission website, specifically at <http://www.ethics.state.tx.us/whatsnew/conflictfroms.htm>

Chapter 176 specifies deadlines for the filing of CIQ Forms (both initial filings and updated filings).

It is Proposer's sole responsibility to file a true and complete CIQ Form with the Galveston County Clerk if Proposer is required to file by the requirements of Chapter 176. Proposer is advised that it is an offense to fail to comply with the disclosure reporting requirements dictated under Chapter 176 of the Texas Local Government Code.

If you have questions about compliance with Chapter 176, please consult your own legal counsel. Compliance is the individual responsibility of each person, business, and agent who is subject to Chapter 176 of the Texas Local Government Code.



COUNTY of GALVESTON

Purchasing Department

rev. 1.3, March 29, 2010

FORM PEID:	Request for Person-Entity Identification Data
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Instructions: Please type or print clearly when completing sections 1 thru 4 and return completed form to:

Galveston County Purchasing Agent
722 Moody Avenue (21 st. Street), 5th Floor
Galveston, Texas 77550
(409) 770-5371
prodoc@co.galveston.tx.us

1.	Business Name:			
	Attention Line:			
2.	Physical Address:			
	City:		State:	Zip+4:
3.	Billing / Remit Address:			
	City:		State:	Zip+4
4.	Main Contact Person:			
	Main Phone Number:			
	Fax Number:			
	E-mail Address:			

Areas below are for County use only.

Requested By:	Phone / Ext. #
Department:	Date:

Action Requested - Check One:	IFAS PEID Vendor Number:	
<input type="checkbox"/> Add New	<input type="checkbox"/> Change Data	<input type="checkbox"/> Re-activate
<input type="checkbox"/> Inactivate	<input type="checkbox"/> Employee	<input type="checkbox"/> Attorney
<input type="checkbox"/> Landlord	<input type="checkbox"/> Foster Parent	<input type="checkbox"/> Refund
<input type="checkbox"/> OneTime	<input type="checkbox"/> Foster Child	

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
4. 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*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or “doing business as” (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity’s name as shown on the entity’s tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a “disregarded entity.” See Regulations section 301.7701-2(c)(2)(iii). Enter the owner’s name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner’s name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity’s name on line 2, “Business name/disregarded entity name.” If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys’ fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.

You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.

You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions.

You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor or other person doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001 (1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).

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 person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of person 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 requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

3 Name of local government officer with whom filer has employment or business relationship.

Name of Officer

This section (item 3 including subparts A, B, C & D) must be completed for each *officer* with whom the filer has an employment or other business relationship as defined by Section 176.001 (1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?

Yes

NO

B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government *officer* named in this section AND the taxable income is not received from the local governmental entity?

Yes

NO

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an *officer* or director, or holds an ownership of 10 percent or more?

Yes

NO

D. Describe each employment or business relationship with the local government *officer* named in this section.

4

Signature of person doing business with the governmental entity

Date

Adopted 06/29/2007

SPECIAL PROVISIONS FOR CONSTRUCTION

1. Contract and Contract Documents

- (a) The project to be constructed pursuant to this contract will be financed with assistance from the Community Disaster Block Grant "CDBG" and is subject to all applicable Federal and State laws and regulations.
- (b) The Plans, Specifications and Addenda, hereinafter enumerated in Paragraph 1 of the Supplemental General Conditions shall form part of this contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth.

2. Definitions

Whenever used in any of the contract Documents, the following meanings shall be given to the terms here in defined:

- (a) The term "Contract" means the Contract executed between Galveston County, hereinafter called the Owner and _____ hereinafter called Contractor, of which these GENERAL CONDITIONS, form a part.
- (b) The term "Project Area" means the area within which are the specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this contract.
- (c) The term "Engineer" means HR Green, Inc. Engineer in charge, serving the Owner with architectural or engineering services, his successor, or any other person or persons, employed by the Owner for the purpose of directing or having in charge the work embraced in this Contract.
- (d) The term "Contract Documents" means and shall include the following: Executed Contract, Addenda (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Special Conditions, Technical Specifications, and Drawings (as listed in the Schedule of Drawings).

3. Supervision By Contractor

- (a) Except where the Contractor is an individual and gives his personal supervision to the work, the Contractor shall provide a competent superintendent, satisfactory to the Local Public Agency and the Engineer, on the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work.
- (b) The Contractor shall lay out his own work and he shall be responsible for all work executed by him under the Contract. He shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

4. Subcontracts

- (a) The Contractor shall not execute an agreement with any subcontractor or permit any subcontractor to perform any work included in this contract until he has verified the subcontractor as eligible to participate in federally funded contracts.

- (b) No proposed subcontractor shall be disapproved by the city/county except for cause.
- (c) The Contractor shall be as fully responsible to the city/county for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them.
- (d) The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work and required compliance by each subcontractor with the applicable provisions of the Contract.
- (e) Nothing contained in the Contract shall create any contractual relation between any subcontractor and the Owner.

5. Fitting and Coordination of Work

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or material suppliers engaged upon this Contract.

6. Payments to Contractor

(a) Partial Payments

- 1) The Contractor shall prepare his requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Engineer for his approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) five percent (5%) of the total amount, to be retained until final payment and (2) the amount of all previous payments. The total value of work completed to date shall be based on the estimated quantities of work completed and on the unit prices contained in the agreement. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for inspection of the Engineer.
- 2) Monthly or partial payments made by the Owner to the Contractor are moneys advanced for the purpose of assisting the contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Owner. Such payments shall not constitute a waiver of the right of the Owner to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the Owner in all details.

(b) Final Payment

- 1) After final inspection and acceptance by the Owner of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the careful inspection of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the Contractor under this contract shall be the amount computed as described above less all previous payments.
- 2) The Owner before paying the final estimate, shall require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the Owner deems it necessary in order to protect its interest. The Owner may, if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments made shall in no way impair the obligations of any surety or sureties furnished under this Contract.

3) Any amount due the Owner under Liquidated Damages, shall be deducted from the final payment due the contractor.

(c) **Payments Subject to Submission of Certificates**

Each payment to the Contractor by the Owner shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors.

(d) **Withholding Payments**

The Owner may withhold from any payment due the Contractor whatever is deemed necessary to protect the Owner, and if so elects, may also withhold any amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Owner and will not require the Owner to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the Owner elects to do so. The failure or refusal of the Owner to withhold any moneys from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

7. **Estimated Quantities**

This Contract, including the specifications, plans and estimates, is intended to show clearly all the work to be done and material to be furnished hereunder. The estimated quantities of the various classes of work to be done and material to be furnished under this contract are approximate and are to be used as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this contract may differ somewhat from these estimates, and that the basis for payment under this contract shall be the plan quantity or actual amount of such work done whichever is specified. It is further understood that the County does not guarantee any minimum amount of work under this Contract.

Contractor agrees that it will make no claim for damages, anticipated profits or otherwise on account of any differences which may be found between the quantities of work actually done, the material actually furnished under this Contract and the estimated quantities contemplated and contained in the proposals.

8. **Changes in the Work**

(a) The Owner may make changes in the scope of work required to be performed by the Contractor under the Contract without relieving or releasing the Contractor from any of his obligations under the Contract or any guarantee given by him pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise. Additionally, all such change orders must be approved by the CDBG staff prior to execution of same.

(b) Except for the purpose of affording protection against any emergency endangering health, life, limb or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Owner authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.

(c) It is agreed that Contractor shall perform all Extra Work under the direction of the Owner when presented with a Written Work Order signed by the Owner: subject, however, to the right of Contractor to require a written confirmation of such Extra Work Order by the County Commissioners' Court. It is also agreed that the compensation to be paid Contractor for performing said Extra Work shall be determined by one or more of the following methods:

Method (a) - By agreed unit prices; or

Method (b) - By agreed lump sum: or

Method (c) - If Neither Method (a) nor Method (b) can be agreed upon before the Extra Work is commenced, then Contractor shall be paid the "Actual field cost" of the work plus fifteen (15) percent.

In the event said Extra Work be performed and paid for under Method (c), then the provisions of this paragraph shall apply and the "actual field cost" is hereby defined to include the cost of all workmen, such as foremen, timekeepers, merchants, and laborers, and materials, supplies, teams, trucks, rentals on machinery and equipment for time actually employed or used on such Extra Work plus actual transportation charges necessarily incurred, if the kind of equipment or machinery is not already on the job, together with all power, fuel, lubricants, water and similar operating expenses, also all necessary incidental expenses incurred directly on account of such Extra Work including Social Security, Old Age Benefits and other payroll taxes, and a ratable proportion of premiums on Construction and Maintenance Bonds, Public Liability and Property Damage and Workmen's Compensation, and all other insurance as may be required by any law or ordinance, or directed by the Owner or by him agreed. The Owner may direct the form in which accounts of the "actual field cost" shall be kept and may also specify in writing, before the work commences, the method of doing the work and the type and kind of machinery and equipment to be used, otherwise these matters shall be determined by Contractor. Unless otherwise agreed upon, the prices for the use of machinery and equipment shall be determined by using the one hundred (100) percent of the actual hourly or daily rate (for the time used plus time in moving to and from Job) of the latest schedule of Equipment Ownership Expense adopted by the Association General Contractors of America. Where practicable the terms and prices for the use of Machinery and Equipment shall be incorporated in the Written Extra Work Order. The fifteen (15) percent of the "Actual Field Cost" to be paid Contractor shall cover and compensate him for his profit, overhead, general superintendence and field office expense, and all other elements of cost and expense not embraced within the "actual field cost" as herein defined, save that where the Contractor's Camp or Field Office must be maintained primarily on account of such extra work, then the cost to maintain and operate same shall be included in the "actual field cost".

No claim for extra work of any kind will be allowed unless ordered in writing by the Owner. In case any orders or instructions, either oral or written appear to Contractor to involve extra work for which he should receive compensation, it shall make written request to the Program Administrator for written order authorizing Extra Work. Should a difference of opinion arise as to what does or does not constitute extra work, or as to the payment therefor, and the Owner insists upon its performance, Contractor shall proceed with the work after making written order and shall keep an accurate account of the "actual field cost" thereof, as provided under Method (c) and by this action Contractor will thereby preserve the right to submit the matter of payment to litigation.

(d) Each change order shall include in its final form:

1) A detailed description of the change in the work.

2) The Contractor's proposal (if any) or a confirmed copy thereof.

3) A definite statement as to the resulting change in the contract price and/or time.

- 4) The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.
- 5) The procedures as outlined in this Section for a unit price contract also apply in any lump sum contract.

9. Claims for Extra Cost

- (a) If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the Owner, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.
- (b) Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.
- (c) Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall be reported at once to the Owner and work shall not proceed except at the Contractor's risk, until written instructions have been received by him from the Owner.
- (d) If, on the basis of the available evidence, the Owner determines that an adjustment of the Contract Price and/or time is justifiable, a change order shall be executed.

10. Liquated Damages

If the work is not completed within the time stipulated in the applicable bid for Lump Sum or Unit Price Contract provided, the Contractor shall pay to the Owner as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) the amount of **One Thousand Dollars (\$1,000.00)** for each calendar day of delay, until the work is completed. The Contractor and his sureties shall be liable to the Owner for the amount thereof.

11. Disputes

- (a) All disputes arising under this Contract or its interpretation except those disputes covered by FEDERAL LABOR STANDARDS PROVISIONS whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall, within ten (10) days of commencement of the dispute, be presented by the Contractor to the Owner for decision. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt of the Owner.
- (b) The Contractor shall submit in detail his claim and his proof thereof.
- (c) If the Contractor does not agree with any decision of the Owner, he shall in no case allow the dispute to delay the work but shall notify the Owner promptly that he is proceeding with the work under protest.

12. Technical Specifications and Drawings

Anything mentioned in the Technical Specifications and not shown on the Drawings or vice versa, shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the Owner, without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

13. Shop Drawings

- (a) All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in 6 copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at his own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the Contractor, for extension of the contract time shall be granted by reason of his failure in this respect.
- (b) Any drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time, otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.
- (c) If a shop drawing is in accordance with the contract or involves only a minor adjustment in the interest of the Owner not involving a change in contract price or time; the engineer may approve the drawing. The approval shall not relieve the Contractor from his responsibility for adherence to the contract or for any error in the drawing.

14. Requests for Supplementary Information

It shall be the responsibility of the Contractor to make timely requests of the Owner for any additional information not already in his possession which should be furnished by the Owner under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted from time to time as the need approaches, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provision of this section.

15. Materials and Workmanship

- (a) Unless otherwise specifically provided for in the technical specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the technical specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.

- (b) The Contractor shall furnish to the Owner for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval full information concerning all other materials or articles which he proposes to incorporate.
- (c) Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- (d) Materials specified by reference to the number or symbol of a specific standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in the technical specifications shall have full force and effect as though printed therein.
- (e) The Owner may require the Contractor to dismiss from the work such employee or employees as the Owner or the Engineer may deem incompetent, or careless, or insubordinate.

16. Samples, Certificates and Tests

- (a) The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents or required by the Engineer, promptly after award of the contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.
- (b) Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Engineer in making a prompt decision regarding the acceptability of the sample. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.
- (c) Approval of any materials shall be general only and shall not constitute a waiver of the Owner's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.
- (d) Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:
 - 1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;
 - 2) The Contractor shall assume all costs of re-testing materials which fail to meet contract requirements;

- 3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient;
- 4) The Owner will pay all other expenses.

17. Permits and Codes

- (a) The Contractor shall give all notices required by and comply with all applicable laws, ordinances, and codes of the Local Government. All construction work and/or utility installations shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the Contractor shall examine the drawings and technical specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the Owner. Where the requirements of the drawings and technical specifications fail to comply with such applicable ordinances or codes, the Owner will adjust the Contract by Change Order to conform to such ordinances or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices.
- (b) Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the drawings and technical specifications), the Contractor shall remove such work without cost to the Owner.
- (c) The Contractor shall at his own expense, secure and pay for all permits for street pavement, sidewalks, shed, removal of abandoned water taps, sealing of house connection drains, pavement cuts, buildings, electrical, plumbing, water, gas and sewer permits required by the local regulatory body or any of its agencies.
- (d) The Contractor shall comply with applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the Improvements contained in this Contract.
- (e) The Contractor will be required to make arrangements for and pay the water, electrical power, or any other utilities required during construction.
- (f) During construction of this project, the Contractor shall use every means possible to control the amount of dust created by construction. Prior to the close of a day's work, the Contractor, if directed by the Owner, shall moisten the bank and surrounding area to prevent a dusty condition.

18. Care of Work

- (a) The Contractor shall be responsible for all damages to person or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance.
- (b) The Contractor shall provide sufficient competent watchmen, both day and night, including Saturdays, Sundays, and holidays, from the time the work is commenced until final completion and acceptance.
- (c) In an emergency affecting the safety of life, limb or property, including adjoining property, the Contractor, without special instructions or authorization from the Owner is authorized to act at his

discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the Owner.

- (d) The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.
- (e) The Contractor shall shore up, brace, underpin, secure, and protect as maybe necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements included in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Owner from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Owner may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

19. Accident Prevention

- (a) No laborer or mechanic employed in the performance of this Contract shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety as determined under construction safety and health standards promulgated by the Secretary of Labor.
- (b) The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work.
- (c) The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Owner with reports concerning these matters.
- (d) The Contractor shall indemnify and save harmless the Owner from any claims for damages resulting from property damage, personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this contract.
- (e) The Contractor shall provide trench safety for all excavations more than five feet deep prior to excavation. All OSHA Standards for trench safety must be adhered to by the Contractor.
- (f) The contractor shall at all times conduct his work in such a manner as to insure the least possible inconvenience to vehicular and pedestrian traffic. At the close of the work each day, all streets where possible in the opinion of the Owner, shall be opened to the public in order that persons living in the area may have access to their homes or businesses by the use of the streets. Barricades, warning signs, and necessary lighting shall be provided to the satisfaction of the Owner at the expense of the Contractor.

20. Sanitary Facilities

The Contractor shall furnish, install and maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or

fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

21. Use of Premises

- (a) The Contractor shall confine his equipment, storage of materials, and construction operations to the contract limits as shown on the drawings and as prescribed by ordinances or permits, or as may be desired by the Owner, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.
- (b) The Contractor shall comply with all reasonable instructions of the Owner and all existing state and local regulations regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

22. Removal of Debris, Cleaning, Etc.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for work, and put the whole site of the work and public rights of way in a neat and clean condition.

23. Inspection

- (a) All materials and workmanship shall be subject to inspection, examination, or test by the Owner and Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction occurs. The Owner shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the Owner may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any Monies which may be due the Contractor, without prejudice to any other rights or remedies of the Owner.
- (b) The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. All tests by the Owner will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the technical specifications.
- (c) The Contractor shall notify the Owner sufficiently in advance of back filling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the Owner, the Contractor shall uncover for inspection and recover such facilities at his own expense, when so requested by the Owner.
- (d) Should it be considered necessary or advisable by the Owner at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or his subcontractors, the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

- (e) Inspection of materials and appurtenances to be incorporated in the improvements included in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the technical specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.
- (f) Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the Owner or its agents shall relieve the Contractor or his sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

24. Review by Owner

The Owner and its authorized representatives and agents shall have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however that all instructions and approval with respect to the work will be given to the Contractor only by the Owner through its authorized representatives or agents.

25. Final Inspection

When the Improvements included in this Contract are substantially completed, the Contractor shall notify the Owner in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The Owner will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable.

26. Deduction for Uncorrected Work

If the Owner deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the Owner and subject to settlement, in case of dispute, as herein provided.

27. Warranty of Title

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase or other agreement by which an interest is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed by him to the Owner free from any claims, liens, or charges. Neither the Contractor nor any person, firm, or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

28. Warranty of Workmanship and Materials

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the improvements included in this Contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy

any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of 12 months from the date of final acceptance of the work.

29. Compliance with Air and Water Acts

- (a) In compliance with the Clean Air Act, as amended, 41 U.S.C. Sec. 7401 et. seq., and the regulations of the Environmental Protection Agency with respect thereto, the Contractor agrees that:
- 1) Any facility to be utilized in the performance of this contract or any subcontract shall not be a facility listed on the EPA List of Violating Facilities pursuant to 40 CFR 15.20.
 - 2) He will comply with all requirements of Section 114 of the Clean Air Act, as amended.
 - 3) Materials utilized in the project shall be free of any hazardous materials, except as may be specifically provided for in the specifications.
- (b) If the Contractor encounters existing material on sites owned or controlled by the Owner or in material sources that are suspected by visual observation or smell to contain hazardous materials, the Contractor shall immediately notify the Engineer and the Owner. The Owner will be responsible for testing for and removal or disposition of hazardous materials on sites owned or controlled by the Owner. The Owner may suspend the work, wholly or in part during the testing, removal or disposition of hazardous materials on sites owned or controlled by the Owner.

30. Section 109 of the Housing and Community Development Act of 1974

No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

31. The Provision of Local Training, Employment, and Business Opportunities

- (a) To the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.
- (b) The Contractor will include this clause in every subcontract for work in connection with the project.

32. Non Segregated Facilities

The Contractor certifies that he does not and will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not and will not permit his employees any segregated facilities at any of his establishments, or permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. As used in this paragraph the term "segregated facilities" means any waiting rooms, work areas, rest rooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise.

33. Job Offices

- (a) The Contractor and his subcontractors may maintain such office and storage facilities on the site as are necessary for the proper conduct of the work. These shall be located so as to cause no

interference to any work to be performed on the site. The Owner shall be consulted with regard to locations.

- (b) Upon completion of the improvements, or as directed by the Owner, the Contractors shall remove all such temporary structures and facilities from the site, and leave the site of the work in the condition required by the Contract.

34. Partial Use of Site Improvements

The Owner may give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected and can be accepted as complying with the technical specifications and if in its opinion, each such section is reasonably safe, fit, and convenient for the use and accommodation for which it was intended, provided:

- (a) The use of such sections of the Improvements shall in no way impede the completion of the remainder of the work by the Contractor.
- (b) The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.
- (c) The period of guarantee stipulated in the Section 29 hereof shall not begin to run until the date of the final acceptance of all work which the Contractor is required to construct under this Contract.

BID PROPOSAL

The bidder hereby proposes to furnish all labor, material, equipment and incidentals for:

Gum Bayou Tributary Channel Improvements

Enclosed is a Cashier's Check or Bid Bond in the sum of 5% of the greatest amount bid.

Bidder agrees to perform in accordance with the requirements of the contract documents in consideration of payment by the County of the prices in this proposal.

IN CASE OF DISCREPANCY BETWEEN UNIT PRICES AND EXTENDED PRICES, UNIT PRICES WILL GOVERN.

This bid sheet must be completely filled out in ink or typewritten with any necessary supplemental information attached.

The undersigned hereby agrees to all of the foregoing terms and provisions and to all terms and provisions of the contract, if awarded, which includes all provisions of this bid package.

BIDDER _____

SIGNATURE _____

PRINT NAME _____

TITLE _____

ADDRESS _____

CITY, STATE _____

ZIP _____

TELEPHONE _____

FAX NO _____

DATE _____

TAX I.D. No. _____

GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
 BID PROPOSAL

Item No.	Description ⁽¹⁾	Approx. Qty.	Unit	Unit Price ⁽²⁾ In Words	Unit Price	Total Amount
1	Mobilization	1	LS	_____ Dollars _____ Cents	\$ _____	\$ _____
2	Clearing and Grubbing of Right of Way	38	STA.	_____ Dollars _____ Cents	\$ _____	\$ _____
3	Excavation	5251	CY	_____ Dollars _____ Cents	\$ _____	\$ _____
4	Precast Reinforced Concrete Box Sewers (6 ft. x 4ft.)	500	LF	_____ Dollars _____ Cents	\$ _____	\$ _____
5	Concrete Structures (Headwalls)	20	CY	_____ Dollars _____ Cents	\$ _____	\$ _____
6	Hydromulch Seeding for Erosion Control and Stabilization	8.75	Ac.	_____ Dollars _____ Cents	\$ _____	\$ _____
7	Sodding for Erosion Control and Stabilization	425	SY	_____ Dollars _____ Cents	\$ _____	\$ _____
8	Reinforced Filter Fabric Fence	7040	LF	_____ Dollars _____ Cents	\$ _____	\$ _____
9	Stabilized Construction Access	170	SY	_____ Dollars _____ Cents	\$ _____	\$ _____

GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
 BID PROPOSAL

Item No.	Description ⁽¹⁾	Approx. Qty.	Unit	Unit Price ⁽²⁾ In Words	Unit Price	Total Amount
10	Concrete Truck Washout Area	1	LS	_____ Dollars _____ Cents	\$ _____	\$ _____
11	Site Restoration	1	LS	_____ Dollars _____ Cents	\$ _____	\$ _____
12	Install, Maintain and Remove In Channel Rock Filter Dam	1	LS	_____ Dollars _____ Cents	\$ _____	\$ _____
13	Construction Safety Fencing	500	LF	_____ Dollars _____ Cents	\$ _____	\$ _____
14	SWPPP Inspection and Maintenance	6	Mo.	_____ Dollars _____ Cents	\$ _____	\$ _____
15	Project Sign	1	Ea	_____ Dollars _____ Cents	\$ _____	\$ _____

Total Amount Base Items _____
 (Items 1 thru 15)

GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS
 BID PROPOSAL

Extra Unit Items

Item No.	Description ⁽¹⁾	Approx. Qty.	Unit	Unit Price ⁽²⁾ In Words	Unit Price	Total Amount
16	"Extra Bank Sand Backfill" Complete in Place	100	CY	_____ Dollars _____ Cents	\$ _____ (\$10.00 Min.)*	\$ _____
17	"Extra Crushed Limestone Bedding" Complete in Place	50	CY	_____ Dollars _____ Cents	\$ _____ (25.00 Min.)*	\$ _____
18	"Extra Cement Stabilized Sand Complete in Place	5	Ton	_____ Dollars _____ Cents	\$ _____ (\$30.00 Min.)*	\$ _____
19	"Extra Class A Concrete Complete in Place	25	CY	_____ Dollars _____ Cents	\$ _____ (\$100.00 Min.)*	\$ _____
20	"Extra" Reinforcing Steel Complete in Place	250	LB	_____ Dollars _____ Cents	\$ _____ (1.00 Min.)*	\$ _____

* Indicates the minimum allowable unit price that will be accepted for the extra unit items. The Contractor may bid more than this amount.

Total Amount "Extra" Unit Items _____
 (Items 16 thru 20)

Total Amount Bid _____
 (Items 1 thru 20)

Subtotal Base Bid Items

\$ _____

Subtotal Extra Unit Price Items

\$ _____

TOTAL: (Must agree with bid)

\$ _____

Notes:

(1) The intent of the Contract Documents is for the Contractor to include all items necessary for the proper execution and completion of the Work described in the Contract Documents. No separate measurement and payment shall be made for any work unless identified as a pay item in the BID. Include the cost of work not identified as a separate pay item in Contract price bid for items of which this work is a component. In case of discrepancy between measurement and payment with BID and Technical Specification Section, the BID shall govern.

(2) In the event of a discrepancy, this column shall govern.

CONTRACT AWARD

CONTRACT FOR: GUM BAYOU TRIBUTARY CHANNEL IMPROVEMENTS

THIS CONTRACT IS ENTERED INTO BETWEEN GALVESTON COUNTY AND THE CONTRACTOR NAMED BELOW PURSUANT TO SUBCHAPTER B, CHAPTER 271, TEXAS LOCAL GOVERNMENT CODE, AND THE REFERENCED INVITATION TO BID.

Contract No: 20-1114

Bid No: ITB #B201034

Contractor: _____

The Specifications and Drawings are enumerated as follows:

Standard Specifications HR Green Specifications

Special Provisions: None

Special Items: Final Report, Geotechnical Investigation

DRAWINGS: Gum Bayou Tributary Channel Improvements Sheets 1-23

ADDENDA: _____

Contract Award (continued)

Invitation to Bid, General Provisions, Special Provisions for Construction, Bid Forms, Vendor Qualification Packet, Non-Collusion Affidavit, Bid Proposal, Affidavit and Surety Forms, Lobbying Certification, Labor Standards/Prevailing Wage Requirements, Contractor's Local Opportunity Plan, Statement of Bidder's Qualifications, Contractor Certifications, Section 504 Certification "Policy of Nondiscrimination on the Basis of Disability", Bid Bond, Payment Bond, Performance Bond and Attorney Certification, Disaster Recovery Projects, Texas General Land Office Forms, Specifications, Plans and any Addenda attached to this Contract Award are all made a part of this Contract and collectively evidence and constitute the entire contract. Contractor shall furnish all materials, perform all of the work required to be done and do everything else required by these documents.

Time of Completion: The Contractor shall complete the work within 90 Calendar Days of the issuance of the notice to proceed. The time set forth for completion of the work is an essential element of the Contract.

The Contract Sum: The County shall pay the Contractor for performance of the Contract, the sum of _____ Dollars and No/100 (\$_____), payments to be made as described herein.

Performance Bond required: (x) yes () no
Payment Bond required: (x) yes () no

This Contract is issued pursuant to award made by Commissioners' Court on _____, 20__.

EXECUTED this ____ day of _____, 20__.

COUNTY OF GALVESTON, TEXAS

BY: _____
MARK HENRY, County Judge

ATTEST:

DWIGHT SULLIVAN, County Clerk

CONTRACTOR

BY: _____
Signature

Printed Name - Title

CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

TO (Owner): Galveston County

PROJECT NO:

PROJECT: Gum Bayou Tributary Channel
(name, address) Improvements
Galveston County, Texas

CONTRACT FOR:

CONTRACT DATE:

State of: Texas

County of: Galveston

The undersigned, hereby certifies that, except as listed below, he has paid in full or has otherwise satisfied all obligations for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or his property might in any way be held responsible.

EXCEPTIONS: (If none, write "None". If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exception.)

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Consent of Surety to Final Payment.
Whenever Surety is involved, consent of Surety is required. CONSENT OF SURETY, may be used for this purpose.
Indicate attachment: yes _____ no _____

The following supporting documents should be attached hereto if required by the Owner:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers to the extent required by the Owner, accompanied by a list thereof.
3. Contractor's Affidavit of Release of Liens.

CONTRACTOR:

Address:

BY:

Subscribed and sworn to before me this

day of _____ 20

Notary Public:

My Commission Expires:

CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIEN

TO (Owner): Galveston County

PROJECT: Gum Bayou Tributary Channel
(name, address) Improvements
Galveston County, Texas

PROJECT NO:

CONTRACT FOR:

CONTRACT DATE:

State of: Texas

County of: Galveston

The undersigned, hereby certifies that, to the best of his knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services who have or may have liens against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS: (If none, write "None". If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exception.)

- SUPPORTING DOCUMENTS ATTACHED HERETO:
1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
 2. Separate Releases or Waivers of Liens from Sub-contractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR:

Address:

BY:

Subscribed and sworn to before me this

day of 20

Notary Public:

My Commission Expires:

CONSENT OF SURETY COMPANY TO FINAL PAYMENT

TO (Owner): Galveston County

PROJECT NO:

PROJECT: Gum Bayou Tributary Channel
(name, address) Improvements
Galveston County, Texas

CONTRACT FOR:

CONTRACT DATE:

CONTRACTOR:

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the
(here insert name and address of Surety as it appears in the bond).

, SURETY COMPANY,

on bond of (here insert name and address of Contractor)

, CONTRACTOR,

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety
Company of any of its obligations to (here insert name and address of Owner)

, OWNER,

as set forth in the said Surety Company's bond.

IN WITNESS WHEREOF,
the Surety Company has hereunto set its had this

day of _____ 20__ .

Surety Company

Signature of Authorized Representative

Title

ATTEST:
(Seal):

NOTE: This form is to be use as a companion document to Contractor's Affidavit of Payment of Debts and Claims.

Federal Labor Standards Provisions

U.S. Department of Housing
And Urban Development

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage rate and fringe benefits therefore only when the following criteria have been met.

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140).

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of an laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140).

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract, in the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates or contributions or costs anticipated for bona fide fringe benefits or cash equivalents there of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017).

(ii)(a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-0014-1), U. S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149).

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.5(a)(3)(i) and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph A.3.(ii)(b) of this section.

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph A.3.(i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance,

or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

(4) Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration. Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may be appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause

include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part "Whoever, for the purpose of ... influencing in any way the action of such Administration... makes, utters or publishes any statement, knowing the same to be false... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat.96).

(3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Title 29 - LABOR

Subtitle A - Office of The Secretary of Labor

**PART 3 - CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK
FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES**

- ✓ Sec.
- ✓ 3.1 Purpose and scope
- 3.2 Definitions
 - ✓ 3.3 Weekly statement with respect to payment of wages
 - 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.
 - ✓ 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.
 - ✓ 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.
 - ✓ 3.7 Applications for the approval of the Secretary of Labor
 - ✓ 3.8 Action by the Secretary of Labor upon applications.
 - ✓ 3.9 Prohibited payroll deductions.
- 3.10 Methods of payment of wages.
- 3.11 Regulations part of contract.

AUTHORITY: The provisions of this Part 3 issued under R.S. 161, sec. 2, 48 Stat. §48; Reorg. Plan No. 14 of 1950, 64 Stat. 1267, 5 U.S.C. Appendix; 5 U.S.C. 301; 40 U.S.C. 276c.

SOURCE: The provisions of this Part 13 appear at 29 F.R. 97, Jan. 4, 1964, unless otherwise noted.

Section 3.1 Purpose and Scope

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with Federally-assisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

Section 3.2 Definitions.

As used in the regulations in this part:

(a) The terms "building" or "work" generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges) dams, plants) highways, parkways, streets) subways, tunnels, sewers, mains, power lines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing *sentence*, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the

materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of the regulations in this part.

(b) The terms "construction," "prosecution," "completion," or "repair" mean all types of work done on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

(c) The terms "public building" or "public work" include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal agency is a contracting party, regardless of whether title thereof is in a Federal agency.

(d) The term "building or work financed in whole or in part by loans or grants from the United States" includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term includes building or work for which the Federal assistance granted is in the form of loan guarantees or insurance.

(e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is "employed" and receiving "wages," regardless of any contractual relationship alleged to exist between him and the real employer.

(f) The term "any affiliated person" includes a spouse, child, parent, or other close relative of the contractor or subcontractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary or otherwise, and an officer or agent of such corporation.

(g) The term "Federal agency" means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentalities.

{29 FR 97, Jan. 4, 1964, as amended at 33 FR 32575, Nov. 27, 1973}

Section 3.3 Weekly statement with respect to payment of wages.

(a) As used in this section, the term "employee" shall not apply to persons in classifications higher than that of laborer or mechanic and those who are the immediate supervisors of such employees.

(b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States) shall furnish each week a statement with respect to the wages paid each of its employees engaged on work covered by 29 CFR Parts 3 and 5 during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, and shall be on form WH 348, "Statement of Compliance," or on an identical form on the back of WH 347, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Sample copies of WH 347 and WH 348 may be obtained from the Government contracting or sponsoring agency, and copies of these form may be purchased at the Government Printing Office.

(c) The requirements of this section shall not apply to any contract of \$2,000 or less.

(d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.

{29 F.R. 95, Jan. 4, 1964, as amended at 33 FR. 10186, July 17, 1968}

Section 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.

(a) Each weekly statement required under §3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or if there is no representative of a Federal or State agency at the site of the building or work, the statement shall be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures

prescribed by the United States Department of Labor.

(b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract. The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.

Section 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

(a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.

(b) Any deduction of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A "bona fide prepayment of wages" is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.

(c) Any deduction of amounts required by court process to be paid to another, unless, the deduction is in favor of the contractor, subcontractor or any affiliated person, or when collusion or collaboration exists.

(d) Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions, or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: Provided, however, That the following standards are met: (1) The deduction is not otherwise prohibited by law; (2) it is either: (i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or

(ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; (3) no profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and (4) the deductions shall serve the convenience and interest of the employee.

(e) Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.

(f) Any deduction requested by the employee to enable him to re]lay loans to or to purchase shares in. credit unions organized and operated in accordance with Federal and State credit union statutes.

(g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasi-governmental agencies, such as the American Red Cross.

(h) Any deduction voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.

(i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: Provided, however, that a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.

(j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of this title. When such a deduction is made the additional records required under §516.27(a) of this title shall be kept.

(k) Any deduction for the cost of safety equipment of nominal value purchased by the employee as his own property for his personal protection in his work, such as safety shoes, safety glasses, safety gloves, and hard hats, if such equipment is not required by law to be furnished by the employer, if such deduction is not violative of the Fair Labor Standards Act or prohibited by other law, if the cost on which the deduction is based does not exceed the actual cost to the employer where the equipment is purchased from him and does not include any direct or indirect monetary return to the employer where the equipment is purchased from a third person, and if the deduction is either (1) voluntarily consented to be the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance; or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees.

{36F.R. 9770, May 28, 1971.}

Section 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under §3 .5. The Secretary may grant permission whenever he finds that:

- (a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise;
- (b) The deduction is not otherwise prohibited by law;
- (c) The deduction is either (1) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and
- (d) The deduction serves the convenience and interest of the employee.

Section 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under §3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

- (a) The application shall be in writing and shall be addressed to the Secretary of Labor.
- (b) The application need not identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions on all current and future contracts of the applicant for a period of 1 year. A renewal of permission to make such payroll deduction will be granted upon the submission of an application which makes reference to the original application, recites the date of the Secretary of Labor's approval of such deductions) states affirmatively that there is continued compliance with the standards set forth in the provisions of §3 .6, and specifies any conditions which have changed in regard to the payroll deductions.
{36 F.R. 9770, May 28, 1971.}
- (c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of §3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.
- (d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of laborers or mechanics from whose wages the proposed deduction would be made,
- (e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

Section 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of §3.6; and shall notify the applicant in writing of his decision.

Section 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under §3.6 are prohibited.

Section 3.10 Methods of payment of wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

Section 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see §5.5(a) of this subtitle.

"General Decision Number: TX20200046 01/03/2020

Superseded General Decision Number: TX20190046

State: Texas

Construction Type: Heavy

Counties: Brazoria, Fort Bend, Galveston, Harris, Matagorda, Montgomery, Waller and Wharton Counties in Texas.

FLOOD CONTROL PROJECTS ONLY, (Does not Include any Water & Sewer Line work; Sewage Collection and Disposal Lines; Sewers (Sanitary Storm, etc.), or Shoreline Maintenance Water Mains and Water Supply Lines).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 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 \$10.80 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 2020. 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	01/03/2020

SUTX1998-009 03/26/1998

	Rates	Fringes
ASPHALT DISTRIBUTOR.....	\$ 9.47	
Asphalt Paving Machine.....	\$ 10.05	
Asphalt Raker.....	\$ 8.28	
Asphalt Shoveler.....	\$ 7.45	
Batching Plant Weigher.....	\$ 11.11	
Broom or Sweeper Operator.....	\$ 8.01	
Bulldozer.....	\$ 9.91	
CARPENTER.....	\$ 10.35	
Concrete Curbing Mach.....	\$ 8.80	
Concrete Finisher-Paving.....	\$ 9.87	
Concrete Finisher-Structures.....	\$ 9.86	
Concrete Finishing Machine.....	\$ 11.79	
Concrete Joint Sealer.....	\$ 10.50	
Concrete Paving Float.....	\$ 9.30	
Concrete Paving Saw.....	\$ 10.01	
Concrete Paving Spreader.....	\$ 9.32	
Concrete Rubber.....	\$ 9.00	
Crane, Clamshell, Backhoe, Derrick, Dragline, Shovel.....	\$ 11.35	
Crusher or Screening Plant Operator.....	\$ 11.00	
ELECTRICIAN.....	\$ 16.15	
Flagger.....	\$ 7.25	
Form Builder (Structures).....	\$ 9.96	

Form Liner - Paving & Curb.....	\$ 9.03
Form Setter (PAVING/CURB).....	\$ 8.86
Form Setter-Structures.....	\$ 9.05
Foundation Drill Operator, Crawler Mounted.....	\$ 12.59
Foundation Drill Operator, Truck Mounted.....	\$ 12.73
Front End Loader.....	\$ 9.29
Labor Common.....	\$ 7.45
Laborer-Utility.....	\$ 8.53
Lineperson.....	\$ 7.50
MANHOLE BUILDER (Brick).....	\$ 8.49
MECHANIC.....	\$ 11.38
Milling Machine Operator.....	\$ 10.43
Mixer.....	\$ 7.94
Motor Grader	
FINE GRADE.....	\$ 11.11
Other.....	\$ 10.67
Oiler.....	\$ 9.56
Painter-Structures.....	\$ 14.00
Pavement Marking Machine.....	\$ 7.45
Piledriver.....	\$ 10.96
Pipe layer.....	\$ 8.49
Reinforcing Steel Setter Paving.....	\$ 12.50
Reinforcing Steel Setter Structures.....	\$ 12.47
Roller, Pneumatic, Self	

Propelled.....	\$ 7.96
Roller, Steel Wheel Other Flatwheel or Tamping.....	\$ 7.61
Roller, Steel Wheel Plant Mix Pavements.....	\$ 9.25
Scraper.....	\$ 8.69
Servicer.....	\$ 9.51
SIGN ERECTOR.....	\$ 10.06
Sign Installer.....	\$ 7.45
Slipform Machine Operator.....	\$ 9.20
Spreader Box Operator.....	\$ 9.08
Steelworker Structural.....	\$ 10.35
Tractor-Crawler Type.....	\$ 10.12
Tractor-Pneumatic.....	\$ 8.99
Traveling Mixer.....	\$ 9.35
Trenching Machine, Heavy.....	\$ 13.56
Trenching Machine, Light.....	\$ 10.50
Truck Driver Lowboy Float.....	\$ 11.29
Truck Driver Single Axle Heavy...	\$ 8.76
Truck Driver Single Axle, Light.....	\$ 8.15
Truck Driver Tandem Axle Semi-Trailer.....	\$ 8.00
Wagon Drill, Boring Machine.....	\$ 10.15
WELDER.....	\$ 10.43
Work Zone Barricade.....	\$ 7.45

WELDERS - Receive rate prescribed for craft performing

operation to which welding is incidental.

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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.

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END OF GENERAL DECISION

"

CONTRACTOR'S LOCAL OPPORTUNITY PLAN

_____ agrees to implement the following specific affirmative action steps directed at increasing the utilization of lower income residents and businesses within the County of Galveston.

- A. To ascertain from the Grant Recipient's CDBG program official the exact boundaries of the project area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plan.
- B. To attempt to recruit from within the city the necessary number of lower income residents through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within and servicing the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan, or the U.S. Employment Service.
- C. To maintain a list of all lower income residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and if a vacancy exists.
- D. To insert this plan in all bid documents and to require all bidders on subcontracts to submit an affirmative action plan including utilization goals and the specific steps planned to accomplish these goals.
- E. To insure that subcontracts (greater than \$10,000), which are typically let on a negotiated rather than a bid basis in areas other than the covered project area, are also let on a negotiated basis, whenever feasible, in a covered project area.
- F. To formally contact unions, subcontractors, and trade associations to secure their cooperation in this effort.
- G. To insure that all appropriate project area business concerns are notified of pending sub-contractual opportunities.
- H. To maintain records, including copies of correspondence, memoranda, etc., which document that all of the above affirmative action steps have been taken.
- I. To appoint or recruit an executive official of the company or agency as Equal Opportunity Officer to coordinate the implementation of this plan.
- J. To maintain records concerning the amount and number of contracts, subcontracts, and purchases which contribute to objectives.
- K. To maintain records of all projected work force needs for all phases of the project by occupation, trade, skill level, and number of positions and to update these projections based on the extent to which hiring meets these Local Opportunity objectives.

As officers and representatives of _____, we the undersigned have read and fully agree to this Plan, and become a party to the full implementation of the program and its provisions.

Signature

Title

Date

PROPOSED CONTRACTS BREAKDOWN

Type of Contracts	No. of Contracts	Approx. Total Dollar Amount	Estimated No. to local Business	Estimated \$ Amount Local Business

ESTIMATED PROJECT WORKFORCE BREAKDOWN

Work Classifications	Total Estimated Positions	No. of Positions Currently Filled	No. of Positions not Filled	No. of Positions to fill with L/M Residents
Totals				

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

Name of Bidder: _____ Date Organized: _____

Address: _____ Date Incorporated _____

Number of Years in contracting business under present name _____:

CONTRACTS ON HAND:

Contract	Amount \$	Completion Date
_____	_____	_____
_____	_____	_____
_____	_____	_____

Type of work performed by your company: _____

Have you ever failed to complete any work awarded to you? _____

Have you ever defaulted on a contract? _____

List the projects most recently completed by your firm (include project of similar importance):

Project	Amount \$	Mo/Yr Completed
_____	_____	_____
_____	_____	_____
_____	_____	_____

Major equipment available for **this** contract: _____

Attach resume(s) for the principal member(s) of your organization, including the officers as well as the proposed superintendent for the project.

Credit available: \$ _____ Bank reference: _____

The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the _____ in verification of the recitals comprising this Statement of Bidder's Qualifications.

Executed this _____ day of _____, 20__.

By:(signature) _____ Title: _____

(print name) _____

CONTRACTOR CERTIFICATIONS

<p>U.S. Department of Housing and Urban Development</p> <p>CERTIFICATION OF BIDDER REGARDING CIVIL RIGHTS LAWS AND REGULATIONS</p>	
<p>INSTRUCTIONS</p>	
<p>CERTIFICATION OF BIDDER REGARDING Executive Order 11246 and Federal Laws Requiring Federal Contractor to adopt and abide by equal employment opportunity and affirmative action in their hiring, firing, and promotion practices. This includes practices related to race, color, gender, religion, national origin, disability, and veterans' rights.</p>	
<p>NAME AND ADDRESS OF BIDDER (include ZIP Code)</p>	
<p>CERTIFICATION BY BIDDER</p>	
<p>Bidder has participated in a previous contract or subcontract subject to Civil Rights Laws and Regulations.</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>The undersigned hereby certifies that:</p> <p><input type="checkbox"/> The <u>Provision of Local Training, Employment, and Business Opportunities</u> clause (Section 3 provision) is included in the Contract. A written Section 3 plan (Local Opportunity Plan) was prepared and submitted as part of the bid proceedings (if bid equals or exceeds \$100,000).</p> <p><input type="checkbox"/> The <u>Non Segregated Facilities</u> clause (Section 109 provision) is included in the Contract. No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964.</p> <p><input type="checkbox"/> The <u>Equal Employment Opportunity</u> clause is included in the Contract (if bid equals or exceeds \$10,000).</p> <p><input type="checkbox"/> The <u>Affirmative Action for Handicapped Workers</u> clause is included in the contract.</p>	
<p>Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>NAME AND TITLE OF SIGNER (Please type)</p>	
<p>SIGNATURE</p>	<p>DATE</p>

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
 COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
 CONTRACTOR'S CERTIFICATION

CONCERNING LABOR STANDARDS AND PREVAILING WAGE REQUIREMENTS

TO (appropriate recipient)	DATE
	PROJECT NUMBER (if any)
C/O	PROJECT NAME

1. The undersigned, having executed a contract with _____
 _____ for the construction of the above-identified project, acknowledges that:

- (a) The Labor Standards provisions are included in the aforesaid contract,
- (b) Correction of any infractions of the aforesaid conditions, including infractions by any of his subcontractors and any lower tier subcontractors, is his responsibility.

2. He certifies that:

- (a) Neither he nor any firm, partnership or association in which he has substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6(b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5) or pursuant to Section 3(a) of the Davis-Bacon Act, as amended.
- (b) No part of the aforementioned contract has been or will be subcontracted to any subcontractor if such subcontractor or any firm, corporation, partnership or association in which such subcontractor has a substantial interest is designated as an ineligible contractor pursuant to any of the aforementioned regulatory or statutory provisions.

3. He agrees to obtain and forward to the aforementioned recipient within ten days after the execution of any subcontract, including those executed by his subcontractors and any lower tier subcontractors, a Subcontractor's Certification Concerning Labor Standards and Prevailing Wage Requirements executed by the subcontractors.

4. He certifies that:

- (a) The legal name and the business address of the undersigned are:

(b) The undersigned is:

(1) A SINGLE PROPRIETORSHIP	(3) A CORPORATION ORGANIZED IN THE STATE OF
(2) A PARTNERSHIP	(4) OTHER ORGANIZATION (Describe)

(c) The name, title and address of the owner, partners or officers of the undersigned are:

NAME	TITLE	ADDRESS

(d) The names and addresses of all other persons having a substantial interest in the undersigned, and the nature of the interest are:

NAME	ADDRESS	NATURE OF INTEREST

(e) The names, addresses and trade classifications of all other building construction contractors in which the undersigned has a substantial interest are:

NAME	ADDRESS	TRADE CLASSIFICATION

Date _____

(Contractor)

By _____



Equal Opportunity Guidelines for Construction Contractors

1. **What are the responsibilities of the offeror or bidder to insure EEO?**
The offeror or bidder must comply with the "Equal Opportunity Clause" and the "Standard Federal Equal Opportunity Construction Contract Specifications."
2. **Are construction contractors required to insure a comfortable working environment for all employees?**
Yes, it is the construction contractor's responsibility to provide an environment free of harassment, intimidation, and coercion to all employees and to notify all foremen and supervisors to carry out this obligation, with specific attention to minority or female individuals.
3. **To alleviate developing separate facilities for men and women on all sites, can a construction contractor place all women employees on one site?**
No, two or more women should be assigned to each site when possible.
4. **Are construction contractors required to make special outreach efforts to Section 3 or minority and female recruitment sources?**
Yes, construction contractors must establish a current list of Section 3, minority and female recruitment sources. Notification of employment opportunities, including the availability of on-the-job training and apprenticeship programs, should be given to these sources. The efforts of the construction contractors should be kept in file.
5. **Should records be maintained on the number of Section 3 residents, minority, and females applying for positions with construction contractors?**
Yes, records must be maintained to include a current list of names, addresses and telephone numbers of all Section 3, minority and female applicants. The documentation should also include the results of the applications submitted.
6. **What happens if a woman or minority is sent to the union by the Contractor and is not referred back to the Contractor for employment?**
If the unions impede the construction contractor's responsibility to provide equal employment opportunity, a written notice should be submitted to TXCDBG.
7. **What efforts are made by construction contractors to create entry-level positions for Section 3 residents, women and minorities?**
Construction contractors are required to develop on-the-job training programs, or participate in training programs, especially those funded by the Department of Labor, to create positions for Section 3 residents, women, and minorities and to meet employment needs.

- 8. Are any efforts made by the Contractor to publicize their EEO policy?**
Yes, the construction contractor is responsible for notifying unions and sources of training programs of their equal employment opportunity policy. Unions should be requested to cooperate in the effort of equal opportunity. The policy should be included in any appropriate manuals, or collective bargaining agreements. The construction contractor is encouraged to publicize the equal employment opportunity policy in the company newspaper and annual report. The Contractor is also responsible to include the EEO policy in all media advertisement.
- 9. Are any in-service training programs provided for staff to update the EEO policy?**
At least annually, a review of the EEO policy and the affirmative action obligations are required of all personnel employees of a decision-making status. A record of the meeting including date, time, location, persons present, subject matter discussed, and disposition of the subject matter should be maintained.
- 10. What recruitment efforts are made for Section 3 residents, minorities and women?**
The construction contractor must notify, both orally and in writing, Section 3, minority, and female recruitment sources one month prior to the date of acceptance for apprenticeship or other training programs.
- 11. Are any measures taken to encourage promotions for minorities and women?**
Yes, an annual evaluation should be conducted for all minority and female personnel to encourage these employees to seek higher positions.
- 12. What efforts are taken to insure that personnel policies are in accordance with the EEO policy?**
Personnel policies in regard to job practices, work assignments, etc. should be continually monitored to insure that the EEO policy is carried out.
- 13. Can women be excluded from utilizing any facilities available to men?**
No, all facilities and company activities are non-segregated except for bathrooms or changing facilities to insure privacy.
- 14. What efforts are made to utilize minority and female contractors and suppliers?**
None, however, records are kept of all offers to minority and female construction contractors.
- 15. If a construction contractor participates in a business related association that does not comply with affirmative action standards, does that show his/her failure to comply?**
No, the construction contractor is responsible for their own compliance.
- 16. Will a construction contractor be in violation of EEO policy and affirmative action if he sets up one set of goals to include minorities and women?**
Yes. There is a separate goal for minorities and a separate single goal for women. The construction contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women both minority and non-minority.
- 17. Can a construction contractor hire a subcontractor who has been debarred from government contracts pursuant to EEO?**
No. The construction contractor must suspend, terminate, or cancel its contract with any Subcontractor who is in violation of the EEO policy.
- 18. What effort has been taken by the construction contractor to monitor all employment to insure the company EEO policy is being carried out?**
The construction contractor must designate a responsible individual to keep accurate records of all employees that includes specific information required by the government.

SECTION 504 CERTIFICATION

**POLICY OF NONDISCRIMINATION ON THE BASIS
OF DISABILITY**

The _____ does not discriminate on the basis of disability in the admission or access to, or treatment or employment in, its federally assisted programs or activities.

(Name) _____

(Address) _____

City State Zip

Telephone Number () _____ - _____ Voice

() _____ - _____ TDD

has been designated to coordinate compliance with the nondiscrimination requirements contained in the Department of Housing and Urban Development's (HUD) regulations implementing Section 504 (24 CFR Part 8. dated June 2, 1988).

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, _____ as PRINCIPAL, and _____, as SURETY are held and firmly bound unto _____ hereinafter called the "Owner", in the penal sum of _____ Dollars, (\$ _____), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the Accompanying Bid, dated _____, for _____

NOW, THEREFOR, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefor, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the Owner in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the local Public Agency may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS THEREOF, the above-bounded parties have executed this instrument under their several seals this _____ day of _____, the name and corporate seal of each corporate party being hereto affixed and these present signed by its undersigned representative, pursuant to authority of its governing body.

Attest: _____ (SEAL)
By: _____ (SEAL)
Affix Corporate Seal

Attest: _____
By: _____
Affix Corporate Seal

Attest: _____
By: _____

Countersigned

By _____

* Attorney-in-Fact, State of _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____, Secretary of the Corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the Principal was then _____ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested to, for and in behalf of said corporation by authority of this governing body.

Corporate
Seal

Title: _____

* Power-of-attorney for person signing for surety company must be attached to bond.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor or Company)

(Address)

a _____, hereinafter called Principal,
(Corporation / Partnership)

and _____
(Name of Surety Company)

(Address)

hereinafter called Surety, are held and firmly bound unto

(Name of Recipient)

(Recipient's Address)

hereinafter called OWNER, in the penal sum of \$ _____

Dollars, \$ _____ in lawful money of the United States, for this payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONFIDENTIALITY OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, a copy of which is hereto attached and made a part hereof for the construction of:

(Project Name)

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUB-CONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUB-CONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS 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 or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counter-parts, each on of (Number) which shall be deemed an original, this the _____ day of _____.

ATTEST: _____ (Principal) _____ By _____ (s) (Principal Secretary)

(SEAL)

(Witness as to Principal) (Address)

(Address)

ATTEST: _____ (Surety) _____ By _____ (Attorney in Fact) (Witness as to Surety) _____ (Address) _____ (Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor or Company)

(Address)

a _____ hereinafter called Principal, and

(Name of Surety Company)

(Address)

hereinafter called Surety, are held and firmly bound unto

(Name of Recipient)

(Recipient's Address)

hereinafter called OWNER, in the penal sum of \$ _____ Dollars (\$ ____) in lawful money of the United States, for the payment of which sum well and truly to be made we bind ourselves, successors, and assigns, jointly and severally, firmly in these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER dated the _____ day of _____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW THEREFORE, if the Principal shall well, truly and faithfully perform its duties in all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS 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 or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ day of _____ counterparts, each one of which shall be deemed an original, this the _____ day of _____.

ATTEST: _____
(Principal)

(Principal Secretary) By _____ (s)

(SEAL)

(Witness as to Principal) _____
(Address)

(Address) _____

ATTEST: _____
(Surety)

(Witness as to Surety) By _____
(Attorney in Fact)

(Address) _____
(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

ATTORNEY'S REVIEW CERTIFICATION

I, the undersigned, _____, the duly authorized and acting legal representative of the _____, do hereby certify as follows:

I have examined the attached contract(s) and surety bonds and am of the opinion that each of the agreements may be duly executed by the proper parties, acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties; and that the agreements shall constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

Attorney's signature: _____ Date: _____

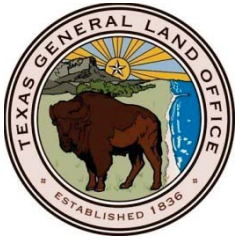
Print Attorney's Name: _____

Disaster Recovery Projects

Attention is called to the fact that not less than, the federally determined prevailing (Davis-Bacon and Related Acts) wage rate, and contained in the contract documents, must be paid on this project. In addition, the successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex age or national origin.

All contractors/subcontractors that are debarred, suspended or otherwise excluded from or ineligible for participation on federal assistance programs may not undertake any activity in part or in full under this project.

Funding for this project is covered under Section 3 of the Housing and Urban Development Act of 1968. All eligible bidders must comply with Section 3 requirements in regards to meeting or exceeding the required objectives for both hiring and subcontracting. In accordance with these objectives, contractors are required to direct their newly created employment and/or subcontracting opportunities to Section 3 Residents and Business Concerns.



Texas General Land Office
 Community Development Block Grant (CDBG)
 Disaster Recovery Program

SECTION 3
RESIDENT EMPLOYMENT OPPORTUNITY DATA
ELIGIBILITY FOR PREFERENCE

Economic Opportunities for Low and Very Low-Income Persons

Grantee/Subrecipient:	Contract Number:	Date:
<input type="text"/>	<input type="text"/>	<input type="text"/>

ELIGIBILITY FOR PREFERENCE

A Section 3 Resident seeking the preference in training and employment provided by this part shall certify, or submit evidence to the Subrecipient, Grantee, Contractor or Subcontractor, if requested, that the person is a Section 3 Resident, as defined in Section CFR 135.5. (An example of evidence of eligibility for the preference is evidence of receipt of public assistance, or evidence of participation in a public assistance program.)

Section 3 Resident Certification
for Worker Seeking Preference in Training
and Employment

RESIDENT COMPLETES THIS SECTION:

I, _____, am a legal resident of the _____

_____ and meet the income eligibility guidelines for a low- or very-low-income person as published on HUD'S income limits www.huduser.org/portal/datasets/il.html and documented on the reverse side of this form.

My permanent address is: _____

I have attached the following documentation as evidence of my status:

Copy of Lease

Copy of receipt of public assistance

Copy of Evidence of participation in a public assistance program

Other Evidence

Resident Signature _____

Date _____

Print Name _____

SECTION 3 INCOME LIMITS

All residents of public housing developments of the Housing Authority of _____

Qualify as Section 3 Residents.

Alternatively, individuals residing in the

City of _____

or County of _____

Who meet the income limits set forth below, can also qualify for Section 3 status.

A picture identification card and proof that illustrates applicant is a current resident of the subject area.

HUD updates area median income (AMI) annually and income limits vary by county. To find the latest income limits visit HUD's website: www.huduser.org/portal/datasets/il.html

Eligibility Guideline

Number in Household	Very Low Income (50% AMI)	Low Income (80%)
1 Individual		
2 Individuals		
3 Individuals		
4 Individuals		
5 Individuals		
6 Individuals		
7 Individuals		
8 Individuals		

Signature Field

Date

Print Name



Texas General Land Office
 Community Development Block Grant (CDBG)
 Disaster Recovery Program

CERTIFICATION FOR BUSINESS CONCERNS
Seeking Section 3 Preference in Contracting and
Demonstration of Capability

Economic Opportunities for Low and Very Low-Income Persons

Grantee/Subrecipient:	Contract Number:	Date:
<input type="text"/>	<input type="text"/>	<input type="text"/>

CONTRACTOR INFORMATION

Name of Business

Address of Business

- Type of Business: Corporation Partnership Non-Profit
 Sole Proprietorship Joint Venture Consortium

Attach the following documentation as evidence of Section 3 eligible status:
 (Definition of "Section 3 Business Concern" in 24 CFR 135 describes the three alternative qualifications.)

For Business claiming status as a Section 3 resident-owned enterprise:

- | | |
|---|---|
| <input type="checkbox"/> Copy of resident lease | <input type="checkbox"/> Copy of receipt of public assistance |
| <input type="checkbox"/> Copy of evidence of participation in a public assistance program | <input type="checkbox"/> Other evidence |

For business entity as applicable:

- | | |
|---|---|
| <input type="checkbox"/> Copy of Articles of Incorporation | <input type="checkbox"/> Certificate of Good Standing |
| <input type="checkbox"/> Assumed Business Name Certificate | <input type="checkbox"/> Partnership Agreement |
| <input type="checkbox"/> List of owners/stockholders and % ownership of each appointed officers | <input type="checkbox"/> Corporation Annual Report |
| <input type="checkbox"/> Organization chart with names and titles and brief function statement | <input type="checkbox"/> Latest Board minutes |
| | <input type="checkbox"/> Additional documentation |

For business entity claiming Section 3 status by subcontracting 25 percent of the dollar awarded to qualified Section 3 business(es):

- List of subcontracted Section 3 business(es) and subcontract amount

For business claiming Section 3 status, by claiming at least 30 percent of their workforce are currently Section 3 residents or were Section 3 eligible residents within 3 years of date of first employment with the business:

- | | |
|---|---|
| <input type="checkbox"/> List of all current full-time employees | <input type="checkbox"/> List of employees claiming Section 3 status |
| <input type="checkbox"/> PHA/IHA Residential lease less than 3 years from day of employment | <input type="checkbox"/> Other evidence of Section 3 status less than 3 years from date of employment |

Evidence of ability to perform successfully under the terms and conditions of the proposed contract:

- | | |
|---|--|
| <input type="checkbox"/> Current financial statement | <input type="checkbox"/> Statement of ability to comply with public policy |
| <input type="checkbox"/> List of owned equipment | |
| <input type="checkbox"/> List of all contracts for the past two years | |

Authorized Name and Signature _____

Date _____

(Corporate Seal)

Attested By: _____



Texas General Land Office
 Community Development Block Grant (CDBG)
 Disaster Recovery Program

**Contractor Certification of Efforts to Fully Comply
 with Employment and Training Provisions of Section 3**

Economic Opportunities for Low and Very Low-Income Persons

THE BIDDER REPRESENTS AND CERTIFIES AS PART OF ITS BID/OFFER THAT IT:

- Is a Section 3 Business Concern. A Section 3 Business Concern means a business concern:
 1. That is 51% or more owned by Section 3 Resident(s); or
 2. Whose permanent, full-time employees include persons, at least 30% of whom are currently Section 3 Residents, or
 3. That provides evidence of a commitment to subcontract in excess of 25% of the dollar value of all subcontracts to be awarded to Section 3 Business Concerns, that meet the qualifications set forth in paragraphs 1 or 2 herein.

- Is **NOT** a Section 3 Business Concern, but who has and will continue to seek compliance with Section 3 by certifying the following efforts to be undertaken.

EFFORTS TO AWARD SUBCONTRACTOR TO SECTION 3 CONCERNS
 (Check ALL that apply)

- By contacting business assistance agencies, minority contractors associations and community organizations to inform them of the contracting opportunities and requesting their assistance in identifying Section 3 businesses which may solicit bids for a portion of the work.
- By advertising contracting opportunities by posting notices, which provide general information about the work to be contracted and where to obtain additional information, in the common areas of the applicable development(s) owned and managed by the Housing Authority.
- By providing written notice to all known Section 3 Business Concerns of contracting opportunities. This notice should be in sufficient time to allow the Section 3 Business Concerns to respond to bid invitations
- By following up with Section 3 Business Concerns that have expressed interest in the contracting opportunities.
- By coordinating meetings at which Section 3 Business Concerns could be informed of specific elements of the work for which subcontract bids are being sought.
- By conducting workshops on contracting procedures and specific contracting opportunities in a timely manner so that Section 3 Business Concerns can take advantage of contracting opportunities.
- By advising Section 3 Business Concerns as to where to seek assistance to overcome barriers such as inability to obtain bonding, lines of credit, financing, or insurance and aiding Section 3 Businesses in qualifying for such bonding, financing, insurance, etc....
- Where appropriate, by breaking out contract work into economically feasible units to facilitate participation by Section 3 businesses.
- By developing and using a list of eligible Section 3 Business Concerns.
- By actively supporting and undertaking joint ventures with Section 3 Businesses.

EFFORTS TO PROVIDE TRAINING AND EMPLOYMENT TO SECTION 3 RESIDENTS

- By entering into a "first source" hiring agreements with organizations representing Section 3 Residents.
- By establishing training programs, which are consistent with the requirements of the Department of Labor, specifically for Section 3 Residents in the building trades.
- By advertising employment and training positions to dwelling units occupied by Category 1 and 2 residents.
- By contacting resident councils and other resident organizations in the affected housing development to request assistance in notifying residents of the training and employment positions to be filled.
- By arranging interviews and conducting interviews on the job site.
- By undertaking such continued job-training efforts as may be necessary to ensure the continued employment of Section 3 Residents previously hired for employment opportunities.
- By posting job vacancies in Work-In-Texas or with my local Workforce Solutions Center.

Contractor Name/Business Name:

Date:

Authorized Representative Name:

Signature:



Texas General Land Office
Community Development Block Grant (CDBG)
Disaster Recovery Program

Code of Federal Regulations
Title 24- Housing and Urban Development

Volume: 1

Date: 2003-04-01

Original Date: 2003-04-01

Title: Section 135.38- Section 3 Clause

Context: Title 24- Housing and Urban Development. Subtitle B- Relating to Housing and Urban Development . Chapter 1- Office of Assistant Secretary for Equal Opportunity, Department. Part 135 Economic Opportunities for Low-and Very Low-Income Persons. Subpart B- Economic Opportunities for Section 3 Residents and Section 3 Business Concerns.

§ 135.38 Section 3 clause.

All section 3 covered contracts shall include the following clause (referred to as the section 3 clause):

- A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.
- F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

Project Specifications

Standard Specifications:

No.	Specification
102	Clearing and Grubbing
120	Excavation for Channels and other Drainage Facilities
130	Borrow
132	Embankment
160	Topsoil
162	Sodding for Erosion Control and Stabilization
165	Hydromulch Seeding (for Erosion Control and Stabilization)
166	Fertilizer
200	Stripping
230	Crushed Aggregate Base Course
400	Structural Excavation and Backfill
402	Bank Sand Backfill
420	Concrete Structures
430	Construction of Underground Utilities
433	Cement Stabilized Sand Bedding and Backfill Material
440	Reinforcing Steel
480	Precast Reinforced Concrete Box Sewers
495	Removing Old Structures
501	Tree Protection and Trimming
559	Construction Safety Fence
560	Maintenance and Cleanup of Project Site
561	Video Recording Construction
562	Preparing the Right of Way
713	Reinforced Filter Fabric Barrier
724	Stabilized Construction Access (Type I Rocks)
725	General Source Controls
730	Concrete Truck Washout Structures
750	Rock Filter Dams
751	SWPPP Inspection and Maintenance

PROJECT SCOPE

1. Project Scope

Under this contract, the Contractor shall furnish all materials, appliances, tools, equipment, transportation, services and all labor and superintendence necessary for construction of the work as described in these Specifications and as shown on the Plans and Exhibits. The completed installation shall not lack any part which can be reasonably implied as necessary to its proper functioning nor any subsidiary item which is customarily furnished, and the Contractor shall deliver the completed and operating installation to the Owner.

Work in General under this contract includes, but is not limited to, the following:

The intent of this project is to provide a continuous 50-foot wide channel section with a 25 foot wide maintenance berm on both sides of the channel within the 100-foot wide right of way. The plans indicate a minimum 4:1 channel side slope, but in general, the intent is to maintain a 50-foot wide top width with varying side slopes.

The existing channel is a natural channel with a meandering centerline. Due to limited survey on the project, the channel may not be shown on the plans in its exact location, however the channel is clearly visible and the existing flowline location should be maintained.

The existing channel has an approximate six foot wide wet bottom that should not be disturbed by the Contractor's work. An eight foot wide no work zone centered on the existing channel flow line has been shown on the plans. The no work zone is to be fenced with reinforced filter fabric barrier. The Contractor shall not work in, drive across or store material in the no work zone.

The Contractor is to remove trees, debris and other items as well as other clearing and grubbing activities within the 100-foot wide right of way. The existing steel framed tin barn located at station 17+00 is to remain and the channel side slope stabilization work should be adjusted to avoid this structure.

An existing Magallen pipeline crosses the channel at approximate station 14+66. The contractor shall use caution when working around this pipeline. Contact Magellan pipeline company prior to working near this pipeline to arrange for a representative of the company to be present when working within 10-feet of the pipeline.

An existing Comcast buried cable is located within the right of way from approximate station 26+00 to 29+20. The contractor shall use caution when working near this buried cable. Contact Comcast Cable company prior to working near this buried cable to arrange for a representative to be present when working near the buried cable.

An existing 10-inch sanitary sewer crosses the channel at approximate station 33+10. The contractor shall use caution when working near this sanitary sewer line. Contact Galveston County WCID # 1 prior to working near the sanitary sewer line.

An existing 6-inch waterline crosses the channel at approximate station 33+80. The contractor shall use caution when working near this water line. Contact Galveston County WCID # 1 prior to working near the water line.

The contractor is fully responsible for any damage caused to the above listed, or any other, utility that is damaged due to his construction activity.

Upon completion of the side slope stabilization work, the Contractor shall Hydromulch seed the entire 100-foot right of way with the exception of the 8-foot wide no work zone. This area is to remain in its existing condition.

Precast reinforced concrete boxes with concrete headwalls are to be installed within a 25-foot wide easement between stations 44+20 and 46+70. The Contractor shall use caution when working near the existing structures in this area. It is anticipated that the Contractor will enter this work zone at the Kentucky Ave. and 30th Street right of way and will install the boxes starting at Deats Road right of way and working upstream. The contractor may install these boxes using his own construction means and methods, but should submit in writing how he intends to install these these boxes prior to beginning the work.

ITEM 102

CLEARING & GRUBBING

- 102.1 Description. This item shall consist of clearing the right-of-way of all trees, brush, overhangs, logs, tires, appliances, trash, rubbish and other debris, including any deleterious materials and of grubbing the right-of-way within the limits of the project. **For the purpose of this specification, right-of-way shall include roadways, roadside ditches, channels, outfall ditches, temporary and permanent easements.**

It shall be the responsibility of the Contractor to visit the project site and ascertain the clearing and grubbing requirements as included in the bid documents prior to submitting a bid on the project. Any necessary trimming of overhangs that encroach the right-of-way and interfere with the facilitation of construction or the operation or maintenance of the executed project will not be paid for separately.

- 102.2 Construction Methods. The right-of-way shall be cleared of all trees, brush, stumps, overhangs, logs, rubbish, shrubs and other trash. Items and certain areas designated by the Engineer for preservation shall be carefully protected from abuse, marring or damage during construction operations and preserved in accordance with the bid documents.

Parking and/or servicing of equipment under the branches of trees designated for preservation will not be permitted.

On areas required for roadway, channel, or structural excavation, all stumps, roots, etc., shall be removed to a depth of approximately 2-feet below the lower elevation of the excavation. On areas required for embankment construction, all stumps, roots, etc., shall be removed to a depth of approximately 2-feet below the existing ground surface. All holes remaining after clearing and grubbing shall be backfilled and compacted to ninety percent of Standard Proctor Density (ASTM Method D698) at a moisture content of between optimum and plus 3 percent of optimum as directed by the Engineer and the entire area bladed to prevent ponding of water and to provide drainage; except in areas to be immediately excavated, the Engineer may direct that the holes not be backfilled. On areas required for borrow sites and material sources, stumps, roots, etc., shall be removed to the complete extent necessary to prevent such objectionable matter becoming mixed with the material to be used in construction.

- 102.3 Disposal of Materials. All cleared and grubbed materials shall be disposed of off site. The Contractor shall be responsible for obtaining any necessary disposal permits. The Contractor shall not bury any refuse on Harris County property. No burning shall be permitted unless otherwise noted.
- 102.4 Limit of Operation. No clearing or grubbing shall be done outside the limits of the right-of- way. Any work done outside the right-of-way limits, for any purpose, shall be done at the Contractor's expense and it shall be the Contractor's responsibility to negotiate and secure the permission of the property owner for such operation. The Contractor shall provide sufficient evidence to Galveston County that such permission has been obtained.
- 102.5 Schedule of Clearing. The Contractor shall schedule his clearing operations so that clearing has been completed for a distance of 1,000 feet ahead of any point where excavation is to be started. After starting excavation, the Contractor shall keep a minimum of 1,000 feet of cleared right of way ahead of the excavation operation.
- 102.6 Measurement & Payment. Clearing and grubbing will be paid for at the unit price bid per acre, or 100-foot station, as designated in the proposal and shall be full compensation for furnishing all labor, materials, permits, supervision, equipment and supplies required to complete all items of work specified herein.

END OF ITEM 102

ITEM 120

EXCAVATION FOR CHANNELS AND OTHER DRAINAGE FACILITIES

120.1 Description. This specification shall consist of required excavation for all channels, detention ponds, and other drainage facilities, channel changes and ditches as shown on the plans and to the lines and grades established by the Engineer and satisfactorily disposing of all materials taken therefrom. Excavation for roadways and roadside ditches are specifically excluded. Ditches shall include inlet and outlet ditches to structures, and all ditches outside the confines of the roadway slopes. The method of constructing embankment for channels and ditches shall be as outlined under the Item 132, "Embankment".

120.2 Construction Methods. All suitable materials removed from the excavation shall be used, insofar as practicable in the formation of embankments as required by the Item 132, "Embankment". Excavated material shall neither be permanently nor temporarily placed on the channel top-of-bank, nor will temporary shelves be cut into the channel side slopes, without the approval of the Engineer. All channel excavation utilized as embankment shall be placed in accordance with Item 132, "Embankment".

Unsuitable excavation shall become the property of the Contractor and shall be disposed of by the Contractor outside of the limits of the right of way. The Contractor shall be responsible for disposal of all excavated material not used for backfill or grading berm areas. The disposal site shall not be an environmentally sensitive area, waters of the United States or floodway. It is the responsibility of the contractor to contact the proper authorities to determine land use classification and to obtain any necessary permits. Refer to Section 120.3 regarding Disposal Permits. If the disposal site is defined in the plans, then the County shall be responsible for ensuring that the appropriate Department of the Army permit has been obtained for the activity.

Cut-off channel meanders shall not be backfilled unless so indicated on the plans.

Any temporary construction access that crosses a channel will be constructed so as to allow a continuous flow at all times. The channel flow line will not be blocked or raised at any temporary construction access. Temporary construction access across a channel shall require a permit. If a permit is not included in the contract, the Contractor is not entitled to construct such access without securing a required permit.

When the plans indicate the fill of a channel side slope, the earthfill material shall be placed in layers not to exceed eight (8) inches and shall be benched or notched into existing slopes and compacted by suitable rolling equipment to ninety (90) percent of Standard Proctor Density, per

ASTM D698, "Laboratory Compaction Characteristics of Soil Using Standard Effort of 12,400 ft-lbf/ft³ (600 kN-m/m³)" at a moisture content of between optimum and plus 3 percent optimum.

The imported earthfill material shall be free from roots, trash, silt and objectionable debris. Soils classified by ASTM D2487, "Classification of Soils for Engineering Purposes" as clayey sands, sand clay mixtures, or inorganic clays with a plasticity index from 15 to 40 are approved as fill materials. Each layer shall be compacted to 90% of standard proctor density (ASTM D698), at a moisture content of optimum to plus 3 percent of optimum. Soils shall not be compacted at less than the optimum moisture content. The channel side slopes, in fill areas, shall be cut to the finished dimensions after completion of the fill process. The Contractor shall notify Galveston County of the borrow site location so that the County shall have the option of conducting any soil test on borrow material, before being transported to the project site.

At the location of pipeline crossings, the Contractor shall suspend machine excavation at locations within 5 feet of any pipeline right of way, until a company representative is present to identify pipe location and to further direct excavation operations. The notification to the pipeline company of the Contractor's operations and the request for their representatives attendance shall be the responsibility of the Contractor. The Contractor shall not be reimbursed directly for any work or expenditure as a result of intersecting any pipeline operation. Any contingent costs therefore shall be anticipated in the preparation of the bid and included as distributed items of cost in the price for channel excavation.

At locations where lateral ditches or swales enter the channel, the Contractor shall perform grading as may be required to maintain the lateral ditches or swales within the easement area; as approved by the Engineer. The cost of all grading shall be considered incidental to the unit price bid and no extra payment will be made.

Prior to final inspection by the Engineer, the Contractor shall remove all sediment from the bottom of the channel and dispose of this material off site. The cost of sediment removal and grading shall be incidental to the unit price bid, and no extra payment will be made.

120.3 Disposal Permits. The Contractor shall provide copies of the disposal permits to the County and post all disposal location permits on the jobsite.

120.4 Measurement & Payment. The quantity of excavation for channels and other drainage facilities shall be paid for by the number of cubic yards of material computed by theoretical cross-sections, obtained from the drawings and natural ground lines using the method of average end areas. Field cross-sections will not be performed after construction has begun. Excavation in SWQ basins and created wetlands may be paid for

per cubic yard or per acre as stipulated in the bid proposal and/or drawings.

After bidding, if the successful contractor feels there is an error in the estimated quantities for excavation, as shown on the bid sheet, he shall provide at no expense to Galveston County, sufficient documentation in the form of recoverable cross-sections and supporting computations. This documentation shall be provided prior to proceeding with any excavation work. No adjustments to the excavation quantities will be allowed once excavation work has begun.

If the documentation provided by the contractor is deemed by Galveston County to be insufficient, additional supporting information may be required, at no expense to Galveston County.

If the documentation, provided by the contractor, is deemed by Galveston County to be correct and is representative of actual field conditions, then the derived quantities shall be the basis of payment for excavation.

The Contractor must submit all required documentation within fourteen (14) calendar days of the project start date, or within fourteen (14) calendar days of horizontal and vertical control being established in the field, whichever occurs last. Requests to evaluate the excavation quantities will not be considered after this time.

All work performed as required by this Item and measured as provided above, will be paid for at the unit price bid for excavation for channels and other drainage facilities which price shall be full compensation for preparation, trimming of slopes, storage and hauling of excavated material for other uses, disposal of surplus materials (wastage), any necessary hauling and the furnishing of all labor, tools, equipment and incidentals necessary to complete the work, as shown on the drawings.

There are line code(s), description(s), and unit(s) for this item.

NOTE: This specification requires other Standard Specification

Item 130, Borrow
Item 132, Embankment
Item 200, Stripping

END OF ITEM 120

ITEM 130

BORROW

- 130.1 Description. Borrow shall consist of proper utilization of materials secured from sources obtained by the Contractor and approved by the Engineer. Compaction of borrow shall conform to the density control method as outlined in the Item 132, "Embankment".

Borrow shall be used only when there is an insufficient quantity of suitable material obtained on-site as outlined by Item 132, "Embankment" and borrow is shown on the bid form and/or directed by the Engineer and then only from approved sources.

- 130.2 Materials. Borrow material used for embankment shall consist of soil having a plasticity index not less than 12, nor more than 20 when tested in accordance with ASTM Test D4318, "Liquid Limit, Plastic Limit and Plasticity Index of Soils" or as directed by the Engineer. The maximum liquid limit allowed is 45, unless otherwise approved by the Engineer. The Contractor is required to inform the County Engineer of the location of the pit or pits out of which the fill material is to be taken and shall provide samples of the material for approval by the Engineer. In the event the material is not acceptable, as determined by the Engineer, the Contractor shall find other pit locations. All fill material shall be free from organic matter and deleterious material.

The use of a blend of cohesive and granular soils to achieve the required plasticity index will not be permitted.

- 130.3 Construction Methods. All suitable material obtained on-site and/or from borrow sources shall be used in the formation of embankments as required by the Item 132, "Embankment", or shall otherwise be utilized as indicated on the plans or as directed, and the completed work shall conform to the established alignment, grades and cross-section. During construction, the borrow sources shall be kept drained, insofar as practicable, to permit final cross-sections to be taken when required.

The borrow source shall be left in a suitable condition, so as to provide proper drainage where practicable.

The Engineer shall be notified sufficiently in advance of opening any approved borrow source to permit necessary testing, prior to the use of the material as borrow.

The borrow site shall not be a water of the United States or environmentally sensitive area. It is the contractor's responsibility to obtain any and all Federal, State or Local permits associated with operation of the borrow site; if it is not an approved commercial borrow site.

130.4 Measurement and Payment. The quantity of borrow to be paid for shall be the number of cubic yards of material computed by theoretical cross-sections, obtained from the drawings and material ground lines, using the method of average end areas. Field cross-sections will not be performed after construction has begun.

After bidding, if the successful contractor feels there is an error in the estimated quantities for borrow as shown on the bid sheet, he shall provide, at no expense to Galveston County, sufficient documentation in the form of recoverable cross-sections and supporting computations. This documentation shall be provided prior to proceeding with any borrow work. No adjustments to the borrow quantities will be allowed once work has begun.

If the documentation provided by the contractor is deemed by Galveston County to be insufficient, additional supporting information may be required, at no expense to Galveston County.

If the documentation, provided by the contractor, is deemed by Galveston County to be correct and is representative of actual field conditions, then the derived quantities shall be the basis of payment for borrow.

Borrow shall only be utilized when the amount of embankment exceeds all useable on-site material and shall then only be used when shown on the bid sheet.

The Contractor must submit all required documentation within fourteen (14) calendar days of the project start, or within fourteen (14) calendar days of horizontal and vertical control information being provided, whichever occurs last. Requests to evaluate borrow quantities will not be considered after this deadline.

All work performed as required herein and measured as provided above, will be paid for at the unit price bid for "Borrow", which price shall be full compensation for furnishing all labor, for all materials, for all royalties and freight involved, for all hauling, delivery and spreading on the road and compacting complete and in place and for all tools, equipment and incidentals necessary to complete the work.

Borrow quantities where shown in the proposal as Extra Work Item shall be measured as loose truckload in cubic yards as delivered to the jobsite. There are line code(s), description(s), and unit(s) for this item.

NOTE: This specification requires other Standard Specifications

Item 132, Embankment
Item 205, Subgrade

END OF ITEM 130

ITEM 132

EMBANKMENT

132.1 Description. This item shall govern for the placement and compaction of all suitable materials obtained from excavation of roadway right-of-way (Item 110), channels, and other drainage facilities (Item 120), structural and all underground utility excavation (Item 430), and borrow (Item 130), used in the construction of project fill and/or embankment.

132.2 Construction Methods. Prior to placing any embankment, all stripping and/or clearing and grubbing operations shall have been completed on the excavation sources and areas over which the embankment is to be placed. Stump holes or other small excavations in the limits of the embankments shall be backfilled with suitable material and thoroughly compacted by approved methods before commencing embankment construction. The surface of the ground, including plowed loosened ground or surface roughened by small washes shall be restored to approximately its original slope by blading or other methods and where indicated on the plans or required by the Engineer, the ground surface thus prepared shall be compacted in accordance with the Item 205, Subgrade.

Unless otherwise indicated on the plans, the surface of the ground of all unpaved areas, which are to receive embankment, shall be loosened by scarifying or plowing to a depth of not less than 4-inches. The loosened material shall be recompacted with the new embankment as hereinafter specified, and shall not exceed 8-inches in total depth.

Where indicated on the plans or as directed by the Engineer, the surface of the hillside to receive embankment shall be loosened by scarifying or plowing to a depth of not less than 4 inches, or cut into steps, benched or notched before embankment materials are placed. The embankment shall then be placed in maximum 8-inch loose layers, beginning at the low side in part width layers and increasing the widths as the embankment is raised. The material which has been loosened shall be recompacted simultaneously with the embankment material placed at the same elevation.

Where embankments are to be placed adjacent to or over existing roadbeds, the roadbed slopes shall be plowed or scarified to a depth of not less than 4-inches and the embankment built up in successive layers, as hereinafter specified to the level of the old roadbed before its height is increased. The top of the old roadbed shall be scarified and recompacted with the next layer of the new embankment. The total depth of the scarified and added material shall not exceed the permissible depth of layer.

Trees, stumps, roots, vegetation or other unsuitable materials shall not be placed in the embankment.

Except as otherwise required by the plans, all embankment shall be constructed in layers approximately parallel to the finished grade of the roadbed. Embankments shall be constructed to the grade established by the Engineer, and completed embankments shall correspond to the general shape of the typical sections shown on the plans and each section of the embankment shall correspond to the detailed section or slopes established by the Engineer. After completion of the channel, it shall be continuously maintained to its finished section and grade until the project is completed.

Except as otherwise specified, earth embankment shall be constructed in successive layers for the full width of the individual channel, cross-section and in such lengths as are best suited to the sprinkling and compaction methods utilized.

Prior to compaction, the layers shall not exceed 6 inches in depth where pneumatic tire rolling is to be used and shall not exceed 8-inches in depth for rolling with other types of rollers. Layers of embankment may be formed by utilizing equipment which will spread the material as it is dumped, or they may be formed by being spread by blading or other acceptable methods, from piles or windrows dumped from excavating or hauling equipment in such amounts that the material is evenly distributed.

Each layer of embankment shall be uniform as to material and moisture content before compaction. Where layers of unlike materials abut each other, the material shall be mixed so as to prevent abrupt changes in the soil. No material placed in the embankment by dumping in a pile or windrow shall be incorporated in a layer in that position, but all such piles or windrows shall be moved by blading or similar methods. Clods or lumps of material shall be broken and the embankment material mixed by blading, harrowing, discing, or similar methods to the end that a uniform material is secured in each layer. Water required for sprinkling to bring the material to the moisture content necessary for maximum compaction shall be evenly applied and it shall be the responsibility of the Contractor to secure a uniform moisture content throughout the layer by such methods as may be necessary. In order to facilitate uniform wetting of the embankment material, the Contractor may apply water at the material source if the sequence and methods used produce the required results. Such procedure shall be subject to the approval of the Engineer.

Each layer shall be compacted to a minimum of 95% of standard proctor density per ASTM D698, "Laboratory Compaction Characteristics of Soil Using Standard Effort of 12,400 ft-lbf/ft³ (600 kN-m/m³)", at a moisture content of between optimum and plus 3 percent of optimum. Soils shall not be compacted at less than the optimum moisture content.

After each layer of embankment or select material is complete, tests as necessary will be made by the Engineer. If the material fails to meet the density specified, the course shall be reworked, as necessary, to obtain the specified compaction.

Should the subgrade, due to any reason or cause, lose the required stability, density or finish before the pavement is placed, it shall be recompacted and refinished at the sole expense of the Contractor. Excessive loss of moisture in the subgrade shall be prevented by sprinkling, sealing or covering with a subsequent layer of asphaltic or other approved material.

- 132.3 Quality Assurance. The Contractor is responsible for the control of the quality of materials incorporated into the construction and the quality of completed construction. The County will engage materials engineering services to provide quality assurance testing and inspection to assist the County Engineer in determining the acceptability of materials and completed construction. Quality assurance services provided by the County do not relieve the Contractor of his responsibility for quality control. The Engineer shall not have control of the means, methods, techniques, sequences, or procedures of construction selected by the Contractor.

The Testing Laboratory's representative will determine the moisture-density relationships in accordance with ASTM D698, on material secured from each type of material encountered.

The Testing Laboratory's representative will determine the in-place density in accordance with ASTM D6938, "Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)" or ASTM D1556, "Standard Test Methods for Density and Unit Weight of Soil in Place by Sand-Cone Method". The minimum level of testing will consist of at least three tests for each 1,000 feet per lane of roadway or 4,000 square feet of embankment, per lift.

- 132.4 Measurement and Payment. Embankment shall not be paid for directly, but shall be incidental to roadway excavation, excavation for channels and other drainage facilities, construction of underground utilities, including all sewers. This includes any transporting and stockpiling of material.

There are no line codes for this item.

Note: This specification requires other Standard Specifications

- Item 102, Clearing and Grubbing
- Item 110, Roadway Excavation
- Item 120, Excavation for Channels and Other Drainage Facilities
- Item 130, Borrow
- Item 200, Stripping
- Item 205, Subgrade
- Item 430, Construction of Underground Utilities

END OF ITEM 132

ITEM 160

TOPSOIL

160.1 Description. This item shall govern for furnishing and placing topsoil to the lines, grades and depth shown on the drawings or as directed by the Engineer.

- 160.2 References.
- ASTM D422, “Standard Test Method for Particle-Size Analysis of Soils”
 - ASTM D1140, “Test Methods for Amount of Material in Soils Finer Than the No. 200 (75-µm) Sieve”
 - ASTM D2974, “Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils”
 - ASTM D4972, “Standard Test Method for pH of Soils”
 - AASHTO T194, “Standard Method of Test for Determination of Organic Matter in soils by Wet Combustion”

- 160.3 Materials.
- A. Topsoil shall be capable of sustaining native plant growth, and it shall be easily cultivated, has high resistance to erosion, free from objectionable material including gravel, large roots, stumps, wood, brush, debris, hard clods, clay balls, hardpan, refuse or other deleterious materials and be of reasonably uniform quality.
- B. Import topsoil or provide from on-site source. If topsoil is from on-site source, topsoil is the surface layer of material containing decaying vegetable matter and roots. It is not necessary to strip all soil containing fine, hairline roots, only soil containing moderate to severe root mat.
- C. Imported Topsoil shall conform to the following requirements:

TABLE NO. 1

Specification	UNIT	VALUE	APPLICABLE STANDARD
Soil Reaction	pH	5.5-8 ^(a)	ASTM D4972
Passing No. 4 Sieve	%	95-100	ASTM D422
Sand Size, 2.0-0.05 mm	%	10-70	ASTM D422
Silt Size, 0.05-0.005 mm	%	0-40	ASTM D1140
Clay Size, <0.005 mm	%	20-50	ASTM D1140
Easily Oxidizable Organic Matter	%	2.5-10 ^(b)	ASTM D2974 AASHTO T194

NOTE:

- (a) Determine pH by Method A for on-site source and Methods A and B for import topsoil. If on-site source topsoil does not satisfy the specified pH range, achieve the desired pH by amending the soil as recommended by the certified agronomist's report of soil sample analysis.
- (b) Soil testing company shall identify test method used if different from the specified. The Engineer must approve alternate test methods.

D. Topsoil shall have Liquid Limit <50 and Plasticity Index <20

160.4 Topsoil Delivery, Storage and Handling.

Deliver, stockpile and handle topsoil in such a way as to not contaminate the material with other soils or objectionable materials.

The stockpile or disposal site shall not be an environmentally sensitive area, in a floodway, wetlands, or in "Waters of the United States". If the stockpile or disposal site is in wetlands as defined in the plans, then the County shall be responsible for ensuring that the appropriate Department of the Army permit has been obtained for the activity.

160.5 Construction Methods.

- A. Strip topsoil as specified on the plans or as directed by the Engineer from area to be excavated or filled and stockpiled for use on the final grades and ditch slopes. Install and maintain proper Storm Water Pollution Prevention Best Management Practices (SWPPP BMP) to stockpiled topsoil at no additional cost to Galveston County.
- B. Prior to placing topsoil, scarify or plow the subgrade to a minimum depth of 4 inches until it is loose and uncompacted to provide bonding of topsoil layer to subgrade. Remove vegetation and foreign inorganic material. Place topsoil on loosened material and roll lightly with appropriate lawn roller to consolidate topsoil.
- C. The Contractor shall place the topsoil to the lines and grades and to the depths shown on the drawings.
- D. Remove spilled topsoil from curbs, gutters, and paved areas and dispose of excess topsoil off site.
- E. Place topsoil to promote drainage and compact with light roller. Water topsoil after placement until saturated for minimum specified depth, fill in and recompact areas of settlement.

- F. Do not place topsoil when it is excessively wet or dry.
- G. If the topsoil excavated from the site will be utilized for the construction of wetlands, then the Contractor shall store the material in piles less than 5 feet in height to ensure the survivability of the existing seed bank.

160.6 Submittal Required.

Contractor shall furnish certification from their supplier that their topsoil meets the material requirements of Section 160.3.

160.7 Quality Control.

- A. The Contractor is required to submit the location of the pit(s) and a sample from which the material is to be taken, for Engineer's approval. The Contractor shall submit the vendor's technical description of the topsoil.
- B. The Engineer may question the quality of material at any stage of work or location if changes in characteristics are apparent.

160.8 Measurement.

When topsoil has to be imported from sources other than the job site, topsoil shall be measured by the cubic yard of in place or per square yard of specified depth of furnished, delivered and placed, in accordance with these specifications.

160.9 Payment.

Payment for this item and SWPPP BMP's when shown in the plans shall be made at the contract unit price per cubic yard of in place or per square yard of specified depth of topsoil, which price shall be full compensation for all labor, materials, equipment and incidentals necessary to furnish, haul and place the topsoil.

Note: This specification does not require a drawing.

Note: This specification does not require other standard specifications.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 160

ITEM 162

SODDING FOR EROSION CONTROL AND STABILIZATION

162.1 Description. Sodding for erosion control and for stabilization shall consist of providing and planting Bermuda grass, San Augustine grass, or other acceptable sod along or across such areas as are designated on the drawings and in accordance with the specification requirements herein outlined.

162.2 Materials. The sod shall consist of live, growing Bermuda grass, San Augustine grass, or other acceptable sod, (ninety-five percent pure), secured from sources where the soil is fertile and has been fumigated. The sod shall have a healthy virile root system of dense, thickly matted roots throughout. The sod shall be cut from the field so that there is a minimum of one-half inch of soil on the roots of the sod, and so that no roots show on the bottom of the soil. Sod shall be dense, with the grass having been mowed to 1 inch height before lifting from field. Sod shall be in a vigorous condition, dark green in color, free of disease and harmful insects. The contractor shall not use sod from areas where the grass is thinned out, nor where the grass roots have been dried out by exposure to the air and sun to such an extent as to damage its ability to grow when transplanted. The sod shall be free from obnoxious weeds or other grasses and shall not contain any matter deleterious to its growth or which might affect its subsistence or hardiness when transplanted. Unless the area has been closely pastured, it shall be closely mowed and raked to remove all weeds and long-standing stems.

Care shall be taken at all times to retain the native soil on the roots of the sod during the process of excavation, hauling and planting. Sod material shall be kept moist from the time it is dug, until planted. When so directed by the Engineer, the sod existing at the source shall be watered to the extent required, prior to excavating. Do not stack sod for more than 36 hours between the time of cutting and the time of installation. The Engineer reserves the right to reject any sod deemed unacceptable for installation.

All planting shall be done between the average date of the last freeze in the spring and six weeks prior to the average date for the first freeze in the fall, according to the U.S. Weather Bureau.

Fertilizer shall conform to the requirements of the Item 166, "Fertilizer" and shall be applied at the rate of 480-pounds per acre.

162.3 Construction Methods. Immediately after the finished grade has been approved, begin sodding operations to reduce excessive weed growth. If the sod bed is dry, immediately prior to sod installation, dampen the surface with a fine mist of water.

Grass shall be turf sod, cut into sixteen (16) inch strip widths for those areas behind a curb. All other areas can receive various cut widths and lengths.

All areas to be sodded shall be raked to true lines, free from all unsightly variations, bumps, ridges or depressions. All sticks, stones, roots or other objectionable material which might interfere with the formation of a finely pulverized sod bed, shall be removed from the soil.

Lay sod so that adjacent strips butt tightly, with no spaces between strips. Lay sod on mounds and slopes, with strips parallel to contours. Stagger joints. Sodded areas shall be flush with adjoining seeded areas. All sod shall, of course, be laid green side up. Tamp and roll the sod thoroughly to make contact with the sod bed, or as directed by the Engineer.

Peg sod on slopes three to one or steeper with pegs driven through sod into soil, until pegs are flush with the turf. Space pegs 18 inches on center. Pegs to be 1 inch square, 6 inches long or, 6 inch lengths of lath.

Commercial fertilizer as outlined in the Item, "Fertilizer" shall be applied to the entire sodded area at the prescribed rates, immediately following laying of the sod. Immediately after fertilizing, water the entire area to a saturated depth of 2-inches. If rain is imminent, then the application of fertilizer shall be postponed until weather conditions exist such that the potential for the runoff of fertilizer from the site is minimized.

Immediately after installation of the sod, remove sod clumps, soil, and any plant material from roadways and pavements. Edges along curbs and drives, walkways, etc., shall be carefully trimmed and maintained until accepted.

Only as approved by the Engineer, in areas where sod is dead, satisfactory growth may be accomplished with application of seeding or hydromulch seeding, in lieu of replacing the dead sod. Costs for labor, materials, tools and equipment for the application of seeding or hydromulch seeding over dead sod shall be incidental to this pay item.

162.4 Contractor's Maintenance & Guarantee Period. It shall be the responsibility of the contractor to maintain all sodded areas until satisfactory growth has occurred as determined by the Engineer and for a period of 60 days after the successful completion of all punch list items. Maintenance shall consist of watering, weeding, repairing of all erosion, and resodding as necessary to establish a uniform growth of the specified grass. A minimum of 95% of the area planted shall be covered with the specified grass with no bare or dead spots greater than 10 square feet.

The Contractor shall be responsible for one (1) mowing per month between the months of April to October. The Contractor shall also be responsible for one (1) mowing every six (6) weeks between the months of November to March.

In addition, the Contractor shall water all sodded areas as often as necessary to establish satisfactory growth and to maintain its growth throughout the duration of the project; including in the sixty (60) day period described above.

Contractor shall make as many repeat plantings as necessary to achieve a minimum of 95% of the area planted covered with the specified grass with no bare or dead spots greater than 10 square feet. Such replanting is to be performed within 14 calendar days of notification by the Engineer.

- 162.5 Submittal Required. The contractor shall submit a statement from the supplier attesting that the sod meets the requirements stated herein.
- 162.6 Measurement. Work and acceptable material for Sodding for Erosion Control and Stabilization shall be measured by linear feet (with standard width of 16 inches behind curb), or by the square yard (for various widths), complete in place.
- 162.7 Payment. Work performed and material furnished under "Measurement" shall be paid for at the unit price bid for Sodding for Erosion Control and Stabilization, which price shall be full compensation for furnishing materials, preparation of ground for planting, planting of sod, pegging of sod, raking, fertilizing, watering, sprinkling, maintenance, mowing, and for labor, tools, equipment and incidentals necessary to complete the work. Additional payment shall not be made for those areas that are replanted.

There are line code(s), description(s), and unit(s) for this item.

Note: This specification requires other Standard Specifications.

Item 166 Fertilizer
Item 725 General Source Controls

END OF ITEM 162

ITEM 165

HYDRO-MULCH SEEDING
(FOR EROSION CONTROL AND STABILIZATION)

165.1 Description. The work covered by this section consists of furnishing all plant, labor, materials, equipment, supplies, supervision and tools and performing all work necessary to provide top soil, seed, fertilize, water, maintain and cleanup of side slopes and finished grades, all in accordance with these specifications, for the purpose of temporary erosion control or final stabilization.

The hydro-mulch seeding operations, together with all necessary related work, shall conform to the requirements specified in this section. The area(s) to be hydro-mulch seeded shall be as shown on the construction drawings.

165.2 Materials. All seed must meet the requirements of the U.S. Department of Agriculture Rules & Regulations as set forth in the Federal Seed Act and the Texas Seed Law.

Standard type of seed, purity and germination requirements, rate of application and planting dates are as shown on Table 1:

TABLE 1

<u>Plant Type</u>	Rate of Application in Pounds of Seed per Acre	Planting Date
<u>Common Bermuda Grass (60% Unhulled and 40% Hulled by weight)</u>	<u>60</u>	Apr. 1 to <u>Sep.30</u>
* <u>"Foxtail Millet</u>	<u>15</u>	Apr. 1 to <u>Sep.30</u>
<u>Common Bermuda Grass (60% Hulled and 40% Unhulled by weight)</u>	<u>50</u>	Oct. 1 to <u>Mar.31</u>
* <u>"Gulf" Annual Ryegrass</u>	<u>15</u>	Oct. 1 to <u>Mar.31</u>
<u>Crimson Clover & Inoculant</u>	<u>20</u>	Oct. 1 to <u>Mar.31</u>
* <u>"KY 31" Tall Fescue</u>	<u>15</u>	Oct. 1 to <u>Mar.31</u>

*Indicates MAXIMUM APPLICATION RATE ALLOWED

Table 1 shall be used except for special applications. For special applications, the seed mix, rate of application, and planting dates shall be as shown in the plans.

Commercial fertilizer as outlined in the Item, "Fertilizer", shall be applied to the entire seeded area at the prescribed rates. The fertilizer shall be delivered to the site in bags or other convenient containers, each fully

labeled, conforming to the applicable State Fertilizer Laws and bearing the name and warranty of the producer.

Mulch shall be virgin wood cellulose fiber made from whole wood chips. Within the fiber mulch material, at least 20 percent of the fibers will be 10.7 mm in length and 0.27 mm in diameter. Rate of application shall be 2000 pounds per acre. Soil stabilizers such as Terra Type III (or approved equal) shall be applied at a rate of 40 pounds per acre on side slopes and Terra Tack I (or approved equal) shall be applied at a rate of 40 pounds per acre on flatter portions. Alternatively, Ultra Bond 2002 (or approved equal) shall be applied at a rate of one gallon per square yard in three applications. First application shall be at a rate of ½ gallon per square yard followed by another application in about two weeks at a rate of ¼ gallon per square yard. Third application shall follow in about two months at a rate of ¼ gallon per square yard. The concentrate shall be diluted in 1:5 ratio with water or as recommended by the manufacturer.

Wood cellulose fiber mulch, for use in the grass seed and fertilizer, shall be processed in such a manner that it will not contain germination or growth inhibiting factors. It shall be dyed an appropriate color to allow visual metering of its application. The wood cellulose fibers shall have the property of becoming evenly dispersed and suspended when agitated in water. When sprayed uniformly on the surface of the soil, the fibers shall form a blotter-like ground cover which readily absorbs water and allows infiltration to the underlying soil. Weight specifications from suppliers for all applications shall refer only to the underlying soil. Weight specifications from suppliers, shall refer only to the air dry weight of the fiber. The mulch material shall be supplied in packages having a gross weight not in excess of 100 pounds and must be marked by the manufacturer to show the dry weight content. Suppliers shall be prepared to certify that laboratory and field testing of their product has been accomplished and that it meets all of the foregoing requirements.

Water shall be free from oil, acid, alkali, salt and other substances harmful to the growth of grass. The water source shall be subject to approval, prior to use.

165.3 Execution. Immediately after the finished grade has been approved, begin hydro-mulching operations to reduce erosion and excessive weed growth.

Hydraulic equipment used for the application of fertilizer, seed and slurry of prepared wood fiber mulch shall have a built-in agitation system with an operating capacity sufficient to agitate, suspend and homogeneously mix a slurry containing up to forty (40) pounds of fiber plus a combined total of 70 pounds of fertilizer solids for each 100 gallons of water. The slurry distribution lines shall be large enough to prevent stoppage. The discharge line shall be equipped with a set of hydraulic spray nozzles which provide even distribution of the slurry on the area to be seeded. The slurry tank shall have a minimum capacity of 800 gallons and shall be

mounted on a traveling unit, which may either be self-propelled or drawn with a separate unit which will place the slurry tank and spray nozzles within sufficient proximity to the areas to be seeded, so as to provide uniform distribution without waste. The Engineer may authorize equipment with a smaller tank capacity, provided the equipment has the necessary agitation system and sufficient pump capacity to spray the slurry in a uniform coat.

Care shall be taken that the slurry preparation take place on the site of the work. The slurry preparation should begin by adding water to the tank when the engine is at half throttle. When the water level has reached the height of the agitator shaft, good re-circulation shall be established and seed shall be added. Fertilizer shall then be added, followed by wood pulp mulch. The wood pulp mulch shall only be added to the mixture after the seed and when the tank is at least one-third filled with water. The engine throttle shall be opened to full speed when the tank is half filled with water. All the wood pulp mulch shall be added by the time the tank is two-thirds to three-fourths full. Spraying shall commence immediately when the tank is full. The operator shall spray the area with a uniform visible coat, by using the green color of the wood pulp as a guide.

- 165.4 Application. The contractor shall obtain approval of hydro-mulch area preparation from the Engineer prior to application. If rain is imminent, then the application of hydromulch seeding and fertilizer shall be postponed until weather conditions exist such that the potential for the runoff of the slurry and fertilizer from the site is minimized.

Operators of hydro-mulching equipment shall be thoroughly experienced in this type of application. Apply the specified slurry mix in a motion to form a uniform mat at the specified rate. Operators shall keep the hydro-mulch within the areas designated and keep from contact with other plant material. Immediately after application, thoroughly wash off any plant material, planting areas or paved areas not intended to receive slurry mix.

Keep all paved and planting areas clean during maintenance operations. Contractor shall keep hydro-mulching within the areas designated and keep from contact with other plant material.

If in the opinion of the Engineer, unplanted areas are noted after hydro-mulching, the contractor shall be required to seed the unplanted areas with the grasses that were to have been planted at no additional cost to Galveston County.

- 165.5 Contractor's Maintenance & Guarantee Period. It shall be the responsibility of the contractor to maintain all hydromulch seeded areas until satisfactory growth has occurred as determined by the Engineer and for 60 days after the successful completion of all punch list items. Maintenance shall consist of watering, weeding, repairing of all erosion, and reseeding, as necessary to establish a uniform stand of the specified

grasses. A minimum of 95% of the area seeded shall be covered with the specified grass with no bare or dead spots greater than 10 square feet.

The Contractor shall be responsible for one (1) mowing per month between the months of April to October. The Contractor shall also be responsible for one (1) mowing every six (6) weeks between the months of November to March. In addition, the Contractor shall water all grassed areas as often as necessary to establish satisfactory growth and to maintain its growth throughout the duration of the project; including the sixty (60) day period described above.

The Contractor shall make as many repeat seedings as necessary to achieve a minimum of 95% of the area planted covered with the specified grass with no bare or dead spots greater than 10 square feet. Such replanting is to be performed within 14 calendar days of notification by the Engineer.

165.6 Submittal Required. The contractor shall submit copy of seed tag(s) and letter from the supplier attesting that the seed meets the requirements as stated herein. Certification shall include common name; botanical name, percent by weight of each plant species; year of harvest; percent purity, germination and dormant seed; percent noxious weed content; and date of certification. The Contractor shall certify on the application of the project.

165.67 Measurement. The unit of measurement for all work performed and materials furnished, as described herein, shall be by the acre or per station as indicated in the bid documents. Measurement shall be done upon completion of the work performed within the limits shown on the drawings and as described herein. The area measured for payment will be computed to the nearest 1/10-acre or station.

165.8 Payment. Payment for hydro-mulch seeding will be made at the contract unit price per acre or per station and includes top soil (when required), smoothing, mulch, seed fertilizer, watering, maintenance and clean-up. Additional payment shall not be made for those areas that are replanted.

There are line code(s), description(s), and unit(s) for this item.

NOTE: This specification requires other Standard Specifications.

Item 166 Fertilizer
Item 725 General Source Controls

END OF ITEM 165

ITEM 166

FERTILIZER

- 166.1 Description. Fertilizing shall consist of providing and distributing fertilizer over such areas as are designated for sodding for erosion control and stabilization, hydro-mulch seeding, or seeding and erosion control blanket and in accordance with these specifications.
- 166.2 Materials. All fertilizer used shall be delivered in bags or containers clearly labeled showing analysis. A pelleted or granulated fertilizer shall be used with an analysis of 10-10-5 (nitrogen – phosphoric acid – potash), unless otherwise approved by the Engineer. The figures in the analysis represent the nitrogen, phosphoric acid and potash nutrients respectively as determined by the methods of the Association of Official Agricultural Chemists. The sources of nitrogen in the fertilizer shall be roughly balanced between ammonical (quick release) and nitrate nitrogen (slow release). Fertilizer shall be readily water-soluble.
- With permission of the Engineer, fertilizer of a different analysis may be substituted. It shall be pelleted or granulated fertilizer with a lower concentration. The total amounts of nutrients furnished and applied per acre shall equal or exceed that specified for each nutrient.
- 166.3 Construction Methods. When fertilizer is included in the specifications, pelleted or granulated fertilizer shall be applied uniformly over the area specified to be fertilized and in the manner directed for the particular item of work. Fertilizer shall be dry and in good physical condition. Fertilizer that is powdered or caked will be rejected. Distribution of fertilizer for the particular item of work shall meet the approval of the Engineer.
- Unless otherwise indicated on the plans, fertilizer shall be applied uniformly at the average rate of 480 pounds per acre for the Item 162, "Sodding for Erosion Control and Stabilization", 400 pounds per acre for the Item 164, "Seeding and Erosion Control Blanket" and for the Item 165, "Hydro-Mulch Seeding for Erosion Control and Stabilization".
- 166.4 Measurement. Acceptable material for "Fertilizer" will be measured by the C-WT (100 lbs) as determined by approved scales or guaranteed weight of sacks shown by manufacturer.

166.5 Delivery, Storage and Handling. Deliver fertilizer in bags or containers clearly labeled with name and address of the manufacturer, weight and guaranteed analysis. Bulk fertilizer, if approved by the Engineer, must be accompanied by either an invoice or label showing the name and address of the manufacturer, guaranteed analysis, and appropriate means to accurately measure and record weight of fertilizer used.

Deliver fertilizer in clean, unopened and undamaged bags.

166.6 Payment. No separate payment shall be made for materials furnished or work performed under this Item. Include the cost of same in the contract price bid for work of which this is a component part.

For special applications in which fertilizer is not already a requirement of another bid item, payment shall be made by the acre of applied area. Application rate (pounds per acre) and analysis (nitrogen – phosphoric acid – potash) shall be as shown in the plans.

There are line code(s), description(s), and unit(s) for this item.

Note: This specification requires other standard specifications.

Item 162 – Sodding for Erosion Control and Stabilization
Item 164 - Seeding and Erosion Control Blanket
Item 165 - Hydro-Mulch Seeding for Erosion Control and Stabilization
Item 725 – General Source Controls

END OF ITEM 166

ITEM 200
STRIPPING

200.1 Description. Within the limits indicated, or in areas where existing grade is to be altered either by excavation or embankment, the Contractor shall strip existing topsoil to approximately 3-inches depth or as shown on the drawings and dispose of it, at the Contractor's expense. Stripping shall include the removal and disposal of scrap iron, rubbish, logs, abandoned utilities, abandoned signs, and any and all other debris, if within the right-of-way or designated easements, whether above or below existing grade. Field cross-sections will no longer be obtained.

200.2 Construction Methods. The stripped material shall be removed as designated below regardless of the project area to be excavated or receive embankment. Strippings are unsuitable material and shall not be considered for use in the future construction. The strippings and any other unsatisfactory material shall be removed and disposed of outside the right-of-way, by the Contractor. No strippings shall be used in esplanade or in areas from back-of-curb to R.O.W. *Proper Storm Water Pollution Prevention Best Management Practices shall be applied to stripped areas.*

When disposing of strippings and waste, off site, the Contractor shall not place the material in “*environmentally sensitive area, floodway or waters of the United States, including adjacent wetlands*”, as defined in the Clean Water Act and the Rivers and Harbors Act, unless he has previously obtained the appropriate Department of the Army Permit authorizing the activity. If the stockpile or disposal site is defined in the plans, then the County shall be responsible for ensuring that the appropriate Department of the Army permit has been obtained for the activity.

200.3 Measurement & Payment. Stripping and any associated stockpiling, or disposal will not be paid for directly. Payment for stripping shall be incidental to excavation, borrow or embankment.

There are no line codes for this item.

NOTE: This specification requires other Standard Specifications

Item 110 - Roadway Excavation
Item 130 - Borrow
Item 132 - Embankment

END OF ITEM 200

ITEM 230

CRUSHED AGGREGATE BASE COURSE

230.1 Description. This item shall consist of a foundation course for a surface course or for other base courses and shall be composed of crushed aggregate materials; and shall be constructed as herein specified in one or more courses in conformity with the typical sections shown on the plans and to the lines and grades as established by the Engineer.

230.2 Materials. The materials shall be obtained from approved sources, shall be crushed, and shall consist of durable particles of crushed aggregate, mixed with approved binding material. The crushed material shall have a minimum compressive strength of 45 psi at 0 psi lateral pressure and 175 psi at 15 psi lateral pressure using triaxial testing procedures. The crushed aggregate shall meet the following gradation when tested in accordance with ASTM C136.

Table I

Retained on Sieve Conforming to ASTM E11	Percent Retained, By Weight
1-3/4"	0
7/8"	10 - 35%
3/8"	30 - 50%
No. 4	45 - 65%
No. 40	70 - 85%

The material passing the No. 40 sieve shall meet the following requirements when tested in accordance with ASTM D4318.

The liquid limit shall not exceed 35
The plasticity index shall not exceed 10

All material retained on the No. 40 sieve shall have a Los Angeles Abrasion percent of wear not exceeding 40 when tested in accordance with ASTM C131.

With prior written permission of the Engineer, additives may be used to meet the above requirements.

230.3 Construction Methods. The subgrade shall be prepared in accordance with the pertinent Item for Subgrade. Immediately before placing the base material, the subgrade shall be checked as to conformity with the grade and section. Any deviation in excess of one-half (1/2) inch in cross-section and in a length of sixteen (16) feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and compacting by sprinkling and rolling. Sufficient subgrade shall be prepared in advance to insure satisfactory prosecution of the work.

The material for the first course shall be deposited on the subgrade in a lift not to exceed six (6) inches in thickness. Material deposited upon the subgrade shall be spread and shaped the same day unless otherwise directed by the Engineer. The material shall be sprinkled, if directed and shall then be bladed, dragged and shaped to the typical sections as shown on the plans. All areas and most of segregated coarse or fine material shall be corrected or removed and replaced with well graded material as directed by the Engineer. If additional binder is considered desirable or necessary after the material is spread and shaped, it shall be furnished and applied in the amount directed by the Engineer. Such binder material shall be carefully and evenly incorporated with the material in-place by scarifying harrowing, brooming or by other approved methods.

The course shall be sprinkled as required and compacted to the extent necessary to provide not less than 95-percent of modified proctor density (ASTM D1557) at a moisture content ranging from optimum to +/- 3% (three-percent) above optimum. In addition to the requirements specified for density, the full depth of the flexible base shown on the plans shall be compacted to the extent necessary to remain firm and stable under construction equipment. After each section of flexible base is completed, tests as necessary will be made by the Engineer. If the material fails to meet the density requirements, it shall be reworked as necessary to meet these requirements. Throughout this entire operation the shape of the course shall be maintained by blading, and the surface upon completion shall be smooth and in conformity with the typical sections shown on the plans and to the established lines and grades. In that area on which pavement is to be placed, any deviation in excess of 1/4-inch in cross section and in length of 16-feet measured longitudinally shall be corrected by loosening, adding or removing material as required, reshaping and recompacting by sprinkling and rolling. Should the base course, due to any reason or cause, lose the required stability, density or finish before the surface is complete, it shall be recompacted and refinished at the sole expense of the Contractor.

Construction methods for succeeding courses shall be the same as prescribed for the first course. Prior to placing the surfacing on the completed base, the base shall be dry cured to the extent directed by the Engineer.

230.4 Quality Assurance. The Materials Engineer will determine the Moisture-Density Relationship in accordance with ASTM D1557 on material secured from the source of supply, or the Contractor.

The Materials Engineer will determine the in-place density in accordance with ASTM D6938 or D1556. The minimum level of testing will consist of at least three tests for each 500 feet per lift per lane of roadway, or 4,000 square feet of completed base.

230.5 Acceptance Requirements. The completed base course will be checked for determining acceptance as provided herein.

Upon completion of compaction operations, the density of the completed course will be determined in accordance with ASTM D6938 or D1556. A minimum of one density test will be taken per 1,000 linear feet per roadway. The location of the test will be chosen randomly. If any density test is below requirements, two additional tests will be taken within 5-feet of the failing test location and the average of the three tests will be used as the value for the 1,000 foot location.

The density requirements as based on ASTM D1557, will be ninety-five percent of the maximum density.

If the density test value per 1,000 foot section is below ninety-five percent, a price adjustment will be supplied as follows:

Density Test Value	Percent of Contract Unit Price
95.0 and above	100
93.0 to 94.9	90
90.0 to 92.9	75
Below 90	50 or remove*

*At the option of the Engineer

The completed base course will not vary from plan thickness in excess of the following tolerances. Base course thickness deficiencies in excess of these tolerances shall be corrected, as specified herein, at the Contractor's expense.

Underthickness	Overthickness
1 inch	1-1/2 inches

If an individual test exceeds allowable tolerances, two additional tests will be taken within 5-feet of the failing test location and the average of the three tests (rounded off to the nearest 1/4-inch) will be used as the value

for that location. Any failing areas will be isolated for purposes of correction. Base course thickness deficiencies in excess of the foregoing tolerances shall be corrected as follows.

If no grade adjustments are permitted, thickness deficiencies shall be corrected by removing and replacing the full depth of base course in deficient areas with one of the following materials:

- a. Cement Stabilized Crushed Aggregate Base Course, Item 231
- b. Hot Mix Asphaltic Concrete Base Course, Item 250

If grade adjustments are permitted, the Contractor shall have the option of correcting thickness deficiencies by furnishing and placing a supplemental layer of asphaltic concrete conforming to Item 250, for the full width of the base course, in lieu of removing and replacing deficient base course. The thickness of the supplemental layer of asphaltic concrete shall be as follows:

BASE COURSE THICKNESS CORRECTION

Underthickness Inches	Overthickness Inches	Minimum thickness of Supplemental Asphaltic Concrete Inches
1/4 to 1-1/2	1-3/4 to 2	1
1-3/4 to 2	2-1/4 to 2-1/2	1-1/2
2-1/4 to 2-1/2	2-3/4 to 3	2
Over 2-1/2	Over 3	Remove and replace

230.6 Measurement. Crushed Aggregate Base shall be measured by the square yard of material, furnished and compacted in place and to the thickness specified, or as shown on the plans.

230.7 Payment. Payment for Crushed Aggregate Base, complete and in-place, shall be at the contract unit price per square yard of the specified thickness, which unit price shall include all costs of materials furnished, hauled, dumped, spread, shaped and compacted in maximum 6-inch lifts, including water for sprinkling. If necessary, adjustments will be made in the payment for this item as outlined in Section 230.4 of this specification.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 230

ITEM 400

STRUCTURAL EXCAVATION AND BACKFILL

400.1 Description. This item shall govern for all excavation required for the construction of all structures, except pipe or box sewers for the disposal of all excavated material; and for backfilling around completed structures to the original ground level or as required by the plans. The work shall include all necessary pumping, bailing, sheathing, drainage, and the construction and removal of any required cofferdams. Unless otherwise provided, the work included herein shall provide for the removal of old structures or portions thereof (abutments, wingwalls, piers, etc.), trees and all other obstructions to the proposed construction.

Excavation will not be classified, but will be considered as "Structural Excavation", which will include the removal of all materials encountered regardless of their nature or the manner in which they are removed as well as any required backfill, and as approved by the Design Engineer.

400.2 Structural Excavation. Unless specified on the plans, or approved otherwise by the Engineer, structural excavation shall be designated as follows:

- A. Width and Length - From a vertical plane outside the structure equal to the thickness of the footing or slab.
- B. Depth - From bottom of footing or slab to the finished groundline or natural groundline, whichever is lower in elevation.
- C. When caissons are provided, excavation is not permitted outside the outer face of the caissons.

By definition, a cofferdam is a temporary or removable structure to keep surrounding earth, water, or both out of the excavation and may be earth, timber, steel, concrete or a combination thereof.

A caisson is a permanent part of the substructure which sinks gradually into place as material is excavated within the area protected by its sidewalls. It may be either open well type or a pneumatic type caisson.

400.3 Construction Methods. Excavation shall be done in accordance with the lines and grades indicated on the plans, or as established by the Engineer.

The final elevation to which a foundation is to be constructed shall be as shown on the plans or as raised or lowered by written order of the Engineer when such alterations are judged proper to satisfactorily comply with the design requirements for the structure. Should it be found necessary, in the judgment of the Engineer to increase or decrease the depth of footings from that shown on the plans, the necessary alterations in the details of the structure shall be accomplished as directed by the Engineer. Galveston County shall have the right to substitute revised details resulting from a consideration of the changes in the design condition.

When a structure is to rest on an excavated surface, special care shall be taken not to disturb the bottom of the excavation, and the final removal of the foundation material to grade shall not be performed until just before the footing is to be placed.

Protect excavations from rainfall and surface water. If the supporting soil is exposed to adverse wet or dry conditions, excavate deeper and/or wider to sound material at no additional cost to Galveston County. Prior to such activity, the Contractor shall notify the Engineer.

Excavated material required to be used for backfill may be deposited, by the Contractor, in storage piles at points convenient for rehandling of the material during the backfilling operations. The location of storage piles shall, however, be subject to the approval of the Engineer, who may require that the survey centerline of the structure and the transverse or hub line of any unit of the structure be kept free of any obstruction.

400.4 Excavated material required to be wasted shall be disposed of as directed by the Engineer, and the disposal shall be in such manner as not to obstruct a stream or otherwise impair the efficiency or appearance of the structure or other parts of the work.

Cofferdams and Caissons. The term cofferdam wherever used in this specification designates any temporary or removable structure which is constructed to hold the surrounding earth, water, or both out of the excavation, whether such structure is formed of earth, timber, steel, concrete, or a combination of these. It thus includes earthen dikes, timber cribs, any type of sheet piling, removable steel sheets and the like and all necessary bracing; and it shall also be understood to include the use of pumping wells or well points for the same purpose. The cost of cofferdams shall be included as an incidental cost to excavation.

Prepared By: HR Green, Inc. The term caisson, wherever used in this specification, designates a permanent part of the substructure, so constructed as to sink gradually into place as material is excavated within the area protected by its
Date: June 22, 2020

sidewalls. Such caisson may be of either the open-well or pneumatic type and quantities for same will always be included as bid items separate from excavation.

In addition to interior dredging, the lowering of caissons may be facilitated by the following methods:

- A. Addition of weight by increasing the thickness of caissons, where such increase is permitted by the type of design, shall be requested by the Contractor prior to beginning the work. Increased quantities due to this change shall be at the Contractor's expense.
- B. By the addition of removable loads to the caisson.
- C. The use of water or air jets placed around the caisson.
- D. Steel shell caissons may be driven with a drop or air hammer if the Contractor, at his own expense, provides a suitable driving ring. The driving ring shall be of sufficient strength and the manner of driving shall be regulated to preclude damage to the caisson.

When no provisions for caissons is shown on the plans, it shall be the intent of this specification to require that a suitable cofferdam be provided for all excavations where such cofferdam may be necessary to control water conditions or to preclude sliding and caving of the walls of the excavation. Where no ground or surface water is encountered, the cofferdam needs to be sufficient only to protect the workmen and to avoid cave-ins or slides extending beyond the excavation limits.

The Contractor shall submit, to the Engineer, upon request, drawings showing his proposed method of cofferdam construction and other details left open to this choice, or not fully shown on the plans. All shoring designs must meet the requirements of OSHA Standard 1926.650.

The type and clearance of the cofferdam, insofar as such details affect the character of the finished work, will be subject to the approval of the Engineer, but other details of design will be left to the choice of the Contractor, who will be responsible for the successful completion of the work. The interior dimensions shall be such as to provide sufficient clearance for the construction and removal of any required forms and the inspection of their exteriors and to permit pumping outside of the forms.

In general, sheet piling cofferdams shall extend well below the bottom of the footings and shall be well braced and as water-tight as practicable.

When foundation pilings are to be driven inside a caisson or cofferdam and when it is judged impractical to dewater the caisson or cofferdam before placing a concrete seal, the excavation may be extended below the footing grade to a depth sufficient to allow for swell of the material during pile driving operations. After the pilings have been driven, all foundation material that has risen to a level above the footing grade shall be

removed. It is the intention of this provision to establish a construction tolerance to be applied when a foundation is being constructed under water. Where it is possible to dewater the caisson or cofferdam before a seal is placed, it is considered practicable to remove the foundation material to the exact footing grades after foundation pilings are driven. Backfilling in a foundation to compensate for excavation which has been extended below grade, will not be permitted. Such areas below grade shall be filled with concrete at the time the seals or base courses are placed, and the concrete quantities involved shall be at the Contractor's expense. All caisson and cofferdam designs must meet the requirements of OSHA Standard 1926.650.

Caissons or cofferdams which tilt or move laterally during the process of sinking shall be righted or enlarged, as necessary, at the sole expense of the Contractor.

Unless otherwise provided, cofferdams shall be removed by the Contractor after the completion of the substructure. The removal shall be affected in such a manner as not to disturb or mar the structure. In lieu of the entire removal of the cofferdams, the Engineer may require the Contractor to remove any portion of them or to leave them entirely in place.

400.5 Pumping or Bailing. Pumping or bailing from the interior of any foundation enclosure shall be done in such a manner as to preclude the possibility of the movement of water through or alongside any concrete being placed. No pumping or bailing will be permitted during the time of the placing of concrete or for a period of at least 24 hours thereafter, unless it is done from a suitable sump separated from the concrete work by a water-tight wall. Pumping or bailing to dewater a sealed cofferdam or caisson shall not be started until the seal has set for at least 36 hours.

400.6 Backfilling. All backfills shall be constructed in layers approximately parallel to the finished grade. After completion of the backfill, it shall be continuously maintained to its finished grade, until the project is accepted.

Backfill for retaining walls, headwalls, bridge abutments, and other special structures, shall be as shown on the plans.

Each layer of backfill shall be uniform as to material, density and moisture content before beginning compaction. Water required to bring the material to the moisture content necessary for the required compaction shall be the responsibility of the Contractor.

Unless otherwise indicated, backfill compacted mechanically shall be in loose lifts not exceeding 8-inches. Backfill shall be clean bank sand, unless otherwise directed by the Engineer, free from clay and clay lumps, shale, loam, organic matter, salts and other deleterious materials and having a plasticity index less than 3. Backfill shall be compacted to ninety-five (95) percent of Standard Proctor Density (ASTM D698) at a moisture content ranging from optimum to +3 percentage points above optimum.

Do not place backfill against walls for a minimum of 7 days after structure has been in place. Place backfill against walls of partially completed structure only after approval of the Engineer. Backfill around abutments and piers shall be deposited on both sides to approximately the same elevation at the same time.

Care shall be taken to prevent any wedging action or backfill against the structure and the slopes bounding the excavation shall be stepped or serrated to prevent such wedge action.

No backfilling shall be done except in the presence of the Engineer, or his authorized representative.

- 400.7 Quality Assurance. The Testing Laboratory's representative will determine the moisture density relationship for each material proposed for use as backfill, in accordance with ASTM D698. In place density will be determined in accordance with ASTM D6938 or D1556, and with each type of construction.

For walls and trenches, determine the in place density at minimum for each 100-foot of wall or trench, for each lift of fill placed.

For building pads and parking areas, determine the in place density for each 4,000 square feet for each lift of fill placed.

- 400.8 Measurement and Payment. Will not be paid for directly, but will be considered subsidiary to the bid for structures requiring excavation and/or backfilling.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 400

ITEM 402

BANK SAND BACKFILL

- 402.1 Description. This item shall consist of the furnishing, placing, manipulation, compacting and completing in-place, Bank Sand as a bedding and backfill material for water and sewer lines, as construction fill for certain excavation areas, as construction fill for ruts, holes and other similar conditions; as a fill material for project clean-up and as directed by the Engineer. Bank sand shall be in accordance with these specifications and in conformity with the lines, grades and cross-sections shown on the plans and as directed by the Engineer.
- 402.2 Materials. Bank sand is to be free of organic matter, foreign material, clay balls, sticks, foreign objects and other objectionable material.
- Bank sand shall have a plasticity index less than 3 and shall meet the following gradation:
- 100 percent passing a 3/8-inch sieve,
5 to 30 percent passing a No. 200 sieve.
- Prior to use, Contractor shall identify the source of the proposed bank sand for testing.
- 402.3 Construction. After the water line, sewer line or other similar construction item, such as a trench, has been excavated and brought to grade, bank sand shall be furnished, placed, compacted complete in-place, either as bedding or backfill material, as shown on the plan, described in these specifications or as directed by the Engineer. After the trench or excavation has been brought to grade, the bank sand shall be placed and compacted as a bedding material, the construction item shall be placed and joined properly around and over that construction item as required and as shown on the plans, described in the specifications or directed by the Engineer.
- Bank sand shall be placed in layers not exceeding 8-inches. It shall be compacted with mechanical vibratory tamps to maximum dry density in accordance with ASTM D698 at a moisture content ranging from optimum to three percentage points above optimum. Water flooding will not be permitted.
- 402.4 Testing. The Testing Laboratory's representative will determine the moisture density relationship for each material proposed for use as backfill, in accordance with ASTM D698. In place density will be determined in accordance with ASTM D6938 or D1556, and with each type of construction.
- 402.5 Measurement. No separate payment shall be made for work performed under this Item, except as indicated below. Include the cost of same in

the price bid per linear foot of pipe, or wall, for which this work is a component.

402.6 Payment. "Extra Bank Sand Backfill", where required, will be measured by the cross-sectional method in its compacted position and paid for at the contract unit price bid per cubic yard. Payment under this bid item is limited to such additional bank sand backfill not shown on the plans that may be required.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 402

ITEM 420

CONCRETE STRUCTURES

420.1 Description. These specifications shall govern for the construction of culverts, retaining walls, abutments, bents, piers, girders, slabs and all other structures involving the use of concrete.

All concrete structures shall be constructed in accordance with the design requirements and the details shown on the plans; in conformity with the pertinent provisions of the items contracted for and the incidental items referred to; and in conformity with the requirements herein set forth.

420.2 General Requirements. Before starting work, the contractor shall inform the Engineer fully as to the methods of construction he proposes to follow and as to the amount and character of equipment he proposes to use; the adequacy of which shall be subject to the approval of the Engineer. Concurrence on the part of the Engineer in any proposed construction methods and approval of equipment, shall not relieve the contractor of the responsibility for the safety or correctness of his methods or the adequacy of his equipment or from carrying out the work in full accordance with his contract.

420.3 Materials. All concrete shall conform to the provisions of the Items "Concrete" or "Lightweight Concrete for Structures," whichever is applicable, as may be indicated on the plans. The class of concrete for each unit shall be as shown on the plans.

Preformed expansion joint materials shall meet the requirements of ASTM D994 or ASTM D1751, as well as the Item, "Preformed Joint Seal".

Poured joints shall be asphalt that is homogeneous, shall be free from water and shall not foam when heated to 392° F. It shall conform to the following requirements:

Flash point (open cup), not less than 200°C (392°F)

Softening point (ring and ball method) 65°C to 110°C (149°F to 230°F)

Penetration at 0°C (32°F), 200 gms., 60 sec., not less than.....10

Penetration at 25°C (77°F), 100 gms., 5 sec.,.....30 to 50

Penetration at 46°C (115°F), 50 gms., 5 sec., not more than.....110

Loss on heating at 163°C (325°F), 50 gms., 5 hrs., not more than.....1.0%

Penetration at 25°C (77°F), 100 gms., 5 sec., of residue after heating at 163°C (325°F), as compared with penetration of asphalt before heating, not less than.....60.0%

Ductility at 25°C (77°F), not less than 3.0 cm.

Proportion of bitumen soluble in carbon tetrachloride, not less than..99.0%

Total bitumen (soluble in carbon disulphide), not less than.....99.0%

All other materials such as reinforcing steel and structural steel shall conform to the requirements of the pertinent specifications.

420.4 General Construction Requirements. Before constructing forms and falsework for concrete superstructure spans over twenty (20) feet in length; form and falsework plans shall be submitted to the Engineer for review and approval. Similar plans shall be submitted for other units of the structure if requested by the Engineer. The plans shall be prepared on standard sheets twenty-two (22) inches by thirty-four (34) inches overall size and shall be sufficiently complete to show all essential details of the proposed forms, falsework, and bracing for same. In general, not over six sets of such plans will be required.

Concurrence on the part of the Engineer in any proposed construction methods, approval of equipment, or approval of form and falsework plans shall not be considered as relieving the Contractor of the responsibility for the safety or correctness of his methods and adequacy of his equipment, or from carrying out the work in full accordance with the contract.

Unless otherwise provided, the following requirements shall govern for the time sequence in which construction operations may be carried on and for the opening of completed structures to traffic.

Steel I-beams or forms and falsework for superstructures shall not be erected on concrete substructures until the concrete in the substructures has cured at least four (4) curing days. Concrete for concrete slab or girder spans or concrete slabs on steel I-beam spans shall not be placed until the substructure has cured at least seven (7) curing days.

Steel trusses or plate girders to be erected from the ground on approved falsework may be erected when the substructure has cured four (4) curing days, but the falsework shall not be removed until the substructure has cured at least seven (7) curing days. Erection by means of a traveling crane on the span will not be permitted until the substructure has cured at least seven (7) curing days.

Forms for walls or columns shall not be erected on concrete footings until the concrete in the footing has cured at least two (2) curing days. Concrete may be placed in the wall or column as soon as the forms and reinforcing steel placement is approved.

The use of completed portions of a structure as the site for mixing operations or for storage of materials will not be permitted until the particular portion of the structure has aged at least ten curing days.

A curing day shall be as defined in the Section "Removal of Forms and Falsework". In continued cold weather the construction operations may be authorized at the end of a period of calendar days equal to twice the number of curing days specified above.

For bridges and direct traffic culverts, construction traffic and traveling public permitted in accordance with the following:

- A. Authorization for light construction traffic not to exceed a three-quarter ton truck may be given after last slab of concrete has been in place at least 14 days.
- B. Authorization for normal construction traffic, when necessary, and to traveling public may be given after last slab of concrete has been in place 30 days.

Forms or screed supports for bridges may be attached to I-beams or girders by welding.

420.5 Foundations. Excavation for foundations shall be made in accordance with the requirements of pertinent specifications.

Caissons shall be constructed of the materials and to the dimensions and details shown on the plans. Forms for concrete caissons may be of wood or metal meeting the specified requirements. The operation of sinking will be permitted to proceed immediately after form removal.

Where necessary, falsework shall be provided to support the caisson during the construction and lowering period. Such falsework shall be of the strength required to support the caisson in combination with the forces of wind, water currents and drift.

Concrete foundation seals, if required, shall be of the thickness shown on the plans. The seals shall be Class D Concrete and shall be placed in accordance with the requirements herein for concrete placed in water. The completed seal shall not be higher or lower than the plan grade or the grade established by the Engineer, by more than one-sixteenth (1/16) times the least inside caisson, cofferdam, or dredge well dimension at such grade.

The seal shall be allowed to set for at least thirty-six (36) hours before the caisson or cofferdam is dewatered. After dewatering, the top of seal shall be cleaned off, all or other soft material readily loosened with a pick shall be removed, and all high spots which exceed the above limitation shall be cut off and removed.

Foundation piling shall be cut off square at the elevation shown on plans. A tolerance of not more than two (2) inches above or below established cut-off grade will be permitted.

420.6 Drains. Weep hole drains shall be installed in abutments and retaining walls, and roadway drains or scuppers shall be installed in the roadway slabs in accordance with the details shown on the plans.

420.7 Expansion Joints and Devices. Expansion joints and devices to provide for expansion and contraction shall be constructed where and as indicated on the plans.

Unless otherwise provided on the plans, the bridge seat under the expansion ends of concrete slab spans and slab and girder spans shall be given a steel trowel finish, and the surfaces of substructure and spans and girders shall be separated by layers of roofing felt or a combination of roofing felt and sheet metal. Before installation, the contact areas of such roofing felt or sheet metal shall be coated with graphite grease. Layers of roofing felt or sheet metal shall be carefully placed so that concrete or mortar will not be worked around or under the material.

All joints constructed, to be left open or filled with poured joint material, shall be constructed using forms adaptable to loosening or early removal. In order to avoid jamming such forms by the expansion action of the spans and the consequent likelihood of injury to the adjacent concrete, these forms shall be removed or loosened as soon as practicable after the concrete has attained its final set. A provision for loosening the forms to permit free expansion of the span without the necessity for full removal is preferred.

Armored joints shall be carefully constructed in order to avoid defective anchorage of the steel and to avoid porous or honeycombed concrete adjacent to same.

When premolded joint material is to be used in vertical joints of roadway and sidewalk slabs, the tops of such joints shall be adequately sealed with asphalt of the quality specified for poured joint materials. To accomplish this sealing, the top two (2) inch depth of the joint shall be constructed open or the premolded material shall be plowed out and the space filled with liquid asphalt.

Premolded material, if specified, shall be used in expansion or contraction joints in abutment walls, wing walls and retaining walls. Metal flashing strips for the prevention of water seepage through wall joints shall be provided and installed in accordance with the plan provisions.

Premolded materials, wherever used, shall be anchored to the concrete on one side of the joint by means of copper wire not lighter than No. 12 B.

& S. gauge. Such anchorage shall be sufficient to preclude the tendency of the material to fall out of the joint.

Careful workmanship shall be exercised in the construction of all joints to insure that the concrete sections are completely separated by an open joint or by the joint materials and to insure that the joints will be true to the outline indicated. Immediately after the removal of forms and again where necessary after surface finishing, all projecting concrete shall be removed along the exposed edges of premolded materials in order to secure full effectiveness of the expansion joint.

Where roofing felt or premolded material is specified for horizontal joints, the material shall, if practicable, extend two (2) inches beyond the form for the top member. The projecting portions shall be subsequently trimmed to the face of the member after the forms are removed.

420.8 Construction Joints. The joint formed by placing plastic concrete in direct contact with concrete that has attained its initial set shall be deemed a construction joint. When concrete in a structure or a portion of a structure is specified to be placed monolithic, the term monolithic shall be interpreted to mean that the manner and sequence of concrete placing shall be such that construction joints will not be created.

Construction joints shall be of the type, location and spacing shown on the plans. Additional joints shall not be provided, without written authorization from the Engineer. Any additional construction joints shall have details equivalent to those shown on the plans for joints in similar locations.

Unless otherwise provided, construction joints shall be square and normal to the forms. Bulkheads shall be provided in the forms for all joints except horizontal joints.

The top surface of a concrete placement which terminates at a horizontal construction joint shall have the surface cement film removed and shall be thoroughly roughened as soon as practicable after the concrete has attained initial set. The surface at bulkheads shall be roughened as soon as the bulkhead forms are removed.

Before joining plastic concrete to concrete that has already set, the surface of the concrete in place shall be thoroughly cleaned up of all loose materials, dirt or foreign matter; shall be washed and scrubbed clean with stiff brooms and thoroughly drenched with water until saturated, and shall be kept wet until the plastic concrete has been placed. Immediately prior to the placing of additional concrete, all forms shall be drawn tight against the concrete in place, and the surface of the concrete in place shall be flushed with a coating of grout mixed in the proportions of one part of cement to two parts of sand.

If shown on the plans, construction joints, shall be provided with concrete keyways, reinforcing steel dowels, and/or metal flashing strips. The

method of forming keys in keyed joints shall be such as to permit the easy removal of forms without chipping, breaking, or damaging the concrete in any manner.

420.9 Falsework. All falsework shall be designed and constructed so that no excessive settlement or deformation will occur, and so that the necessary rigidity will be provided. Details of falsework construction shall be subject to review and approval by the Engineer in accordance with the provisions of Section "General Construction Requirements".

For calculating the loads on falsework, a weight of one hundred and fifty (150) pounds per cubic foot shall be assumed for concrete, and a live load allowance of fifty (50) pounds per square foot of horizontal surface of the form work shall be included. The maximum stresses shall not exceed one hundred and twenty-five (125) per cent of the allowable stresses used for the design of the structure.

All timber used in falsework centering shall be sound, in good condition, and free from defects which will impair its strength.

Steel members shall be of adequate strength and of such shape as to be suitable for the purpose intended.

Timber piling may be of any species of wood which will withstand driving satisfactorily and which will adequately support the superimposed load.

Where sills or timber grillages are used to support falsework columns, unless founded on, shale or other hard materials, shall be placed in excavated pits and backfilled to prevent the softening of the supporting material by drip from the forms or by rains that may occur during the construction process. Sills or grillages shall be of ample size to support the superimposed load without settlement.

Falsework which cannot be founded on a satisfactory spread footing shall be supported on piling which shall be driven to a bearing capacity sufficient to support the superimposed load without settlement. The safe bearing capacity of piling shall be determined by the formula specified elsewhere.

In general, each falsework bent shall be capped transversely at the proper elevation by a cap of adequate size. If desired by the Contractor, however, a short cap section forming a T-head may be substituted at the top of each pile or column in order to permit the removal of portions of the forms without disturbing the falsework. Caps shall be securely fastened to each pile or column in the bent and shall be set at the proper elevation to produce, in conjunction with the use of approved hardwood wedges or jacks, permanent camber indicated on the plans or specified, plus a construction camber covering allowance for deformation of the forms and falsework. The use of wedges to compensate for incorrectly cut bearing surfaces will not be permitted. Each falsework bent shall be securely

braced to adjacent bents by bracing material of ample size to provide the stiffness required. The bracing shall be securely spiked or bolted to each pile or column it may cross.

420.10

Forms. Forms shall be built mortar-tight and of material sufficient in strength to prevent bulging between supports and shall be set and maintained to the lines designated until the concrete is sufficiently hardened to permit form removal. During the elapsed time between the building of the forms and the placing of the concrete, the forms shall be maintained in a manner to eliminate warping and shrinking. All details of form construction shall be subject to the approval of the Engineer, and permission to place concrete will not be given until all of such work is complete to his satisfaction.

Forms shall be designed for the pressure exerted by a liquid weighing one hundred and fifty (150) pounds per cubic foot. The rate of placing the concrete shall be taken into consideration in determining the depth of the equivalent liquid. An additional live load of fifty (50) pounds per square foot shall be allowed on horizontal surfaces. The maximum stresses shall not exceed one hundred and twenty-five (125) per cent of the allowable stresses used for the design of the structures.

If, at any stage of the work, the forms show signs of bulging or sagging, that portion of the concrete causing such condition shall be immediately removed, if necessary, and the forms shall be reset and securely braced against further movement.

Lumber for forms shall be properly seasoned and of good quality. It shall be free from loose or unsound knots, knot holes, twists, shakes, decay, and other imperfections which would affect its strength or impair the finished surface of the concrete. The lumber used for facing or sheathing shall be finished on at least one side and two edges and shall be sized to uniform thickness.

The use of nominal two (2) inch lumber, as a minimum thickness, will be required for forms for the bottoms of all superstructure girders except that in case of special forming of girders, as for curved-bottom girders where facing boards are transverse to beam, the Engineer may permit the use of one (1) inch lumber. Nominal one (1) inch thickness lumber will be permitted for general use on other portions of the structure if backed by a sufficient number of studs and wales.

Timber forms for exposed concrete surfaces which are required to be surface finished in accordance with these specifications shall be face lined with an approved type of form lining material such as masonite or plywood. If desired by the Contractor, facing for such surfaces may be constructed of three-fourth (3/4) inch thick plywood backed by adequate studs and wales, and in this case form lining will not be required.

Forms or form lumber to be re-used shall be maintained clean and in good condition as to accuracy, shape, strength, rigidity, tightness, and smoothness of surface. Any lumber which is split, warped, bulged, marred, or has defects that may produced work inferior to that resulting from using new material, shall not be re-used.

Studs shall not be less than two (2) inches by four (4) inches nominal section and shall be spaced center to center not more than twenty (20) times the actual thickness of the facing lumber. Wherever practicable, studs shall be capped at the top with a plate of not less than two (2) inches by six (6) inches nominal size, carefully selected as to straightness. All joints in plates shall be scabbed at least four (4) feet each way to provide continuity.

Wales shall be spaced at such intervals as to hold forms securely to the designated lines. All wales shall be scabbed at least four (4) feet on each side of joints to provide continuity. A row of wales shall be placed within six (6) inches of the bottom of each placement.

Forms shall be rigidly braced to prevent movement while placing the concrete.

All face form material shall be fastened to all studs and shall have true horizontal and vertical joints. Facing material on horizontal and other surfaces shall be placed with parallel and square joints.

Molding specified for chamfer strips or other uses shall be made of redwood, cypress or pine materials of such grade that will not split when nailed and which can be maintained to a true line without warping. The molding shall be mill cut and dressed on all faces. Unless otherwise provided, forms shall be filleted at all sharp corners and edges with triangular chamfer strips. The strips shall be three-fourths (3/4) inch measured on the sides.

Forms for railings shall be constructed to standards equivalent to first class mill work. All moldings, panel work, and bevel strips shall be straight and true with neatly mitered joints and of such design that the finished work shall be true, sharp and clean cut.

All forms shall be so constructed as to permit removal without damage to the concrete. Particular and special care must be exercised in framing forms for copings, offsets, and railing so that there will be no damage to or marring of the concrete when the forms are removed. If desired by the Contractor, the forms may be given a slight draft to permit ease of removal.

Metal form ties of an approved type shall be used to hold forms in place. Such ties shall be of a type especially designed for use in connection with concrete work, and they shall have provision to permit ease of removal of the metal as hereinafter specified. The use of wire form ties will not be

permitted except for minor or special form areas where the use of rigid type metal ties would be impracticable.

All metal appliances used inside of forms to hold them in correct alignment shall be removed to a depth of at least one-half (1/2) inch from the surface of the concrete and shall be so constructed that the metal may be removed without undue injury to the surface by chipping or spalling. Such devices, when removed, shall leave a smooth opening in the concrete surface. Burning off of rods, bolts, or ties will not be permitted.

Metal ties shall be held in place by devices attached to wales. Each device shall be capable of developing the strength of the tie.

Pipe spreaders will not be permitted.

Metal and wooden spreaders which are separate from the forms shall be entirely removed as the concrete is being placed.

Where wire ties are used, all wires, upon removal of the forms, shall be cut back at least one-half (1/2) inch from the face of the concrete with a sharp chisel or nippers.

All cavities produced by the removal of metal ties shall be carefully cleaned and completely filled with re-tempered sand cement mortar mixed in proportion of one to three, and the concrete shall be left smooth and even.

Whenever practicable, forms shall be erected complete before the reinforcement is placed.

For narrow walls and other locations where access to the bottom of the forms is not readily attainable otherwise, adequate clean-out openings shall be provided.

At the time of placing concrete, the forms shall be clean and entirely free from all chips, dirt, sawdust, and other extraneous matter.

The facing of all forms shall be treated with oil before concrete is placed. In hot weather, both sides of face forms may be required to be treated with oil to prevent warping and to secure tight joints. The oil must be applied before the reinforcement is placed. The oil used for this purpose shall be a light clear oil which will not discolor or otherwise injuriously affect the concrete surface.

In general, all forms shall be thoroughly wetted before the concrete is placed therein.

The foregoing specifications for forms, regarding design, mortar-tightness, filleted corners, beveled projections, bracing, alignment, removal, re-use,

oiling and wetting shall apply with equal force to all forms, except that metal forms will not require lining unless noted on the plans.

The metal used for forms shall be of such thickness that the forms will remain true to shape. All bolt and rivet heads on the facing sides shall be countersunk. Clamps, pins, or other connecting devices shall be designed to hold the forms rigidly together and to allow removal without injury to the concrete. Metal forms which do not present a smooth surface or line up properly shall not be used. Special care shall be exercised to keep metal free from rust, grease, or other foreign material such as will tend to discolor the concrete.

420.11 Placing Reinforcement. Reinforcement in concrete structures shall be carefully and accurately placed and rigidly supported as provided in the Item, "Reinforcing Steel".

420.12 Placing Concrete, General. The Contractor shall give the Engineer sufficient advance notice before starting to place concrete in any unit of the structure to permit the inspection of forms, the reinforcing steel placement, and preparations for casting. Unless authorized by the Engineer, no concrete shall be placed in any structure until prior to the completion of the formwork and the placement of the reinforcement. No concrete shall be placed before the completion of all adjacent pile driving or other operations which might prove detrimental to the concrete.

Whenever it is necessary to continue the mixing, placing, and finishing of concrete after the daylight hours, the site of the work shall be brilliantly lighted so that all operations are plainly visible. In general, however, concrete placing shall be so regulated as to permit finishing operations to be completed in the daylight hours.

The Engineer reserves the right to order postponement of the placing operations when, in his opinion, impending weather conditions may result in rainfall or low temperatures which will impair the quality of the finished work. In case rainfall should occur after placing operations are started, the Contractor shall provide ample covering to protect the work. In case of drop in temperature, the provisions set forth in the Section "Placing Concrete in Cold Weather" shall be applied.

The sequence of placing concrete shall be as provided on the plans or in the specifications. The operation of depositing and compacting the concrete shall be conducted so as to form a compact, dense, impervious mass of uniform texture which shall show smooth faces on all surfaces. The placing shall be so regulated that the pressures caused by the plastic concrete shall not exceed the loads used in the design of forms.

The method and manner of placing shall be such as to avoid the possibility of segregation or separation of the aggregate or the displacement of the reinforcement. Concrete shall not have a free fall of

more than three (3) feet except in the case of thin walls such as culvert walls.

Spattering on forms or reinforcement bars shall be prevented if the concrete so spattered will dry or harden before being incorporated in the mass. Any hardened concrete splatter ahead of the plastic concrete shall be removed.

Each part of the forms shall be filled by depositing concrete directly as near its final position as possible. The coarse aggregate shall be worked back from the face and the concrete forced under and around the reinforcement bars without displacing them. Depositing large quantities at one point in the forms and running or working it along the forms will not be allowed.

After the concrete has taken initial set, the forms shall not be jarred or any strain placed on projecting reinforcement.

Chutes, troughs, conveyors or pipes used as aids in placing concrete shall be arranged and used so that the ingredients of the concrete will not be separated. When steep slopes are necessary, the chutes shall be equipped with baffle boards or be made in short lengths that reverse the direction of movement. Open troughs and chutes shall extend, if necessary, down inside the forms or through holes left in the forms, or the ends of such chutes shall terminate in vertical downspouts. All chutes, troughs, and pipes shall be kept clean and free from coatings of hardened concrete by a thorough flushing with water before and after each placement. Water used for flushing shall be discharged clear of the concrete in place. The use of chutes in excess of thirty-five (35) feet total length for conveying concrete will not be permitted except by specific authorization from the Engineer.

Where the Contractor's operations involve the placing of concrete from above, that is, directly into an excavated area or through the completed forms, particularly in the case of abutments, piers, columns, retaining walls, and deep girders, and excepting thin walls such as culvert walls less than 12-inches, all concrete so placed shall be deposited through a vertical sheet metal or other approved pipe not less than six (6) inches nor more than ten (10) inches in diameter. The pipe shall be made in sections so that the outlet may be adjusted to proper heights during placing operations.

Concrete shall be placed in continuous horizontal layers approximately 12-inches in thickness. Not more than one hour shall elapse between the placing of successive layers of concrete in any portion of the structure included in a continuous placement. The Contractor shall avoid unauthorized construction joints by placing required portions of abutments, pier walls or superstructures in one continuous operation. Laitance or foreign matter of any kind shall not be permitted to

accumulate inside the forms. Openings in forms necessary for removal of shall be provided.

All concrete shall be well compacted and the mortar flushed to the surface of the forms by continuous working with concrete spading implements or mechanical vibrators of an approved type. Vibrators of the type which operate by attachment to forms or reinforcement will not be permitted. The vibrators shall be applied to the concrete immediately after deposit and shall be moved throughout the mass, thoroughly working the concrete around the reinforcement, embedded fixtures, and into the corners and angles of the forms until it has been reduced to a plastic mass. The mechanical vibrator shall not be operated so that it will penetrate or disturb layers placed previously which have become partially set or hardened. The vibration shall be of sufficient duration to accomplish thorough compaction and complete embedment of reinforcement and fixtures but shall not be done to an extent that will cause segregation. Vibration shall be supplemented by hand spading if necessary to insure the flushing of mortar to the surface of all forms.

Holes for anchor bolts in piers, abutments, bents, or pedestals may be drilled or may be formed by the insertion of oiled wooden plugs or metal sleeves in the plastic concrete. The plugs or sleeves shall be withdrawn after the concrete has set. When the holes are formed, they shall be of such diameter to permit horizontal adjustment of the bolts. The bolts shall be carefully set in mortar. In lieu of the above methods of placing, anchor bolts may be set to exact locations in the concrete when it is placed.

The placing of concrete for floor slabs of I-beam spans, girder spans, or truss spans preferably shall be done from a mixing plant located off the structure. If the mixer plant is to be located on the structure, it shall not be placed on a section of the roadway slab which has not aged for at least ten (10) curing days. Carting or wheeling concrete batches on a completed concrete floor slab will not be permitted until the slab has aged at least four (4) curing days. If carts are used, the carts shall be wheeled on timber planking so that the loads and impact will be distributed over the slab. Carts shall be equipped with pneumatic tires. Curing operations shall not be interrupted for the purpose of wheeling concrete over finished slabs.

Stockpiling of concrete aggregate or cement on bridge floors will be permitted only when authorized by the Engineer, and, when permitted, the stock piles shall be uniformly distributed and shall be limited to not over two (2) feet maximum depth. The storing of reinforcing or structural steel on completed roadway slabs shall generally be avoided, and, when permitted, such storage shall be limited to quantities and distribution that will not induce excessive stresses.

420.13 Placing Concrete In Cold Weather. No concrete shall be placed when the atmospheric temperature is at or below 40°F (taken in the shade away from artificial heat) unless permission to do so is given in writing by the

Engineer. When such permission is given or in cases where the temperature drops below 40°F after the concreting operations have been started, the Contractor shall furnish sufficient canvas and framework or other type of housing to enclose and protect the structure in such way that the air around the forms and fresh concrete can be kept at a temperature not less than 50°F for a period of five days after the concrete is placed. Sufficient heating apparatus such as stoves, or steam equipment and fuel to furnish all required heat shall be supplied. The treatment of mixing water and aggregates used in mixing concrete shall be as specified in "Concrete". The placing of concrete in cold weather, shall conform to the requirements of ACI306.

It is understood that the Contractor is responsible for the protection of concrete placed under any and all weather conditions. Permission given by the Engineer to place concrete during freezing weather will in no way relieve the Contractor of the responsibility for satisfactory results. Should concrete placed under such conditions prove unsatisfactory, it shall be removed and replaced at the expense of the Contractor.

420.14 Placing Concrete in Hot Weather. Unless otherwise directed by the Engineer, when the temperature of the air is above 85°F, an approved retarding agent will be required in all concrete or direct traffic culverts. An approved retarding agent will be required in all cased drilled shafts, regardless of temperature.

420.15 Placing Concrete In Water. Concrete shall be deposited in water only when specified on the plans or with the permission of the Engineer. The forms, cofferdams, or caissons shall be sufficiently tight to prevent any water current passing through the space in which the concrete is being deposited. Pumping will not be permitted while the concrete is being placed, nor until it has set for at least thirty-six (36) hours.

The concrete shall be carefully placed in a compact mass by means of a tremie, closed bottom-dump bucket or other approved method that does not permit the concrete to fall through the water. The concrete shall not be disturbed after being deposited. Depositing shall be regulated to maintain an approximately horizontal surface at all times.

When a tremie is used, it shall consist of a tube having a diameter of not more than ten (10) inches, constructed in sections having water-tight connections. The means of supporting the tremie shall permit the movement of the discharge end over the entire top surface of the work and shall permit the tremie to be rapidly lowered when necessary to choke off or retard the flow. The number of times it is necessary to shift the location of the tremie, for any continuous placement of concrete, shall be held to a minimum.

During the placing of concrete, the tremie tube shall be kept full to the bottom of the hopper. When a batch is dumped into the hopper, the tremie shall be slightly raised, but not out of the concrete at the bottom,

until the batch discharges to the level of the bottom of the hopper. The flow shall then be stopped by lowering the tremie. The placing operations shall be continuous until the work is complete.

When concrete is placed by means of a bottom-dump bucket, the bucket shall have a capacity of not less than one-half (1/2) cubic yard. The bucket shall be lowered gradually and carefully until it rests upon the concrete already placed. It shall then be raised, very slowly, during the upward travel, the intent being to maintain, as nearly as possible, still water at the point of discharge and to avoid agitating the mixture.

- 420.16 Placing Concrete in Slab Spans. Concrete in slab spans shall be placed in longitudinal strips. Placing preferably shall be started at a point in the center of the span adjacent to one curb and the longitudinal strip thus started shall be completed by depositing concrete uniformly in both directions toward the ends of the span. The width of longitudinal strips shall be such that the concrete in any strip will not take its initial set before the adjacent strip is placed. The concrete in the curbs shall be placed in proper sequence to be monolithic with the adjacent longitudinal strip of the slab.

The forms for the bottom surface of the slab shall be maintained true to the required vertical alignment during the placing of concrete in the span. For convenience in checking the vertical alignment, an approved system of "tell-tales" shall be installed and maintained by the Contractor. The "tell-tales" shall be attached to the form and shall provide a convenient means of matchmarking with reference to points set on stakes or other suitable reference points set independent of the forms and falsework for the span being placed.

On completion of the filling of the curb forms, the curbs shall be brought to the correct camber and alignment, and then they shall be struck off and float finished.

As soon as concrete is placed in a longitudinal section of the slab of a width necessary to permit finishing operations, the slab shall be finished in accordance with the requirements of "Finish of Roadway Slabs".

- 420.17 Placing Concrete in Deck Girders Spans. Unless otherwise provided, the girders, slab and curbs of deck girder spans shall be placed in one continuous operation. Concrete shall be placed in longitudinal sections. Placing preferably shall commence with a section adjacent to one curb, and successive sections continuing across the roadway shall follow. The width of each longitudinal section shall be governed by the size of the mixing apparatus and shall be such that each successive section shall be placed before the adjacent completed section shall have attained its initial set. The placing of concrete in curbs shall be in the proper sequence to be monolithic with the adjacent slab or girder section. Except for spans on a grade of one and one-half (1.5) per cent or more, concreting in each longitudinal section preferably shall be started at the middle of the span

and shall be continued in both directions to the ends of the span. For spans on a grade of one and one-half (1.5) per cent or more, concreting shall be commenced at the low end of the span. The filling of the girder stems ahead of placing the concrete in the slab will be permitted provided the slab is placed not later than one hour after the filling of the girder stem.

During the operations of placing concrete in the span, the bottoms of the girders and overhanging slabs shall be maintained true to required vertical alignment. For convenience in checking the vertical alignment, the Contractor shall attach to the form of each girder an approved system of "tell-tales" which shall provide a means of matchmarking for reference to established grades fixed on stakes or other suitable reference points set independent of the forms and falsework for the span being placed. Care shall be exercised to assure that the "tell-tales" system is not altered or destroyed after the matchmarking is done.

On completion of the filling of the curb forms, the curbs shall be brought to the correct camber and alignment, and then shall be struck off and float finished.

The surface of the floor slab shall be finished as provided in Section, "Finish of Roadway Slabs". The finishing shall be done as soon as possible after the placing of concrete is completed in a section of slab of sufficient width to permit finishing operations.

420.18

Placing Concrete In Floors on Steel Spans. Before concrete floor slabs are placed on steel truss spans, the falsework under the span shall be released and the span swung free on its supports. The floor slab shall be placed symmetrically about the centerline of the span beginning at the center and working simultaneously toward each end, or beginning at the ends and working simultaneously toward the center. Where construction joints are provided at each panel point of the truss, variations from the above sequence will be permitted to the extent of one unsymmetrical panel; that is, concreting will be permitted in a panel on one side of the centerline of span provided that the corresponding panel on the opposite side of the centerline shall be the next panel placed.

Placing of the slab in each panel and the placing of the slab on steel I-beam spans shall be in accordance with the provisions of Section "Placing Concrete in Slab Spans".

Concrete placed around steel shapes shall be deposited on one side of the shape and shall be spaded or vibrated until it flushed up over the bottom flange on the opposite side of the member, after which, it may be placed on both sides to completion.

On completion of the filling of the curb forms, the curbs shall be brought to the correct camber and alignment, and they shall then be struck off and

float finished as described in Section "Treatment and Finishing of Horizontal Surfaces Except Roadway Slabs".

The surface of the floor slab shall be finished as provided in Section, "Finish of Roadway Slabs". The finishing shall be done as soon as possible after the placing of concrete is completed in a section of slab of sufficient width to permit finishing operations.

420.19 Placing Concrete in Box Culverts. In general, the base slab, curtain walls, lower haunches, and the bottom portion of the sidewalls up to a height approximately one inch above the haunches, or sidewalls to a height approximately four (4) inches above the base slab when no haunch is provided, shall be placed as a monolith. The top surface of the base slab and the top surface of the top slabs which do not carry direct traffic shall be accurately finished by hand floating methods before the concrete has attained its initial set. Before concrete is placed in the sidewalls, the footing area joining the walls shall be thoroughly cleaned of all shavings, sticks, sawdust, or other extraneous material.

In the construction of box culverts less than four (4) feet in clear height, the sidewalls and top slab generally shall be placed monolithic. When box culverts are greater than four (4) feet in clear height, a construction joint may, if shown on the plans, be provided between the sidewalls and the top slab. In case no joint is provided, an interval of not less than one (1) hour or more than two (2) hours shall elapse between the placing of concrete in the walls, and concrete in the haunches and top slab, such interval to allow for shrinkage in the wall concrete. Curbs and haunches at tops of walls shall be placed monolithic with the top slab.

The tops of culvert slabs which are intended to carry direct traffic shall be finished and surface tested in accordance with the provisions for finishing roadway slabs.

420.20 Placing Concrete in Foundations of Structures. Concrete shall not be placed in footings until the depth and character of the foundation has been inspected by the Engineer and permission has been given to proceed.

The placing of concrete bases above seal courses will be permitted after the caissons or cofferdams are free from water and the seal course cleaned. Any necessary pumping or bailing during the concreting operations shall be done from a suitable sump located outside the forms.

All temporary wales or braces on the inside of cofferdams or caissons shall be constructed or adjusted as the work proceeds, so that construction joints in bases or shaft, in addition to those shown on the plans, will not be necessary.

Concrete in deep foundations shall be placed in a manner that will avoid separation of the aggregates or displacement of the reinforcement. Suitable chutes or vertical pipes shall be provided.

When footings can be placed in dry foundation pits without the use of cofferdams or caissons, forms may be omitted, if desired by the Contractor and approved by the Engineer, and the entire excavation filled with concrete to the elevation of the top of footing. Where this procedure is followed, no measurement for payment will be made for concrete placed outside of the footing dimensions shown on the plans.

Concrete in columns shall be placed monolithically unless otherwise provided. Unless a construction joint is provided at the top of columns, an interval of not less than one hour or more than two (2) hours shall elapse between the placing of concrete in columns and the placing of concrete above the top of columns. Such interval is intended to allow for shrinkage of the column concrete.

- 420.21 Treatment and Finishing of Horizontal Surfaces, Except Roadway Slabs. All upper surfaces not covered by forms, such as tops of railing posts, railings, caps, curbs, parapets, copings, bridge seats, and sidewalk areas shall be completed by placing excess material in the forms and removing or striking off such excess with a wooden template forcing the coarse aggregate below the mortar surface. The use of mortar topping for surfaces under this classification will not be permitted.

After the concrete has been struck off as described above, the surface shall be thoroughly worked and floated with a wooden, canvas, or cork float. After floating and before the finish has set, all surfaces, except sidewalks so finished, shall be lightly striped with a fine brush, to remove the surface cement film, leaving a fine grained, smooth but sanded texture. That portion of curbs or parapets which is to be the seat for concrete rail posts or webs of concrete railings shall be roughened in an approved manner.

- 420.22 Finish of Roadway Slabs. As soon as concrete placing operations have been completed for a longitudinal roadway slab section of sufficient width to permit finishing operations, the concrete shall be approximately leveled and then struck off, screeded and tamped by a longitudinal screed. The screed shall be of a design adaptable for the purpose intended. It shall have provisions for adjustment to the desired camber and be sufficiently rigid to hold true to shape during use.

The first strike-off operation shall leave the concrete surface at an elevation above grade so that, when consolidation and finishing operations are completed, the slab will be at the exact grade elevation shown on the plans with proper allowance for finished camber as hereinafter provided. The tamping and screeding operations shall be continued until the concrete is properly consolidated and surface voids eliminated. The surface shall then be brought to a smooth true alignment

by means of longitudinal screeding, floating, belting, and/or other methods approved by the Engineer. Spans over forty (40) feet in length may be screeded in two or more sections if suitable intermediate templates are installed. Unless otherwise provided, the templates shall be of such design as to permit early removal in order to avoid construction joints and to permit satisfactory finishing at and adjacent to the site of the template.

After the finishing operations are completed and while the concrete is still plastic, the surface shall be straightedged by the Contractor, using a standard ten (10) foot metal straightedge. Any deviations from the face of the straightedge greater than those prescribed under the following surface test shall be corrected before the concrete has attained its initial set. The final belting of the slab shall be done after this straightedging is completed.

After the concrete has attained its final set, the roadway surface shall be tested again with a standard ten (10) foot metal straightedge for irregularities, and the surface shall be corrected, if necessary, to conform to the following:

The straightedge shall be placed parallel to the centerline of the road so as to bridge any depression and touch high spots. Ordinates measured from the face of the straightedge to the surface of the slab shall not exceed one-sixteenth (1/16) inch per foot from the nearest point of contact and the maximum ordinate shall not be greater than one-eighth (1/8) inch. The surface shall be corrected by grinding off the high spots as may be required in order to conform to these limits.

In the case of concrete slab or girder spans, the floor shall be finished so as to provide a camber sufficient to off-set the dead load deflection of the span; other spans shall be so finished if directed by the Engineer. Unless otherwise shown on the plans, the camber at the center of the span shall be made one-eighth (1/8) inch for each ten (10) feet of span length with a maximum camber of one-half (1/2) inch. When camber is provided, the ordinate to the straightedge may be as much as three-sixteenths (3/16) inch at the end of the straightedge but shall not exceed one-sixteenth (1/16) inch under its center.

420.23

Curing Concrete. Careful attention shall be given by the Contractor to the proper curing of all concrete in the structure. The Contractor, at his option, may elect to use other curing methods outlined in the Item, "Concrete". If cotton mats are used, all upper surfaces not formed, except roadway and side walk slabs, shall be covered by cotton mats immediately following the floating operations and shall be kept thoroughly wet for a period of four (4) curing days after the concrete is placed. All formed surfaces requiring a surface finish shall be covered with wet cotton mats immediately after the forms are removed and shall be kept covered and wet until the concrete has aged at least four (4) curing days. Intermission will be permitted as needed to allow the surfaces to be finished. The mats shall be held in direct contact with the concrete.

Water used for curing shall be free from injurious amounts of oil, acid, alkali, salt, or other deleterious substances.

When forms are removed from concrete caissons in less than four (4) curing days and when the sinking operations do not immediately follow the form removal, the caissons shall be cured by being covered with wet cotton mats which shall remain in place until the caissons have aged at least four (4) curing days.

Immediately following the finishing operations, concrete roadway and sidewalk slabs shall be covered with wet cotton mats or with a temporary covering of canvas or burlap. The temporary covering will be required in all cases where the size of span, size of mats, or other factors are such that the mats cannot be placed immediately following the finishing operation without marring the finish of the slab.

The canvas or burlap covering material shall weigh not less than ten (10) ounces per square yard, and the sections shall be placed with a lap at the edges of at least eight (8) inches. The material shall be saturated with water previous to placing and shall be kept saturated as long as it remains in place. Care shall be exercised in the placing of the cover material in order that the concrete surface shall not be disturbed.

When a temporary covering is used, it shall remain in place only until the slab has sufficiently hardened that a cotton mat covering can be substituted without disturbing or marring the finish of the slab. Cotton mats shall be thoroughly saturated before placing and shall be maintained in a saturated condition for a period of at least eight (8) curing days after the concrete is placed.

Ponding, instead of cotton mat covering may be used for curing roadway, sidewalk slabs, and top slabs of culverts. In addition, membrane curing as specified in the Item, "Membrane Curing", may also be used, where appropriate.

420.24 Removal of Forms and Falsework. Except as hereinafter provided, forms for surfaces required to be finished shall be removed when the concrete has aged not less than one-half (1/2) nor more than two (2) curing days after the concrete is placed. In order to facilitate slab finishing, forms for inside curb faces on roadway slabs may be removed in not less than three (3) hours if the concrete has set sufficiently to permit form removal without damage to the curbs.

Forms and falsework for the portions of structures which do not require surface finish may be removed when the concrete has aged for the minimum number of curing days set forth in the following table:

Forms and falsework under slabs or girders having span lengths of 10 feet and less.....7 Days

Forms and falsework under slabs or girders having span lengths over 10 feet and less than 17 feet7 Days plus one day for each foot of span over 10 feet

Forms and falsework under slabs or girders having spans over 17 feet in length.....14 Days

Forms and falsework under caps or tie beams of framed bents.....4 Days

Forms under caps of pile bents.....4 Days

Forms & falsework under webwalls of piers.....7 Days

Forms for walls, columns & sides of beams..... 4 Days

Forms for concrete caissons..... 2 Days

The term "curing day" will be interpreted as any calendar day on which the temperature is above 50°F for at least nineteen (19) hours. Colder days may be counted if satisfactory provision is made to maintain the air temperature adjacent to the concrete constantly above 50°F throughout the entire day. In continued cold weather, when artificial heat is not provided, the Engineer may permit the removal of forms and falsework at the end of a period of calendar days equal to twice the number of curing days stated in the above table. Test specimens may be made, at the option of the Engineer, for the purpose of determining a satisfactory time of form and falsework removal in cold weather. When tests made on specimens cured under like conditions to the curing of the structure indicate that strengths equivalent to the seven-day strengths as given in the Item, "Concrete" have been attained, the forms and falsework may be removed. In no event shall this removal be done in less time than the curing periods given in the above table.

Forms for the portions of slabs that cantilever more than one foot beyond the outside beams shall not be removed in less than four curing days, nor shall falsework under girders and bent caps for framed bents be removed in less than the minimum time specified regardless of requirements for surface finish. The above provisions relative to form removal shall apply only to forms or parts of forms which are so constructed as to permit removal without disturbing forms or falsework which are required to be left in place for a longer period on other portions of the structures.

420.25 Defective Work. Any defective work discovered after the forms have been removed shall be repaired immediately. If the surface of the concrete is bulged, uneven, or shows excess honeycombing or form marks, which defects, in the opinion of the Engineer, cannot be repaired satisfactorily, the entire section shall be removed and replaced. In repairing honeycombed areas, all loose material shall be removed before the repair work is started. No extra compensation will be allowed for the extra work or materials involved in repairing or replacing defective concrete.

420.26 Finishing Exposed Surfaces. All railing, curbs, the underside of overhanging slabs, the outside and bottom of exterior girders or fascia beams, and all portions of piers, columns, bents, abutments, retaining walls and culverts, which are exposed to view after backfill and roadway embankments are placed shall be surface finished. The area inside of culvert barrels including both sidewalls and the underside of the top slab for a distance equal to one-third (1/3) the clear height but not less than eighteen (18) inches shall be considered as exposed to view. The remaining surface inside of culvert barrels, the underside of roadway slabs between exterior girders or beams, the sides and bottoms of interior superstructure girders and bottoms of slab spans will not be required to be surface finished unless such surfaces are not true or have porous spots or honeycombed areas. In case these defects occur, the areas shall be given a first surface rubbing.

The operation of surface finishing shall be in accordance with the following provisions:

As soon as forms are removed, all necessary pointing shall be done. When the pointing has set sufficient to permit it, all surfaces requiring surface finish shall be wet with a brush and given a first surface rubbing with a No. 16 Carborundum Stone or an abrasive of equal quality. The rubbing shall be continued sufficiently to bring the surface to a paste, to remove all form marks and projections, and to produce a smooth dense surface without pits or irregularities. The use of cement to form a surface paste will not be permitted. The material which has been ground to a paste in this process shall be carefully spread or brushed uniformly over the surface and allowed to take a reset.

In general chamfered corners shall not be rubbed in the first surface rubbing.

During the process of conditioning the completed structure for final acceptance, the surfaces of the entire structure requiring finish shall be cleaned free from drip marks and discolorations and shall be given a final finish rubbing with a No. 30 Carborundum Stone or an abrasive of equal quality. On completion of this rubbing, the surface shall be neatly striped with a brush, and the mortar on the surface shall be allowed to take a reset. The surface shall then be washed down with clean water. The entire structure shall be left with a clean, neat, and uniform appearing finish and shall be uniform in color.

The surfaces of concrete roadway and sidewalk slabs shall be finished by floating, screeding, and belting as provided in Section, "Finish of Roadway Slabs".

420.27 Special Surface Finishes. When so specified, special surface finishes shall be employed for ornamental panels, copings, and like construction.

In general, the method and manner of performing this work will be fully provided for in the plans or special provisions to these specifications.

In case of special finishes, the Contractor will be required to prepare test or sample panels showing the method and manner of finish. The choice and selection of the aggregate and other features affecting the work shall be approved by the Engineer before any further work is done.

420.28 Measurement and Payment. No direct compensation will be made for "Concrete Structures". Measurement and payment for quantities of concrete, railing, piling, excavation and other proposal items, which constitute the completed and accepted structure will be made in accordance with the provisions of the pertinent specifications.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 420

ITEM 430

CONSTRUCTION OF UNDERGROUND UTILITIES

- 430.1 Description. This item shall govern for all excavation required for the construction of sewers, sewer structures, pipe culverts, appurtenances and connections and for the backfilling around completed sewers to the level of the original ground, all in conformity with the locations, lines and grades shown on the plans or as given by the Engineer and in accordance with these specifications. Trench excavation shall consist of the required excavation within the limits of the trench, the removal and proper utilization of all suitable trench excavation by placing in accordance with Item 132, "Embankment" or disposal of unusable material. This item shall also govern for any necessary pumping or bailing and drainage and all sheathing and bracing of trench walls. Also governed by this item are the cutting and restoration of pavement and base courses, the furnishing and placing of cement stabilized backfill, the hauling and storage of suitable excavated material for other uses and/or disposing of surplus or unsuitable materials and the bridging of trenches and other provisions for maintenance of traffic or access as provided herein.
- 430.2 Testing. Gravity sanitary sewer lines shall be "lamped". No sewer line shall be accepted, unless a clear lamp can be seen from manhole to manhole.
- 430.3 Excavation & Trench Preparation. Excavate trench to the alignment and depth required. All suitable excavated materials shall be utilized, insofar as practicable, in constructing the required underground utilities, roadway sections or in uniformly widening of embankment, flattening slopes, etc. or as directed by the Engineer. Unsuitable trench excavation and trench excavation in excess of that needed for construction shall be known as waste and shall become the property of the Contractor to be disposed of by the Contractor outside the limits of the right-of-way. The cost to haul and store suitable material for other uses or for disposal is incidental to this item. Brace the trench and drain, as required, so that the work may be accomplished safely and efficiently. If necessary, install a dewatering system to provide a dry trench bottom. Pumps shall discharge into natural drainage channels or to drains. Shoring for excavations and trenches shall meet the requirements of the latest edition of OSHA Regulation 1926, Subpart P, and the Item, "Timber Ordered Left In Trench".

When disposing off site, the Contractor shall not place the waste (excess) material in an environmentally sensitive area, floodway or waters of the United States, including adjacent wetlands", as defined in the Clean

Water Act and the Rivers and Harbors Act, unless he has previously obtained the appropriate Department of the Army Permit authorizing the activity. It is the responsibility of the contractor to contact the proper authorities to determine the land use classification and to obtain necessary permits. If a disposal site is designated in the plans and is classified as wetlands, then the County shall be responsible for ensuring that the appropriate Department of the Army permit has been obtained for the activity.

For pipes less than 30 inches in diameter, the minimum width of the trench shall be the width of the outside barrel of the pipe plus 24 inches, the maximum width of the trench shall be the width of the outside barrel of the pipe plus 36 inches. For pipe 30 inches and larger, the minimum trench width shall be the width of the outside barrel of the pipe plus 32 inches, and the maximum width of the trench shall be the width of the outside barrel of the pipe plus 36 inches.

Side sloping or benching of the trench, where permitted, will begin at one foot above the top of the pipe and will not encroach upon private property or endanger existing or future structures or underground utilities. Depth of trench, without sheathing or bracing shall comply with OSHA Regulation 1926.650.

The full width of the trench shall be excavated to a depth below the invert elevation of the pipe so as to permit placing the bedding material specified on the attached drawings below the outside bottom of the pipe. Any additional depth excavated by the Contractor shall be replaced with an equal depth of cement stabilized sand. The cost of this additional material, in place shall be at the expense of the Contractor.

Where necessary, excavations shall have sheathing and bracing to prevent caving. At these locations, increase the trench width as required and leave the sheathing in place until the pipe has been laid and the backfill compacted to a depth of 2 feet over the pipe. Sheeting and bracing shall be in accordance with the Item 435, "Timber Ordered Left in Trench". All sheathing and bracing shall be designed to the requirements of OSHA Standard 1926, Subpart P (latest edition).

Sewers shall not be constructed or sewer pipe laid in the presence of water. All water shall be removed from the excavation sufficiently prior to the sewer placing operation to insure a dry, firm bed on which to place the sewer and shall be maintained in such unwatered condition until all concrete, cement stabilized sand, and mortar are cured. Removal of water may be accomplished by bailing, pumping or by a well-point system as conditions warrant. The well-point installation shall be in accordance

with the Item 436 "Well Pointing". A seal slab shall be installed when Well Pointing is used for dewatering.

In the event that the excavation cannot be dewatered to the point where the pipe subgrade is free of mud, excessive wet soil, sand silt or clay with water, a seal slab shall be used in the bottom of the excavation. Such seal slab shall consist of a lean concrete mixture in accordance with Item 421, "Structural Concrete". The seal slab (7" thick) shall be a Class "D", 5 sacks of cement per cubic yard with a minimum compressive strength of 1,750 P.S.I. at 7 days and 2,500 P.S.I. at 28 days. The seal slab shall have minimum #4 rebar at 18 inch on centers, in each direction. A precast seal slab, minimum 6" thick, may be used, provided that the joints of the seal slab do not coincide with or at the joints of the pipe. Contractor shall have an option of using a three day cylinder break test at no expense to Galveston County.

For unstable conditions requiring outside forms, seals, sheathing, and bracing, or where groundwater is encountered, any additional excavation in width and backfill required shall be done at the Contractor's expense.

Portable trench boxes may be used in lieu of sheathing upon approval in writing by the Engineer. The trench box must be in accordance with OSHA Regulation 1926.650 (latest edition).

Use of the trench box does not relieve the Contractor of any liability for damages to person or property. When a trench box is moved, the jointed pipe or in-place backfill shall not be disturbed.

All materials from excavation operations not required for backfilling, if considered suitable shall be placed in embankments or wasted, in accordance with the Item 132, "Embankment". All material not suitable for use in embankments will be declared surplus by the Engineer and shall become the responsibility of the Contractor to dispose of as he wishes. Such surplus material shall be promptly removed from the work following the completion of the portion of the sewer involved. The cost to haul and store suitable material for other uses or for disposal is incidental to this item.

Unless otherwise specifically approved, Contractor shall use ladder or wheel-type trench-digging machinery, except where hand methods must be employed to avoid damage to existing structures above or below ground, or where hand excavation is indicated.

Engineer may limit the amount of trench opened or partially opened at any time in advance of the completed pipe laying operation and the amount of

trench left unfilled. Open no more than 500 feet of trench on any street at any one time.

- 430.4 Pipe Laying. No pipe shall be laid in water or when the trench conditions or weather is unsuitable for such work, unless specifically approved by the Engineer.

Fit and lay the pipe to form a smooth and uniform invert. Laying of pipe shall commence at the lowest point, so that the spigot or tongue ends point in the direction of flow.

All other types of pipe shall be laid in accordance with the applicable provisions of this specification.

Field cutting of Polyvinyl Chloride pipe shall be in accordance with the pipe manufacturer's recommendations.

Minor deflections may be obtained in pipe joints. Contractor must obtain approval when the degree of deflection is necessary to deflect from a straight line. Where necessary to make major deflections in concrete pipe, use sections of pipe with beveled ends for deflections not greater than five degrees. For deflections greater than five degrees, use fabricated fittings for concrete pressure pipe.

When the pipe laying operation is halted, seal the open end of the pipe with a temporary plug. Plug is to remain in place until the pipe laying operation re-commences.

Standard plugs shall be inserted into bells of all dead end pipe.

For gravity pipelines, use concrete a minimum of 6 inches on all sides of the pipe for encasing, embedding where indicated on the plans.

- 430.5 Backfilling. As soon as practicable after completion of laying and jointing of pipe, backfill the trench. Not more than 200 feet of the trench shall be left open after laying the pipe. Also backfill other structures, such as manholes, and junction boxes with material selected from the excavation, that is generally suitable for use as backfill.

Trenches shall be backfilled with material selected from sewer trench excavation, or obtained from other sources, shall be free from stones, which will interfere with compaction and free of large lumps which will not break down readily under compaction. Do not use material excavated in large lumps which will not break down or which cannot be spread in loose layers. Material excavated by trenching machine will generally be suitable

for use as backfill. Cement stabilized sand shall be in accordance with the Item 433, "Cement Stabilized Sand Bedding and Backfill Material".

In the pipe zone, as shown on the drawings, cement stabilized sand placed to the depth shown by those drawings, deposited in the trench simultaneously on both sides of the pipe for the full width of the trench and to the height shown by those drawings. Moisten if necessary and tamp in approximately 4-inch layers, thoroughly compacting under and on each side of the pipe to provide solid backing against the external surface of the pipe. Walking or working on the completed pipeline, except as necessary in tamping or backfilling, shall not be permitted until the trench has been backfilled to at least 12-inches over the top of the pipe. The cement stabilized sand shall be placed in accordance with Item 433, "Cement Stabilized Sand Bedding and Backfill Material."

Backfill above the cement stabilized sand shall be placed as follows.

For trenches under proposed pavement or through asphaltic concrete, concrete, asphalt topped concrete flexible base with asphalt topping, shell or gravel surfaces on either public or private roads, streets or driveways, place backfill above the cement stabilized sand in approximately 6-inch layers, moistened if necessary and thoroughly compacted to 95% of standard proctor in accordance with ASTM D698, "Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)). Tamped backfill shall be brought up to the required grade shown by the drawings. Where pipe is laid below the existing pavement or proposed pavement, the backfill material shall be the same, or an approved equivalent, as the material used below the pavement subgrade. For trenches through unimproved roadways, unsurfaced road shoulders or unimproved driveways, the procedures are the same as above, except that compaction above the pipe zone shall be 90% of standard proctor.

For trenches located in areas other than those previously stated, and not designated for improvement, place the in-situ material, used as backfill, above the cement stabilized sand as shown by the drawings, in approximately 6-inch layers, moistened if necessary and compacted to 90% of standard proctor density in accordance with ASTM designation D698. For the top layer of backfill, place a sufficient amount of previously excavated material neatly rounded over the trench to allow for settlement during consolidation. The Contractor shall supply any deficiency in quantity of materials for backfilling trenches or filling depressions caused by settlement.

Where required as shown in the plans, pipe to be installed under railroad embankment or highway or streets shall be in accordance with Item 431, "Jacking, Boring or Tunneling" or Item 432, "Tunnel Construction".

- 430.6 Restoration of Surfaces. Replace or repair sidewalks, driveway culverts, inlets, curbing, gutters, shrubbery, trees, fences, sod and other like obstructions removed or disturbed, to the condition equivalent to that existing prior to commencement of this work. Use concrete having a compressive strength of not less than 3,000 psi in 28 days for the replacement of curbing, gutters, inlets and sidewalks.

Use reasonable care in the removal and replacement of shrubbery and trees designated to be replaced at original locations. Where at all possible, ditch alignment will be such as to minimize this work. The restoration of asphalt-topped flexible base and concrete streets shall be as specified under other items of the specifications.

- 430.7 Clean-Up. The Contractor shall remove from the site of the work and from public and private property temporary structures, rubbish, and waste materials, including excess excavated materials. The Contractor is responsible for disposing of all surplus earth. Any excess material from excavation that is suitable for use in road or embankment will be salvaged, stored and protected from any contamination for reuse. The contractor shall seek approval from the Engineer before disposal of any excess earth.

The pipe laying operation shall be temporarily suspended if the clean-up is further behind than 2,000 feet.

- 430.8 Quality Assurance. The Testing Laboratory's representative will determine the moisture density relationship in accordance with ASTM D698 on material secured from the trench excavation. Samples secured from the cement stabilized sand supplier shall be blended with Portland cement in accordance with the Item 433, "Cement Stabilized Sand Bedding and Backfill Material.", and the moisture density relationship will be determined in accordance with ASTM D558, "Standard Test Methods for Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures".

The Testing Laboratory's representative will determine the in place density in accordance with ASTM D1556, "Standard Test Methods for Density and Unit Weight of Soil in Place by Sand-Cone Method" or, D6938, "Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods". The minimum level of testing will consist of at least one test for each 100 linear feet of trench per lift of backfill.

430.9 Measurement & Payment. Gravity pipelines shall be measured by the linear foot of pipe actually laid, at finished grade, exclusive of pipe installed in tunnel construction, special structures, boxes, manholes, or other special sections, along pipe of size and at depth installed. Measure depth at manholes, at intervals not to exceed 50 feet between manholes, and at breaks in profile of natural ground from flow line of pipe to natural ground surface over center of pipe. Payment for gravity pipeline, furnished, installed and measured as stated shall be at the contract unit price bid for the type of pipe, size, and depth measured, as per pipe material specification, i.e., R.C.P – Specification Item 460.

Pressure pipelines shall be measured by the linear foot from the centerline of fitting to centerline of fitting, exclusive of pipe installed in tunnel construction, special structures or other special sections along pipe of the size and type installed. If depth of cut is shown on the proposal, measure depth at intervals not to exceed 50 feet and at breaks in profile of natural ground from flow line of pipe to natural ground surface over the center of the pipe.

If the depth of cut is not shown on the proposal, no consideration shall be made for depth at which the pipe is installed. Payment for pressure pipeline, furnished, installed and measured as stated shall be at the contract unit prices for the size and type (and depth, if shown on the proposal) measured.

No separate payment shall be made for concrete used for blocking, backing, encasement or embedding. Gravity lines and Pressure Pipelines shall be paid for in accordance with the applicable item of the material specification.

Concrete used in the repairing curbs, gutters and sidewalks shall be paid for by the linear foot or square yard, as designated on the proposal form. Pay for concrete used in repairing curbs, gutters and sidewalks, measured in the contract unit price bid for "Extra Concrete" of the class installed.

Pipe installed by tunneling shall be paid for in accordance with Item 431 or Item 432.

Street and driveway surfacing shall be paid for in accordance with the applicable item of those specifications.

No separate payment shall be made for ordinary bedding and select backfill, unless so indicated on the bid form.

No separate payment shall be made for hauling and storing suitable excavated trench material for other uses or for disposal of excess or unsuitable materials.

No separate payment shall be made for any bedding and backfill installed in accordance with these specifications and the drawings attached hereto.

Well Pointing shall be measured and paid for in accordance with the Item 436, "Well Pointing."

Seal slabs (with rebar) shall be measured by the square yard installed along the centerline of the structure. Payment for class "D" concrete seal slab shall be made at the unit price bid per square yard and shall include the price of all labor, material and equipment necessary to complete this item.

There are line code(s), description(s), and unit(s) for this item.

Note: This Specification requires drawings that shall be incorporated into the proposed Standard Construction Drawings.

Note: This Specification requires other Standard specifications

Item 132, Embankment
Item 431, Jacking, Boring or Tunneling Pipe
Item 432, Tunnel Construction
Item 433, Cement Stabilized Sand Bedding and Backfill
Item 435, Timber Ordered Left in Trench
Item 436, Well Pointing

END OF ITEM 430

ITEM 433

CEMENT STABILIZED SAND BEDDING AND BACKFILL MATERIAL

433.1 Description. This item specifies cement stabilized sand to be used for backfill and bedding as called for on the drawings, in other parts of the specifications, or as directed by the Engineer.

433.2 Materials. Cement shall be Type I Portland cement conforming to ASTM C150.

Sand shall be clean durable sand containing not more than the following:

A. Deleterious Materials

Clay lumps, when tested in accordance with ASTM C142 shall be less than 0.5 percent.

Lightweight pieces, when tested in accordance with ASTM C123 shall be less than 5.0 percent.

Organic impurities when tested in accordance with ASTM C40, shall not show a color darker than the standard color.

B. The plasticity index shall be six (6) or less when tested in accordance with ASTM D4318.

C. Sand shall be free of organic matter and deleterious substances and shall meet the following gradation requirement.

Square Sieve Size	Percent Passing, By Weight
3/8"	100%
No. 200	5 - 30%

Water shall be clean and clear, free of oils, acids, alkalis, organic matter or other deleterious substances and shall conform to the requirements of ASTM C94.

433.3 Sand-cement Mixture Product. The mixture shall consist of not less than 1.5 sacks of Portland cement per ton of material mixture as placed. The mixture shall contain sufficient water to hydrate the cement.

The cement, sand and water shall be mixed in a pugmill type mixer, which meets the approval of the Engineer. It shall be mixed for a minimum period of two minutes per batch.

433.4 Submittals and Responsibilities of the Contractor:

A. Submit the proposed design mix and test data for cement stabilized sand mixture.

- B. Facilitate testing and inspection, by furnishing any necessary labor to assist the designated Testing Laboratory in obtaining and handling samples at the project site.

433.5 Placing. The sand cement mixture shall be placed in maximum eight (8) inch thick lifts, loose measure around the pipe, boxes, structures, bridge approaches and paving sections. Placement and compaction shall be performed in a manner that will thoroughly fill all voids without placing undue strain on or displacement of the structure.

Cement stabilized sand backfill placed below the top of sewers, manholes, inlets or other structures shall be placed equally along all sides of the structure. Cement stabilized sand backfill/bedding shall be placed in a manner that will completely fill all voids in the trench. Hand operated tampers may be used for compaction.

Materials not placed and compacted within four (4) hours after mixing shall be rejected. Do not place or compact sand-cement mixtures in standing or free water.

Cement stabilized sand bedding and backfill placed in trenches shall be compacted in accordance with Items 430 "Construction of Underground Utilities" and 480 "Precast Reinforced Concrete Box Sewers."

Provide excavation and trench safety system at locations and depths required for testing and retesting during construction, at no additional cost to Galveston County.

In-place density tests shall be taken at each location, each day, to test the placement of bedding/backfill material. The minimum number of tests per day shall be one (1) in-place density on the bedding and two (2) in-place densities on backfill. The minimum number of tests shall be for each location at the rate of one (1) in-place density test per 50 linear feet (50 l.f.) of bedding and one (1) in-place density test per 50 linear feet (50 l.f.) of backfill per lift placed above the top of pipe. In-place densities shall be determined in accordance with ASTM D6938 or ASTM D1556 and ASTM D3017.

433.6 Performance. The sand cement mixtures shall produce a minimum unconfined compressive strength of one hundred pounds per square inch (100 psi) in forty eight hours, when compacted to ninety five percent (95%) of Standard Proctor density (ASTM D558), without additional moisture control and when cured in plastic bags at a temperature of 73.4⁰ F. at plus or minus 3⁰ F. and tested in accordance with ASTM D1633.

Random samples of the delivered product will be taken in the field at the direction of the Engineer and tested at Galveston County's expense. A minimum of one (1) sample per week shall be taken at random to represent a production that is less than one hundred (100) tons per week. Two (2) samples per week shall be taken at random to

production greater than one hundred (100) tons per week. The Engineer shall have the option to obtain additional samples for testing.

After the molding of the soil-cement cylinders, the specimens will be tested in accordance with ASTM D1633, Method A. Two specimens will be tested at 48 hours and two specimens will be tested at 7 days.

433.7 Notification. The Testing Laboratory's representative will notify the County, Engineer, Contractor and material supplier by facsimile of all tests indicating results falling below specified strength requirements.

433.8 Measurement. Cement stabilized sand shall be measured by the square yard of material, furnished and compacted in place to the thickness specified, or as shown in the plans or acceptable material mixture, as specified by this item, shall be measured by the ton of 2,000 pounds. Measurement shall be made by tickets delivered to the Engineer. The dray tickets shall indicate the tare, gross and net weight of the load and the location of delivery.

433.9 Payment.

- A. The payment for cement stabilized sand, complete and in-place, shall be at the contract unit price per square yard of the specified thickness, which unit price shall include all costs of materials, furnished, hauled, dumped, spread, shaped, and compacted.
- B. Where the bid sheet specifies FOB the plant, the materials shall be loaded on Galveston County vehicles and paid for by the ton of 2,000 pounds.
- C. Where the bid sheet specifies FOB the job, materials shall be transported to the job site specified on the bid sheet, and paid for by the ton of 2,000 pounds.
- D. When the Project Manual, plans or other specifications indicate the use of cement stabilized sand is incidental to another pay item, no direct payment for the material will be made.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 433

ITEM 434

FLOWABLE FILL

434.1 Description. This item specifies flowable fill to be used as backfill for construction of underground utilities, as called for on the drawings, or in other parts of the specifications. This material may be used in lieu of cement stabilized sand, at the option of the Engineer. Because of the time required for "setting up", this material can only be used at locations where the trench can be left open for approximately twelve hours prior to backfilling. Shoring for excavations and trenches shall meet the requirements of the latest edition of OSHA Regulation 1926, Subpart P.

434.2 Materials. Cement shall be Type I Portland cement conforming to ASTM C150.

Fly ash shall meet the requirements of ASTM C618, Class C. Fly ash shall have a minimum CaO content of 20-percent.

Sand shall be clean, durable sand containing not more than the following:

A. Deleterious Materials

Clay lumps, when tested in accordance with ASTM C142, shall be less than 0.5 percent.

Lightweight pieces, when tested in accordance with ASTM C123, shall be less than 5.0 percent.

Organic impurities, when tested in accordance with ASTM C40, shall not show a color darker than the standard color.

B. The plasticity index shall be six (6) or less when tested in accordance with ASTM D4318.

C. Sand shall be free of organic matter and deleterious substances and shall meet the following gradation requirement:

<u>Square Sieve Size</u>	<u>Percent Passing, by Weight</u>
3/8"	100%
No. 200	0 - 10%

Note: It is intended that the sand be a fine sand that will stay in suspension, in the mixture, to the extent required to obtain a flowable consistency. The gradation shall be adjusted to achieve this consistency.

Water shall be clean and clear, free of oils, acids, alkalis, organic matter, or other deleterious substances and shall conform to the requirements of ASTM C94.

Admixtures shall conform to ASTM C1017 and/or C494.

- 434.3 Mix Design. The following are given as typical mix designs for trial mixes. Adjustments of the proportions may be made to achieve proper solid suspension and optimum flowability. Admixtures may be used, if desired, to improve the characteristics of the mix. The suggested quantities of dry material per cubic yard are as follows:

Trial Mix No. 1

Cement 100 lbs.
Fly Ash 250 lbs.
Sand 2800 lbs.
Water (approx.) 60 gals.

Trial Mix No. 2

Cement 100 lbs.
Fly Ash 300 lbs.
Sand 2600 lbs.
Water (approx.) 70 gals.

The above quantities will give an approximate yield of one cubic yard. The flowability of the mixture shall be observed by the Engineer and flowability increased/ decreased by adjusting the water content as well as increasing/decreasing the air entraining admixture content.

Provide a mix design per TxDOT's Material Specification Item 401, "Flowable Backfill", 2004.

- 434.4 Consistency. The consistency of the mix shall be tested by filling an open-ended three-inch diameter cylinder six-inches high, to the top with flowable fill. The cylinder shall be immediately pulled straight up and the correct consistency of the flowable fill shall produce a minimum eight-inch diameter circular type spread, with no segregation. The flowable fill shall maintain its consistency when placed.
- 434.5 Batching, Mixing, and Transportation. Materials are to be measured by weight. The flowable fill may be mixed in a central concrete mixer, a ready mix truck, or other means acceptable to the Engineer. The flowable

fill shall be transported to the point of placement in a revolving drum mixer or in an agitator unit.

- 434.6 Placement. The flowable fill shall be placed by direct discharge from the mixer truck, or other approved methods. If necessary to prevent segregation, boots shall be used.

The flowable fill shall be placed in accordance with the drawings attached to Item 430, "Construction of Underground Utilities" and Item 480, "Precast Reinforced Concrete Box Sewers". It will be necessary to use cement stabilized sand as bedding, as shown by drawings HC430-1-2-3 and HC480-1-2. At the option of the Engineer, the flowable fill may be used above the bedding to the uppermost elevation shown on the referenced drawings.

- 434.7 Measurement. No direct payment shall be made for flowable fill when used as backfill in accordance with Items 430 and 480, and the drawings attached thereto.

Where used as backfill at other locations, and where measured, flowable fill shall be measured by the cubic yard, computed from the dry weight of the material.

- 434.8 Where measured for payment in accordance with Section 434.7 of this specification, flowable fill shall be paid for at the contract unit price bid per cubic yard, for flowable fill, which price shall be full payment for all materials, equipment, labor, and transportation necessary to complete the work.

There are line code(s), description(s), and unit(s), for this item.

END OF ITEM 434

ITEM 440

REINFORCING STEEL

440.1 Description. This item shall govern for the furnishing and placing of reinforcing steel of the type, size and quantity designated for use in structures, as shown on the plans and in accordance with these specifications.

440.2 Materials. Unless otherwise designated on the plans, or herein, all bar reinforcement shall be deformed and shall conform to the following:

- A. ASTM A615, Grade 40 or 60, open hearth, basic oxygen or electric furnace new billet steel.

Unless noted by these specifications, rail steel or axle steel shall not be permitted.

When no specific grade is specified on the plans, the reinforcing steel shall be a minimum Grade 60.

Where bending of bar sizes #14 or #18 of Grade 60 is required, bend testing shall be performed on representative specimens as described for smaller bars in the applicable ASTM Specification. The required bend shall be 90 degrees around a pin having a diameter of 10 times the nominal diameter of the bar.

- B. Spiral reinforcement shall be either smooth or deformed bars, or wire, of the minimum size or gage shown on the plans or as specified herein. Bars for spiral reinforcement shall comply with ASTM A675, A615 or A617. Wire shall conform to ASTM A82.

Unless otherwise shown on the plans, the minimum yield strength for spiral reinforcement shall be 40,000 psi.

Report of chemical analysis, showing the percentages of carbon, manganese, phosphorus and sulphur will be required of all reinforcing steel bars when it is to be welded.

The nominal size and area and the theoretical weight of reinforcing steel bars covered by this specifications are as follows:

Table No. 1

Bar Size #	Nominal Diameter In.	Nominal Area Square Inch	Weight per Linear Foot
2	0.250	0.05	0.167
3	0.375	0.11	0.376
4	0.500	0.20	0.668
5	0.625	0.31	1.043
6	0.750	0.44	1.502
7	0.875	0.60	2.044
8	1.000	0.79	2.670
9	1.128	1.00	3.400
10	1.270	1.27	4 303
11	1.410	1.56	5.313
14	1.693	2.25	7.65
18	2.257	4.00	13.60

- C. When wire is ordered by size numbers, the following relation between size number, diameter in inches and area shall apply unless otherwise specified.

Table No. 2

Size #	Nominal Diameter Inch	Nominal Area Square Inch
31	0.628	0.310
30	0.618	0.300
28	0.597	0.280
26	0.575	0.260
24	0.553	0.240
22	0.529	0.220
20	0.505	0.200
18	0.479	0.180
16	0.451	0.160
14	0.422	0.140
12	0.391	0.120
10	0.357	0.100
8	0.319	0.080
7	0.299	0.070
6	0.276	0.060
5.5	0.265	0.055
5	0.252	0.050
4.5	0.239	0.045
4	0.226	0.040

<u>Size #</u>	<u>Nominal Diameter Inch</u>	<u>Nominal Area Square Inch</u>
3.5	0.211	0.035
3	0.195	0.030
2.5	0.178	0.025
2	0.160	0.020
1.5	0.138	0.015
1.2	0.124	0.012
1	0.113	0.010
0.5	0.080	0.005

Where deformed wire is required the size number shall be preceded by D, and for smooth wire, the prefix W will be shown.

- D. Where plain steel wire is used for concrete reinforcement, it shall meet the requirements of ASTM A82.

Fabricated deformed steel bar mats shall meet the requirements of ASTM A184, while plain steel welded wire fabric shall meet the requirements of ASTM A185.

Deformed steel wire for concrete reinforcement shall meet the requirements of ASTM A496, while deformed steel welded wire fabric shall meet the requirements of ASTM A497.

440.3 Bending. The reinforcement shall be bent cold, true to the shapes indicated on the plans. Bending shall preferably be done in the shop. Irregularities in bending shall be cause for rejection. Unless otherwise shown on the plans, bends shall be made in accordance with ACI 315.

Bends of 90° and greater in stirrups, ties and other secondary bars that enclose another bar in the bend, in terms of the nominal bar diameter (d), shall be as follows:

Table No. 3

	<u>Grade 40</u>	<u>Grade 60</u>
#3, #4, #5	4d	4d
#6, #7, #8	6d	6d

All bends in main bars and in secondary bars not covered above shall be as follows:

Table No. 4

	<u>Grade 40</u>	<u>Grade 60</u>
#3 through #8	6d	6d
#9, #10, #11	8d	8d
#14, #18	10d	10d

440.4 Fabricating Tolerances. Fabricating tolerances for bars shall be as indicated in ACI 315.

440.5 Storing. Steel reinforcement shall be stored above the surface of the ground upon platforms, skids or other supports and shall be protected from mechanical injury and surface deterioration caused by exposure to conditions producing rust. When placed in the work, reinforcement shall be free from dirt, paint, grease, oil or other foreign materials. Reinforcement shall be free from injurious defects such as cracks and laminations. Rust, surface seams, surface irregularities or mill scale will not be cause for rejection, provided the minimum dimensions, cross-sectional area and tensile proportions of a hand wire brushed specimen meets the physical requirements for the size and grade of steel specified.

440.6 Lap Splices. Splicing of bars, except where shown on the plans, will not be permitted without prior approval of the Engineer.

Splices, not provided for on the plans, will be permitted in slabs not more than 15 inches in thickness, columns, walls and parapets subject to the following:

Splices will be permitted in bars 30 feet or less in plan length. For bars exceeding 30 feet in plan length, the distance center to center of splices shall not be less than 30 feet minus one splice length, with no more than one individual bar length less than 10 feet. Splices not shown on the plans, but permitted hereby, shall be made in accordance with Table No. 5. The specified concrete cover shall be maintained at such splices and bars placed in contact and securely tied together. Lap bars so that both bars will be in the same plane parallel to the nearest concrete surface.

Table No. 5

Minimum Lap Requirements

Size #	<u>Grade 40</u>	<u>Grade 60</u>
3	1' - 0"	1' - 0"
4	1' - 2"	1' - 9"
5	1' - 5"	2' - 2"
6	1' - 9"	2' - 7"
7	2' - 4"	3' - 5"
8	3' - 0"	4' - 6"
9	3' - 10"	5' - 8"
10	4' - 10"	7' - 3"
11	5' - 11"	8' -

Spiral steel will be lapped a minimum of one turn.

Sizes #14 and #18 may not be lapped.

440.7 Welded Splices. Where shown on the plans or required by the provisions of this item or other pertinent specifications, welded bar splices shall be used. All welding operations, processes, equipment, materials, workmanship and inspection shall conform to the American Welding Society Specification D1.4. For bars #6 and smaller, use lap weld splices with fillet welds equal to one half bar diameter on each side, for 4 inches in length. For bars #7 and larger, use butt weld splices in accordance with AWS D1.4.

All splices whether lap, weld, mechanical or coupler, shall develop the full strength of the bar. Information on mechanical splicing devices and couplers shall be submitted for approval prior to use.

440.8 Placing. Steel reinforcement shall be placed in the exact position as shown on the plans and held securely in place during the placing of the concrete. The dimensions shown are to centers of bars, unless otherwise noted. Hold bars securely in place with wire and other approved means during placement of concrete.

- A. In plane of steel parallel to nearest surface of concrete, bars should not vary from plan spacing by more than one twelfth of spacing between bars.
- B. In plane of steel perpendicular to nearest surface of concrete, bars shall not vary from plan placement by more than 1/4 inch.

Space steel the required distance from forms or earth by approved galvanized metal spacers, metal spacers with plastic coated tips, stainless steel spacers, plastic spacers, or approved precast mortar or concrete blocks. For approval of plastic spacers, provide samples of plastic which show no indications of deterioration after immersion in a 5 percent solution of sodium hydroxide after 120 hours.

Use galvanized metal chairs to support all reinforcing steel, except that pavement steel chairs need not be galvanized. Use a heavy bolster to support bottom layer of reinforcing in abutment caps, bent caps and other beams.

In bridge deck slabs, use two rows of supports for bottom layer of reinforcing parallel to beams for each bay. Use high chairs to support top layer.

Reinforcing steel for bridge slabs, top slabs or direct traffic culverts and the top slabs of prestressed box beams shall be tied at all intersections, except that where the spacing is less than one foot in each direction, alternate intersections only need be tied. For reinforcing steel cages or other structural members, the steel shall be tied at enough intersections to provide a rigid cage of steel. Mats or wire fabric shall overlap each other one full space as a minimum to maintain a uniform strength and shall be fastened securely at the ends and edges.

Before any concrete is placed, all mortar, mud, dirt, etc., shall be cleaned from reinforcement. No concrete shall be deposited, until the Engineer has inspected the placement of the reinforcing steel and given permission to proceed.

440.9 Submittals. The following information shall be submitted for reinforcing steel. Six sets of each item shall be submitted.

- A. Product data for all materials used.
- B. Shop drawings indicating locations, placement, sizes and bending. Shop drawings shall be in accordance with the ACI Manual of Practice for Detailing Reinforced Concrete Structures.
- C. When welding is required, furnish report of chemical analysis, showing percentages of carbon, manganese, phosphorus and sulfur.
- D. Submit certified copies of mill certificates of compliance with requirements herein specified.

- E. Submit information on mechanical splicing devices, couplers, and all other reinforcing accessories.

440.10 Measurement & Payment. Reinforcing steel quantities will not be measured or paid for directly. All costs of furnishing, fabrication, placement, ties, chairs, bending, labor and equipment shall be considered subsidiary to bids for concrete structures, requiring reinforcement.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 440

ITEM 480

PRECAST REINFORCED CONCRETE BOX SEWERS

- 480.1 Description. This specification shall govern for the furnishing and placing of precast reinforced concrete box sewers of the size, type and configuration installed to the lines and grades established by the drawings.
- 480.2 Material. Precast reinforced concrete box sewers shall be manufactured in accordance with the latest revisions published by the American Society for Testing Materials of the following specifications:
- A. ASTM C 1433 - Precast Reinforced Concrete Box Sections for Culverts, Storm Drains and Sewers.
 - B. ASTM C 1433 - Precast Reinforced Concrete Box Sections for Culverts, Storm Drains and Sewers with less than Two Feet of Cover and Subjected to Highway Loadings.

In the manufacture of concrete box sewers, the supplier has the option of using Portland cement or Portland cement plus fly ash, as defined herein. Cement plus fly ash shall be composed of Portland cement and 20-30 percent fly ash, by absolute volume. Fly ash shall be Class C, conforming to the requirements of ASTM C618, titled "Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement". Fly ash shall have a minimum CaO content of 20 percent.

Unless otherwise specified, all boxes furnished under this specification shall be fabricated with tongue and groove joint.

Joints in concrete boxes will be made watertight by the methods described herein. The Contractor shall be fully responsible for using methods, workmanship and materials and taking precautions as may be necessary to secure the required water tightness per ASTM C990 Section 10.

Gasket material for sealing tongue and groove joints shall be preformed flexible butyl rubber meeting the requirements of ASTM C990 Section 6.2 Butyl Rubber Sealant. Joints shall be water tight using sealants such as "RU106 – RUBR-NEK", manufactured by Henry Company, or "CS-102" manufactured by ConSeal Concrete Sealants, Inc., or any other approved equal.

Gasket width shall be in accordance with the joint material manufacturer's recommendations, and large enough to properly seal the entire perimeter of the tongue and groove joint.

In addition, joints shall be sealed externally with a continuous 12" wide minimum strip along the entire joint. The strip shall be centered on the joint and wrapped around all four sides completely covering the exposed surface of the joint. The seal strip shall be in accordance with ASTM C877, types II and/or III. The seal strip shall have a rubberized mastic sealer with woven polypropylene reinforcing, and heavy polyethylene backing such as "Seal Wrap", which is manufactured by Mar-Mac Construction Products, Co.; or "ConWrap CS-212" supplied by Concrete Sealants, Inc.; or an approved equal. The external joint seal strip shall be installed per the joint material manufacturer's recommendations.

480.3 Submittals. Furnish submittals that have the name and types for both the gasket sealant and external seal strip materials that are to be used for sealing the box sewer joints.

480.4 Installation. Trenches shall be excavated with suitable type equipment such as ladder type trenching machines or trench hoes or other equipment that may be approved by the Engineer. Trenches for precast box sewers shall have a width below the top of the box of not less than the outside width of the box plus 18 inches and shall be wide enough to permit making up the joints.

After the trench has been excavated to the bottom, the trench shall be fine graded to the established subgrade. Any over excavation of the subgrade shall be filled with 1.5 sack per ton of cement stabilized sand. Cement stabilized sand shall be in accordance with the Item 433, "Cement Stabilized Sand Bedding and Backfill Material", at the Contractor's expense. The Contractor shall establish the grade line in the trench from grade stakes. The Contractor shall maintain this grade control a minimum of 100 feet behind and ahead of the box laying operation. The Contractor shall, at his expense, furnish and place in position all necessary stakes, grade and batter boards for locating the work.

The precast box sections shall be so laid in the trench that after the sewer is completely installed, the interior surface shall conform accurately to the grade and alignment as shown on the drawings or as established and given by the Engineer. All box sections must be laid in a straight line with the tongue end of the box section pointed downstream entering the grooved end of the previously laid box section, to full depth. Caution shall be taken to not drag cement stabilized sand or earth into the annular space. Box sections shall be fitted together and matched to achieve a finished sewer with a smooth and uniform invert.

All lifting holes shall be sealed to the satisfaction of the Engineer. Tapered lift hole plugs shall be used, and sealed both externally and internally with non-shrink grout. Additionally, lift hole plugs shall not

protrude above the top exterior surface of the box nor more than one-half inch below the soffit of the box.

Tongue and groove ends shall be primed if required, before installation of joint gasket material. Primer shall be used as recommended by the joint material manufacturer.

Before laying the box section in the trench, the gasket material shall be placed around the entire perimeter of the tapered tongue near the shoulder or groove of each box section joint. The paper wrapper shall be removed from one side only of the two-piece wrapper on the gasket and pressed firmly to the clean, dry box section joint surface.

The outside wrapper shall not be removed until immediately before pushing each box section into its final position.

When the tongue is correctly aligned with the flare of the groove, the outside wrapper on the gasket shall be removed and the box section shall be pulled or pushed home (do not push box home with backhoe bucket) with sufficient force and power (using tuggers) to cause evidence of squeeze-out of the gasket material on the inside or outside around the complete box section joint circumference. In no case shall a joint be wider than one inch, after having been pulled or pushed home. Any joint material pushed out into the interior of the box section that would tend to obstruct the flow shall be removed. Each box section shall be pulled home in a straight line with all parts of the box section on line and grade at all times.

When the atmospheric temperature is below 40°F, priming the concrete joint will improve the bonding action with the gaskets to be installed on the tongue of the joint. Priming the concrete joint will be applied if required by the joint material manufacturer. Gaskets shall then be applied to box section joints immediately prior to placing each box section in the trench, and then followed by joining with the previously laid box section.

No box sewer shall be laid in a trench in the presence of water. All water shall be removed from the trench sufficiently ahead of the sewer placing operation to insure a dry, firm bed on which to place the sewer, and if necessary, the trench will continue to be dewatered until after the sewer is bedded and backfilled as directed by the Engineer. Removal of water may be accomplished by pumping, or pumping in connection with the well point installation as the particular situation may warrant. The well point installation shall be in accordance with the Item 436 "Well Pointing". When Well Pointing is used for dewatering, then the seal slab shall be installed. Where available, Galveston County will provide the Contractor with soils data; however, Galveston County does not guarantee the adequacy or accuracy of the information as compared to actual field conditions at the time of construction. The Contractor may elect to do soil borings on his own, if he so desires.

Where necessary, to comply with OSHA Regulation 1926.650, the side of the trench or other excavation shall be braced and rendered secure. The bracing shall be in accordance with the Item 429, "Trench Safety System".

Following excavation of the trench to the established subgrade, the Contractor shall place a minimum of a 6 inch thickness cement stabilized sand bedding in such a manner that once the box sections are laid, the invert elevation in the box section shall conform to the drawing elevations. No voids in the bedding material shall be permitted by the Engineer. Cement stabilized sand shall be composed of a minimum of 1.5 sacks of cement per ton of material mixture as placed.

When installing concrete box culverts in an existing channel, ditch or gully, cement stabilized sand shall be placed in accordance with the "Storm Sewer Excavation, Backfill and Bedding Detail", shown on the standard construction drawings. The external joint seal strip, as previously described in the materials section, shall be wrapped around the complete external surface of the joint, with a twelve inch overlap, and installed per the seal strip manufacturer's instructions.

When installing concrete boxes in a trench condition, backfill shall consist of material in the "Storm Sewer Excavation, Backfill and Bedding Detail" shown on the standard construction drawings. Cement stabilized sand shall be installed in accordance with Item 433, "Cement Stabilized Sand". Moisture content shall be so controlled that the required moisture content to three percent above optimum moisture content. The "Seal Wrap", or approved equal, centered on the joint of two box sections, shall be wrapped around the complete external surface of the joint, with a twelve inch overlap, and installed per the seal wrap manufacturer's instructions.

Backfill over box sections will be permitted as installation proceeds. Prior to backfilling, the Contractor shall remove all steel sheeting and/or cut off all timber sheeting a minimum of three (3) feet below finished grade as shown by the plans. Backfill shall consist of material excavated on the site and deemed adequate by the Engineer or materials obtained from a suitable borrow site.

In the event that excavation cannot be dewatered to the point where the precast box sewer subgrade is free of mud, excessive wet soil, sandy silt or clay with water, a seal slab shall be used in the trench bottom. Such seal slab shall be designed in accordance with Item 421, Structural Concrete. The seal slab shall be Class "D", 5 sacks of cement per cubic yard with a minimum compressive strength of 1,750 P.S.I. at 7 days and 2,500 P.S.I. at 28 days. The seal slab shall have minimum #4 rebar at 18 inch on centers, in each direction. A precast seal slab, minimum 6 inch thick, may be used, provided that the joints of the seal slab do not occur at the joint of the precast box sewer. Contractor shall have an option of using a three day cylinder test break at no expense to Galveston County.

Precast reinforced box sewers shall be installed in accordance with the "Storm Sewer Excavation, Backfill and Bedding Detail" shown on the standard construction drawings.

Laboratory tests will be performed as the backfill proceeds. All backfill not meeting this specification shall be removed and recompacted to the satisfaction of the Engineer at no cost to Galveston County.

All surplus excavated material shall be disposed of by the Contractor.

The angles in box type sewers shall be built in accordance with the plans and specifications. The cost of making these angles and all cost incidental to them shall be included in the unit price bid for box sewer. Where junction with sewers are to be made, openings may be left in the walls the size of which shall be the outside dimensions of the connecting sewer. A bond length of each reinforcing bar shall be left in the opening for connecting with the concrete collar or future sewer. Where a stub sewer is to be built, the end of the concrete of the stub sewer at the box sewer shall be at the inside face of the sewer box wall. All openings shall be closed with a 12 inch thick brick bulkhead. The cost of providing bulkheads shall be included in the unit price for the box sewer.

480.5 Quality Assurance. The Engineer shall witness the manufacture of precast reinforced concrete box sewers. When the Engineer does witness this production, tests using concrete cylinders in accordance with ASTM C39, titled "Test Method for Compressive Strength of Cylindrical Concrete Specimens", shall be acceptable.

In the event that production of boxes is not witnessed by the Engineer, select boxes shall be cored in accordance with ASTM C1433, part 10.3 and tested in accordance with ASTM C42, (wet method). All test specimens and testing shall be done by the producer of the concrete pipe.

Boxes previously approved and stamped by the Texas Department of Transportation (TxDOT), or by the TxDOT approved fabricator specific stamp, which must specify: "Fabricator certifies that this product meets TxDOT Contract, Plans, & Specifications, and DMS 7310 certification requirements, will be accepted by all laboratories and by Galveston County.

The Testing Laboratory's representative will determine the moisture density relationship in accordance with ASTM D698 on material secured from the trench excavation. Samples secured from the cement stabilized sand supplier shall be blended with Portland cement in accordance with the Item 433 "Cement Stabilized Sand Bedding and Backfill", and the moisture density relationship will be determined in accordance with ASTM D558.

The Testing Laboratory's representative will determine the in-place density in accordance with ASTM D6938 or ASTM D1556 and ASTM D3017. The minimum level of testing will consist of at least one

each 50 linear feet of trench for bedding and per lift of backfill, or as directed by the Engineer.

- 480.6 Acceptance Requirements. The average compressive strength of all cylinders tested shall be equal to or greater than the design concrete strength and no cylinder tested shall have a compressive strength less than eighty percent of the design concrete strength. Any lot which complies with all of these requirements will be considered acceptable with regard to concrete strength. Any lot which does not meet all of these requirements will be subject to further testing by cores of hardened concrete in accordance with ASTM C1433.

Conduit which meets all the dimensional tolerances given in the appropriate ASTM C1433 specifications or further defined in this specification will be considered acceptable provided that the conduit has met the compressive strength requirement outlined above. Repaired pipe will only be acceptable if the repaired portions are visible and areas repaired were within the limitations given in this specification and ASTM C1433.

- 480.7 Measurement. All box sewers installed in accordance with the above specifications and accepted by the Engineer shall be measured by the linear foot of the size installed. Longitudinal measurements shall be made along the centerline of the box sewer from the end of the concrete box sewer to the end of the concrete box sewer. Seal slabs shall be measured by the square yard installed, along the centerline of the structure.

- 480.8 Payment. All box sewers installed in accordance with this specification and accepted by the Engineer shall be paid for at the unit price bid by the Contractor, complete in place, of the type, size and depth constructed. The unit price bid shall be full compensation for furnishing all material, including joint materials, equipment and labor for all excavation, shaping of trench bottom, jointing, laying, normal dewatering, sheeting, bracing, bedding, backfilling, and specials necessary to install the box sewers in accordance with this specification and of the size, type and depth as shown on the drawings.

Payment for seal slab shall be made at the unit price bid per square yard for class "D" concrete seal slab and shall include the price of all labor, materials and equipment necessary to complete this item.

Payment for a well point system, when used for dewatering, shall be made in accordance with the Item 436, "Well Pointing".

There are line code(s), description(s), and unit(s), for this item.

Note: This Specification Requires Drawings, that shall be incorporated into the proposed Standard Construction Drawings.

END OF ITEM 480

ITEM 495

REMOVING OLD STRUCTURES

495.1 Description. This item shall provide for the removal and disposal of old structures or portions of structures such as bridges, headwalls, box culverts, pipes, timber structures, and other structures, as noted on the plans. This item shall include all excavation and backfill necessary to complete the removal.

495.2 Method of Removal. Culvert or sewer pipe for reuse shall be removed by careful excavation of all material on the top and sides so that the pipe will not be damaged. Removal of sewer appurtenances shall be included for removal with the pipe. Those pipe which are deemed unsatisfactory for reuse, by the Engineer, will be removed and disposed of, off the job site, in any manner the Contractor may select.

When an existing concrete structure is to remain in use, the removal of any portions thereof shall be in accordance with the Item, "Extending Concrete Structures".

Concrete portions of structures below the permanent groundline shall be neatly squared off. Reinforcement shall be cut off close to the concrete.

Steel structures or steel portions of structures shall be dismantled in sections determined by the Engineer. The sections shall be of such weight and dimensions which permit convenient handling, hauling and storing. Rivets and bolts connecting steel rail members, steel beams or girder spans and steel stringers of truss spans will be removed by cutting the heads with a cold cut then punched or drilled by a method that will not injure the member for reuse and will meet the approval of the Engineer. The removal of rivets and bolts, from connections, will not be required unless specifically called for. Unless otherwise specified, the Contractor shall have the option of dismantling these members by flame cutting immediately adjacent to the connection. Flame-cutting will not be permitted when plans call for the structural unit to be salvaged in such a manner as to permit re-erection. In such case, all members shall be carefully dismantled without damage and match marked with paint in accordance with the plans and all rivets and belts shall be removed from the connections in the manner specified in this section.

Timber structures or timber portions of structures to be reused shall be removed with as little damage to the timber as possible. All bolts and nails shall be removed from such lumber as deemed salvageable by the Engineer.

Unless otherwise specified on the plans, timber piles shall be either pulled or cut off at a point not less than two feet below the groundline, or to final grade, with the choice between these two methods resting with the Engineer.

Brick or stone structures shall be removed by sledging the masonry into removal sizes. Portions of such structures below the permanent groundline, which will not in any manner interfere with the proposed construction, may be left in place, but removal shall be carried at least two feet below the permanent groundline and neatly squared off.

All material such as pipe, timbers, railing, etc. which the Engineer deems as salvageable for reuse and all structural steel shall be carefully placed in neat piles along the right-of-way at convenient loading points. All of these materials shall be the property of Galveston County.

All timber structural members which are deemed unsatisfactory for reuse, by the Engineer, will be removed and properly disposed of at a permitted landfill. If the timber is treated wood, such as creosote, then the timber shall be disposed of as a hazardous waste, and a copy of the waste manifest shall be provided to the Engineer. The transportation and disposal cost for unsalvageable timber structural members shall be the responsibility of the Contractor. If temporarily stored on site until final disposition, all reusable timber members and waste timber members shall be blocked up off the ground and covered with a tarp.

The I-beams, girders, stringers, etc. which are to be put in storage or specified for reuse, shall be blocked up off the ground to protect the members against damage.

Materials which are not deemed salvageable by the Engineer, shall become the property of the Contractor and shall be removed and disposed of off the site by the Contractor. The Contractor is responsible for the proper protection of all materials that are salvageable.

All excavation made in connection with this item and all openings below the natural groundline caused by the removal of old structures or portions thereof shall be back filled to the level of the original groundline, unless otherwise provided on the plans. No separate payment shall be made for backfill and it shall be considered subsidiary to this item.

That portion of the backfill which will support any portion of the roadbed or embankment shall be placed in layers of the same thickness as those required for placing embankment. Material in each layer shall be wetted uniformly, if required, and shall be compacted to the density required in the adjoining embankment. In places inaccessible to blading and rolling equipment, mechanical or hand tampers shall be used to obtain the required compaction.

That portion of the backfill which will not support any portion of the roadbed or embankment shall be placed as directed by the Engineer in such manner and to such state of compaction as will preclude objectionable amounts of settling.

495.3 Measurement. The work as provided for by this item shall be measured as each individual structure to be removed, except that box culverts, pipes and water lines shall be measured by the linear foot. The removal shall include all appurtenances thereto.

495.4 Payment. The work as prescribed for in this item shall be paid for at the unit price bid for "Removing Old Structures" per each or "Removing Old Box Culverts, Pipes or Water Lines" per linear foot, which price shall be full compensation for all work, labor, tools, equipment, excavation, backfilling, materials, disposal costs and incidentals necessary to complete the work.

There are line code(s), description(s) and unit(s) for this item.

Note: This specification requires other Standard Specifications:

Item 424 - Extending Concrete Structures

END OF ITEM 495

ITEM 559

CONSTRUCTION SAFETY FENCE

559.1 Description. This item shall include the requirements for furnishing, installing, maintaining, and removing "Construction Safety Fence"; to provide a temporary barrier to prevent pedestrians or members of the General Public from entering the designated work areas. The four foot high orange color polypropylene construction safety fence shall be installed at the locations designated by the Engineer.

559.2 Materials. Construction Safety Fence shall be comprised of extruded, high density polypropylene, 4 foot tall minimum and orange in color. The mesh openings shall be no larger than 3.5 inches by 1.50 inches.

Plastic fence ties (zip ties), 7 inches long by 0.187" wide minimum, shall be used for attaching safety fence to posts for a tight secure installation.

Line/Support posts shall be steel T-posts, any color, shall be furnished in sufficient quantity to provide a maximum spacing between posts of 8-feet (See Table 1). Reinforcing steel bars shall not be used as posts.

Table 1

LINE POST REQUIREMENTS

T-POST Fence Height	SECTION		EMBEDMENT Length
	T-post Size Overall Length	T-post Weight (per/LF)	
4 feet	5'-6"	1.25 lb./lf	+/- 18"

All fencing materials shall be approved by the Engineer to be in accordance with the specification before they are erected. When requested by the Engineer, samples of any fencing component shall be furnished by the Contractor for testing and/or examination.

559.3 Construction Methods. The Contractor shall perform all clearing of brush and debris, which may be necessary for the installation of this fencing.

The fencing sections between T-posts shall generally follow the finished ground elevations. However, the Contractor shall grade off minor irregularities in the path of the fencing as necessary to limit the variation of grade under the bottom rung of fencing to a distance of not more than 2-inches and not less than 1-inch to the ground.

559.4 Installation.

Place T-posts no more than 8 feet apart, center to center. Posts shall be located to allow movement of machinery and job related maneuvers in the designated work areas.

Pull the construction safety fence taut and secure to the posts with plastic fence ties (zip ties). Loop the ties through the available holes or "teeth" in/on the T-posts at the top and bottom of the fence, with two additional ties evenly spaced in the middle section of the fence. (minimum of 4-ties per post).

To connect fence sections, overlap two ends by at least 6-inches and weave a wood slat through the overlapped strands. Then secure the joined area to a T-post.

Ingress/Egress- The Contractor shall provide gates, capable of being secured, or other means as required to allow machinery and equipment to enter the work areas during normal working hours. These areas shall be secured when work is not in progress.

For special construction applications of the Construction Safety Fence, as example: installed over an existing paved area (parking lot, etc.), the Contractor shall provide an alternate method of installation, approved by the field engineer, so not to damage any existing pavement.

Maintain and repair the construction fence throughout the duration of the project, at no cost to the County, to insure that the barrier continuously performs its intended function.

559.5 Submittal Required. The Contractor shall submit manufacturer's certification that materials meet the requirements of this specification.

559.6 Removal and Disposal.

Remove and dispose of the construction safety fence upon completion of the project. Dispose of the material off of Galveston County property.

After the fence is removed, the Contractor shall maintain field conditions equal to or better than the original condition.

559.7 Measurement. Construction Safety Fence of the height specified, will be measured by the linear foot of fence, complete in-place.

559.8 Payment. The work performed and the material furnished as prescribed by this Item, measured as provided under measurement, will be paid for at the unit price bid for "Construction Safety Fence", of the height specified, which price shall be full compensation for furnishing, installing, maintaining, and removing all fencing materials, including all miscellaneous fittings, plastic fence ties, T-posts, driving/setting T-posts;

all hauling; and for all manipulations, labor, tools, equipment and incidentals necessary to complete the work, including excavation, grading and disposal of surplus material.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 559

ITEM 560

MAINTENANCE AND CLEANUP OF THE PROJECT SITE

560.1 Description. This item shall govern for the maintenance and cleanup of the jobsite both during the term of the construction and at the end of construction.

560.2 General Requirements. The Contractor is required to remove from the job site all trash, excess materials, etc., accumulated as a result of and during this work.

At such time (daily or weekly) as directed by the Engineer, the Contractor shall remove any debris, trash or excess material off the site. He shall make every effort to keep the site in a neat, presentable condition, at all times.

In addition, at the end of each month, the entire construction site shall be generally cleaned and all trash and material over the length of the site shall be removed off site to the complete satisfaction of the Engineer.

The Contractor will mow, trim and edge the right-of-way and esplanades on the project for the entire project duration. The mowing schedule shall be as follows:

<u>April – October:</u>	<u>Once per month</u>
<u>November – March:</u>	<u>Once every six weeks</u>

After the construction work has been completed, the Contractor shall remove all debris, trash, excess materials, forms, stakes, empty sacks etc. from the site and leave the site with a neat appearance. All excavation shall be backfilled and all excess excavated material shall be disposed of off the site of the work.

560.3 Measurement and Payment. There shall be no separate payment for this item.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 560

ITEM 561

VIDEO RECORDING CONSTRUCTION

- 561.1 Description. This item provides for the video recording of a construction project by the Contractor. Two copies of each of the video recordings of the project shall be prepared at the following intervals and submitted to the Engineer:
1. after the pre-construction meeting and before construction begins;
 2. after clearing and grubbing (if this item is applicable);
 3. after construction of the detour;
 4. after construction is completed.

- 561.2 Equipment. The equipment used for video recording shall be an audio/visual recording device, such as a camcorder, capable of recording on DVD media. The finished product shall be capable of being viewed on a DVD player.

- 561.3 Methods. Prior to beginning the video recording of the construction project, a sign board shall be filmed showing the name of the project, the date, and time the video recording begins.

The physical limits for video recording a project shall be as set out in these specifications. Unless otherwise stated, the entire project shall be video recorded along both right-of-way lines.

Video recording shall progress along the stationing. The cameraman shall verbally note the stationing where the video recording is taking place. During video recording, the cameraman shall pay particular attention to privately maintained features located in or adjacent to the County's right-of-way, or easement. These privately maintained features would be such items as trees, shrubs, mailboxes, fences, gates, etc. If a tree or other feature has been damaged or is dead, prior to beginning construction, it shall be verbally noted and the damage shall be video recorded. The cameraman shall video record all driveways. The cameraman shall pay particular attention to any other features on the project where, in his opinion, some future conflict may arise. He may elect to do interim video recording of such items as barricades, at no additional cost to the County.

- 561.4 Measurement and Payment. This item shall be paid for as a lump sum item which shall include the full cost of video recording for all the intervals noted, and providing two copies (DVD disks) of all video recordings to the County.

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 561

ITEM 562

PREPARING THE RIGHT-OF-WAY

562.1 Description. This item provides for the removal of all obstructions and objectionable material from the right of way and designated easements, so as to prepare the right of way for construction.

Included under this item is the removal of trees, shrubs, other landscaping features not designated for preservation, stumps, fences, brush, logs, curb and gutter, driveways, pavement and paved parking areas, miscellaneous stone, brick, concrete, sidewalks, drainage structures, manholes, inlets, abandoned utilities, scrap iron, rubbish and debris, if within the right of way or designated easements.

It is the duty and responsibility of the Contractor to locate all "live" utility facilities, within the right of way or designated easements and to protect these facilities, except when instructed on the plans to do otherwise.

562.2 Construction Methods. The removal of all trees, shrubs, stumps, and brush shall be in accordance with Item 102, titled "Clearing and Grubbing". The removal of concrete curb and gutter, concrete driveways, concrete pavement and parking areas shall be in accordance with Item 104, titled "Removing Old Concrete". The removal of fences shall be in accordance with Item 550, titled "Fencing Removal". The removal of roadway signs, mail boxes, traffic signs and light and traffic poles shall be in accordance with Item 500, titled "Remove and Relocate Roadway Signs, Mail Boxes, Traffic Signs, Light and Traffic Signal Poles". The removal of existing underground utilities shall be in accordance with Item 465, titled "Remove and Dispose of Existing Concrete or Metal Pipe". The removal of concrete inlets, boxes and other concrete structures shall be in accordance with Item 104, titled "Removing Old Concrete". Debris, scrap iron, cans, etc. shall be removed in accordance with Item 200, titled "Stripping".

562.3 Measurement. Measurement shall be the full width of the right of way or easement and the full length of the right of way.

562.4 Payment. Payment will be on a lump sum basis for "Preparing the Right of Way".

There are line code(s), description(s), and unit(s) for this item.

END OF ITEM 562

ITEM 713

REINFORCED FILTER FABRIC BARRIER

713.1 Description. This work shall consist of furnishing, installing, and removing temporary erosion protection and sediment control reinforced filter fabric barrier in accordance with these specifications and construction drawings, and as directed by the Engineer. The reinforced filter fabric barrier consists of geotextile fabric supported by a net reinforced fence stretched across and attached to supporting posts or frame and entrenched. This work shall be performed during construction operations and prior to final stabilization to control erosion and sedimentation.

713.2 Materials.

Geotextile fabric (filter fabric) shall consist of long-chain synthetic polymers composed of at least 95 percent by weight of polyolefins in a woven fabric. The geotextile fabric shall meet the following specifications:

Geotextile Fabric Properties: The geotextile fabric used shall equal or exceed the stated property values listed in Table 1 below:

Table 1 Silt Fence Geotextile Fabric Properties			Requirements Unsupported Silt Fence	
	Units	Supported Silt Fence	Geotextile Elongation ≥50%	Geotextile Elongation <50%
Grab Strength				
Machine Direction	Lbs.	90	123	123
X-Machine Direction	Lbs.	90	100	100
Permittivity	Sec ⁻¹	0.05	0.05	0.05
Apparent Opening Size (maximum average roll value)	Mm/sieve	0.6/30	0.6/30	0.6/30
Ultraviolet Stability (Retained Tensile Strength)	%	70 after 500 hrs exposure	70 after 500 hrs exposure	70 after 500 hrs exposure
NOTES:				
1. Table 1 adapted from AASHTO M 288 <i>Geotextile Specification for Highway Applications</i> Table 6. Temporary Silt Fence Property Requirements.				
2. All numeric values in Table 1 except Apparent Opening Size (AOS) represent minimum average roll values (MARV). Values for AOS represent maximum average roll values.				

Geotextile fabric shall contain stabilizers and/or inhibitors to make the fabric resistant to deterioration resulting from exposure to sunlight or heat. Geotextile fabric shall be resistant to commonly encountered soil chemicals, mildew, rot, and insects. Geotextile fabric shall be free of defects or flaws that affect its physical and/or filtering properties.

Geotextile fabric shall provide an expected useable life comparable to the anticipated construction period.

Fence posts shall be either steel or hardwood, essentially straight, with a minimum length of 4 feet. Hardwood posts shall be 2-inch x 2-inch minimum, or equivalent. Metal posts shall be either studded T or U steel type with a minimum weight of 1.28 lbs. per linear foot. Fin anchors shall be used to resist post movement as directed by the Engineer.

Net reinforced fence shall be 2 inch wide by 4 inch high welded wire fabric mesh, 14 gage minimum. The mesh support height shall be the equivalent height, or greater, of the geotextile fabric to be attached. Plastic grid mesh or other support mesh may be substituted for welded wire mesh as approved by the Engineer.

Attachment of net reinforced fence and geotextile fabric shall be with wire ties, staples, or shoat rings. Wire ties shall be 14 gage minimum, staples shall be no. 9 wire minimum with a ½ inch minimum crown length, and shoat rings shall be galvanized, or as approved by the engineer.

A prefabricated unit with geotextile fabric, posts, and wire mesh meeting the minimum specifications in this item may be used in lieu of a constructed filter fabric barrier.

713.3 Construction Methods.

No clearing and grubbing or rough cutting, other than as specifically directed by the Engineer to allow for soil testing, surveying and installation of erosion protection and sediment control measures, shall be permitted until sediment control and erosion protection systems are in-place.

Reinforced filter fabric barriers shall be installed at the locations shown on the construction drawings and in accordance with the drawing attached to this specification or as directed by the Engineer. Reinforced filter fabric barriers shall be constructed in accordance with an approved schedule that clearly describes the timing during the construction process that the various erosion control measures will be implemented. Reinforced filter fabric barriers shall be installed so as surface runoff will percolate through the system and allow sediment to be retained and accumulated.

Posts shall be driven to a minimum depth of 1 foot into the ground. Posts shall be a minimum of 18" above the ground. Posts shall be placed with a maximum spacing of 6 feet and be installed on a slight angle toward the anticipated runoff.

Trenches shall be dug along the uphill side of the fence to anchor at least 8 inches of the filter fabric to prevent underflow. The trench shall be a 6-inch x 6-inch square, or a 4 inch deep V-trench.

Net reinforced fence shall be attached to the posts. Attachment shall be at the top and midsection. Additional ties or staples shall be added to secure the net reinforced fence to the posts as directed by the Engineer.

Geotextile fabric shall be placed against the side of the trench with approximately 2 inches across the bottom in the upstream direction. Using wire ties or shoat rings, the geotextile fabric shall be attached to the net reinforced fence. The fabric shall be attached at the top and midsection. The horizontal spacing of the attachment shall be every 24-inches, or less. Additional ties, shoat rings, or staples shall be added to secure fabric to the net reinforced fence or posts as directed by the Engineer.

Geotextile fabric shall be provided in continuous rolls and cut to the length of the barrier, so as to minimize joints. When joints of two sections of fabric are necessary, the fabric shall be spliced together only at a support post. The fabric shall be overlapped a minimum of 6 inches at a post, folded, and secured at six or more places. Splices in concentrated flow areas will not be permitted.

Geotextile fabric shall be attached at the end posts at a minimum of four locations. Geotextile fabric shall be entrenched and attached to the posts so as a minimum of 18 inches of the fabric is above the ground. The trench then shall be backfilled and hand tamped as approved by the Engineer.

Contractor shall inspect the reinforced filter fabric barriers at least once every week or as directed by the Engineer. The Contractor shall remove irregularities which will impede normal flow. Erosion protection and sediment control systems shall be maintained by the Contractor until final stabilization. Damage caused to erosion protection and sediment control systems shall be repaired immediately.

The Contractor is responsible for removal and proper disposal of sediment and debris from the reinforced filter fabric barrier system and as directed by the Engineer. Sediment and debris shall not be allowed to flush into the storm sewer system, waterways, and jurisdictional wetlands, or onto adjacent properties. Sediment deposits shall be removed before they reach one-third of the height of the reinforced filter fabric barrier.

Uncontaminated sediment can be placed at the project spoil site or, if properly handled, spread out to supplement fill requirements. The Engineer will designate how the sediment deposits are to be handled.

Uncontaminated sediment shall not be placed in waterways or jurisdictional wetlands, unless as approved by the engineer. If sediment has been contaminated, then it shall be disposed of in accordance with the applicable federal, state, and local regulations. Offsite disposal shall be the responsibility of the Contractor.

After final stabilization and at the direction of the Engineer, the Contractor, when required, shall be responsible for removing all erosion protection and sediment control systems that are not permanent, from the project.

713.4 Quality Assurance. The Contractor is responsible for the control of the quality of materials incorporated into the construction and the quality of completed construction. The County will engage materials engineering services to provide quality assurance testing and inspection to assist the County Engineer in determining the acceptability of materials and completed construction. Quality assurance services provided by the County do not relieve the Contractor of his responsibility for quality control. The Materials Engineer shall not have control of the means, methods, techniques, sequences or procedures of construction selected by the Contractor.

713.4 Measurement. When paid for separately as a pay item, measurement for reinforced filter fabric barrier shall be by the linear foot, complete and in-place, measurement being made along the centerline of the top of the barrier.

713.5 Payment. Payment for reinforced filter fabric barrier shall include and be full compensation for all labor, equipment, materials, supervision and all incidental expenses for the construction of this item, complete and in-place, where 60% of the total unit cost shall be for furnishing and placing all materials. Thus, 40% of the total unit cost shall be for the removal and disposal of erosion protection and sediment control systems: reinforced filter fabric barrier, after final stabilization, at the end of the project.

There are line code(s), description(s), and unit(s) for this item.

Note: This specification requires a drawing that shall be incorporated into the proposed Standard Construction Drawings.

END OF ITEM 713

ITEM 724

STABILIZED CONSTRUCTION ACCESS (TYPE I – ROCK)

724.1 Description. This work shall consist of the installation of temporary erosion protection and sediment control stabilized construction access - type I, rock, utilized during construction operations and prior to final stabilization, in accordance with these specifications and construction drawings, and as directed by the Engineer.

724.2 Materials. Geotextile fabric shall consist of a woven monofilament or spunbond nonwoven fibers consisting of long-chain synthetic polymers composed of at least 95 percent by weight of polyolefins. Geotextile fabric shall equal or exceed the following average roll values or as directed by the Engineer:

- a. Minimum average roll value.
 - (1) Elongation \geq 50 percent.
 - (2) Grab Strength – 200 pounds.
 - (3) Puncture Strength – 75 pounds.
 - (4) UV Stability (retained strength) – 50 percent after 500 hours of exposure.
- b. Maximum average roll value.
 - (1) Apparent Opening Size (AOS) – 0.6 mm/#30 US sieve.

Geotextile fabric shall be resistant to commonly encountered soil chemicals, mildew, rot, insects, and deterioration resulting from exposure to sunlight or heat. Geotextile fabric shall provide an expected useable life comparable to the anticipated construction period.

Aggregate for the construction access shall consist of crushed stone, gravel, or furnace slag, or combination thereof. The aggregate shall be open-graded with a size of 2 inches to 5 inches with no material diameter less than 2 inches and no material diameter greater than 5 inches. Aggregate particles shall be composed of clean, hard, durable materials free from adherent coatings, salt, alkali, dirt, clay, loam, shale, soft or flaky materials or organic and injurious matter. The depth of the aggregate shall not be less than 8 inches.

Aggregate shall be cubic or rounded form, not elongated, flat, shapes. Spalls, fragments, and chips shall not exceed 5 percent by weight. Crushed concrete may not be substituted for the crushed stone, gravel, or furnace slag unless as approved by the Engineer.

724.3 Construction Methods. No clearing and grubbing or rough cutting, other than as specifically directed by the Engineer to allow for soil testing, surveying and installation of erosion protection and sediment control

measures, shall be permitted until sediment control and erosion protection systems are in-place.

Stabilized construction access – type 1 shall be installed at the locations shown on the construction drawings and in accordance with the drawing attached to this specification or as directed by the Engineer. Stabilized construction access – type 1 shall be constructed in accordance with an approved schedule that clearly describes the timing during the construction process that the various erosion control measures will be implemented. Stabilized construction access – type 1 shall be installed so as to prevent tracking or flowing of sediment from the construction site.

The construction access location shall be graded to provide sufficient drainage away from the proposed stabilized area. The separation geotextile fabric shall be placed to the width and length of the construction access. Aggregate shall be placed on the underlying separation geotextile fabric to the width and length of the fabric and to the specified depth, with the depth being no less than 8 inches. The separation geotextile fabric may be omitted only as approved by the Engineer.

When necessary, equipment, truck, and vehicle wheels shall be cleaned to remove sediment prior to entrance onto public right of way. When washing is required, the construction access shall be graded to drain into a sediment trap or sediment basin. The sediment trap or sediment basin for the washing area shall be the size and location shown on the construction drawings or as directed by the Engineer.

Details for stabilized construction access are shown on the drawing that is incorporated into the proposed Standard Construction Drawings. Stabilized construction access shall be at least 14-feet wide for one way traffic and 20-feet for two way traffic and shall be sufficient for all ingress and egress unless as approved by the Engineer due to site conditions. Length of the stabilized area shall be as shown on the construction drawings, but not less than 50-feet, unless approved by the Engineer due to site conditions.

The Contractor shall provide stabilized construction access for project related access roads, parking areas, and other on-site vehicle transportation routes. Stabilization of these areas shall have the same aggregate and thickness requirements as the stabilized construction access unless shown otherwise on the construction drawings.

Gravel, sand bags, boards, reinforced filter fabric fence, or similar methods shall be used in combination with the stabilized construction access to prevent sediment from entering public right-of-way, storm sewer system, jurisdictional wetlands, and waterways.

The Contractor shall provide periodic top dressing, with additional aggregate, to maintain the required roadway depth. The Contractor shall be responsible for repairing and cleaning out damaged areas used to trap sediment. All sediment and aggregate tracked or washed into public right of way, storm sewer system, jurisdictional wetlands or waterways shall be removed immediately.

The Contractor shall inspect the stabilized construction access at least once every week or as directed by the Engineer. Damage caused to stabilized construction access shall be repaired immediately. Stabilized construction access shall be maintained by the Contractor until construction staging requires removal or upon final stabilization of the construction site. Upon removal of the stabilized construction access, the area shall be graded as per the construction drawings and stabilized with vegetation, or other.

If an equipment or vehicle washing area is necessary, The Contractor is responsible for removal and proper disposal of sediment and debris from the sediment trap or basin. Sediment and debris shall not be allowed to flush into the storm sewer system, waterways, jurisdictional wetlands, or onto adjacent properties. Sediment deposits shall be removed before they reach one-third of the depth of the sediment trap or basin.

Uncontaminated sediment can be placed at the project spoil site or, if properly handled, spread out to supplement fill requirements. The Engineer will designate how the sediment deposits are to be handled. Uncontaminated sediment shall not be placed in waterways or jurisdictional wetlands, unless as approved by the Engineer. If sediment has been contaminated, then it shall be disposed of in accordance with the applicable federal, state, and local regulations. Offsite disposal shall be the responsibility of the Contractor.

After final stabilization and at the direction of the Engineer, the Contractor, when required, shall be responsible for removing all erosion protection and sediment control systems that are not permanent, from the project.

724.4 Quality Assurance. The Contractor is responsible for the control of the quality of materials incorporated into the construction and quality of completed construction. The County will engage materials engineering services to provide quality assurance testing and inspection to assist the County Engineer in determining the acceptability of materials and completed construction. Quality assurance services provided by the County do not relieve the Contractor of his responsibility for quality control. The Materials Engineer shall not have control of the means, methods, techniques, sequences or procedures of construction selected by the Contractor.

724.5 Measurement. When paid for directly as a pay item, measurement for stabilized construction access – type 1, rock, shall be by the square yard, complete and in-place.

724.6 Payment. Payment for stabilized construction access – type 1 shall include and be full compensation for all labor, equipment, materials, supervision and for all incidental expenses for the construction of these items, complete in-place, where 60% of the total unit cost shall be for the installation including excavation. Thus, 40% of the total unit cost shall be for the removal of erosion protection and sediment control systems: stabilized construction access, after final stabilization, at the end of the project. Construction and maintenance of sediment traps or basins associated with the stabilized construction access for the purpose of washing equipment or vehicles prior to egress to public right of way shall be considered incidental to stabilized construction access.

There are line code(s), description(s), and unit(s) for this item.

Note: This specification requires a drawing that shall be incorporated into the proposed Standard Construction Drawings.

END OF ITEM 724

ITEM 725

GENERAL SOURCE CONTROLS (SWPPP)

725.1 Description. This item describes erosion protection and sediment control related practices which must be utilized during construction operations.

725.2 Materials. Topsoil shall conform to the following requirements:

TABLE NO. 1

Specification	Applicable Test	Applicable Test Method for
pH=5.5 – 8	(1) pH (Litmus)	ASTM D4972, "pH of Soils"
Sand (2.0-0.05 mm) content	(2) Sedimentation	ASTM D422, "Particle-Size Analysis of Soils"
Shall be 10-70 % of oven dry weight		ASTM D1140, "Amount of Material in Soils Finer Than the No. 200 (75-µm) Sieve"
Total Organic Matter 2.5-10%	(3) Wet Combustion	ASTM D2974, "Moisture, Ash, and Organic Matter of Peat and Other Organic Soils" AASHTO T194,

All tests shall be oven dry weight.

The Contractor is required to inform the Engineer of the location of the pit or pits from which the material is to be taken. Galveston County shall have the right to have an independent testing laboratory test the material to determine if it meets these specifications.

725.3 Construction Methods. No clearing and grubbing or rough cutting, other than as specifically directed by the Engineer to allow for soil testing and surveying, shall be permitted until sediment control and erosion protection systems are in-place.

The Contractor shall prohibit equipment and vehicles from maneuvering on areas outside of dedicated rights of way and easements for construction. Damages caused by construction traffic to erosion and sedimentation control systems shall be repaired immediately.

Topsoil for Erosion and Sedimentation Control Systems:

When topsoil is called for as a component of another item, Contractor shall conduct erosion control practices during topsoil operation. When applying topsoil, contractor shall maintain erosion and sediment control systems, such as swales, berms, dikes, and sediment basins. Contractor shall place the topsoil to the lines and grades and to the depths shown on the construction plans.

After the areas to receive topsoil have been brought to grade and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or by scarifying to a depth of at least 2 inches, to permit bonding of the topsoil to the subsoil. Contractor shall compact by passing a bulldozer up and down the slope, tracking over the entire surface area of the slope to create horizontal erosion control slots. When grading, filling, and applying topsoil around trees, Contractor shall maintain the existing grade within the drip line of trees, unless otherwise indicated.

Topsoil shall be material free of clay, rock or gravel larger than 2-inches in any dimension, debris, waste, vegetation and other deleterious matter. Drainage fill shall be selected stone or gravel, graded to pass a 3-inch sieve and retained on a 1-inch sieve.

No sod, seed, or other vegetation shall be placed on soil that has been treated with soil sterilants until sufficient time has elapsed to permit dissipation of toxic materials.

Protection of Trees in Construction Area:

Contractor shall employ protective measures to avoid damage to existing trees to be retained on the project site. Heavy equipment, vehicular traffic, and stockpiles of construction materials, including topsoil, are not permitted within 3 feet of the dripline of any tree to be retained. Specimen trees shown on the construction plans shall be boxed or fenced for protection. Contractor shall water those trees indicated to be preserved, as required, to maintain their healthy growth during the course of construction operations. Contractor shall protect tree root systems from damage due to noxious materials in solution caused by runoff or spillage during mixing and placement of construction materials or drainage from stored materials.

When called for in the construction plans, tunneling under the root system for the installation of utility lines shall be accomplished by hand digging. Contractor shall not allow exposed roots to dry before permanent backfill is placed. Tree trunks, exposed roots, and limbs of the trees designed to be retained which are damaged during construction operations will be cared for as prescribed by an arborist certified by the International Society of Arboriculture (ISA), at the expense of the Contractor. The Contractor

shall extend the pruning operation to restore the natural shape of the entire tree. Main lateral roots, taproots, or old main branches shall not be cut or pruned. The Contractor shall cut branches and roots with sharp pruning instruments. He shall not break or chop branches and roots. Cuts over 1/2-inch in size shall be painted with tree pruning compound. Tree pruning compound shall be waterproof, antiseptic, elastic, and free of kerosene, coal tar, creosote and other substances harmful to trees.

Dust Control:

Control dust blowing and moving on construction sites and roads for erosion and sediment control, to prevent exposure of soil surfaces, to reduce on and off site property damage, to prevent health hazards, and to prevent hazardous sight conditions. Control dust blowing by utilizing one or more of the following methods:

1. Mulches bound with natural or chemical binders such as Soiltac®, Terratack®, or equal, as approved by the Engineer.
2. Temporary or permanent vegetative cover.
3. Spray-on adhesive, such as Soil Master®, PennzSuppress®, Soil Sement®, or equal, on mineral soils when not used by traffic and as approved by the Engineer.
4. Tillage to roughen surface and bring clods to the surface.
5. Irrigation by water sprinkling.
6. Barriers using solid board fences, snow fences, burlap fences, crate walls, bales of hay, or similar materials.

Dust control methods shall be implemented immediately whenever dust can be observed blowing on the project site.

Equipment Maintenance and Repair:

Maintenance and repair of construction machinery and equipment shall be confined to areas specifically designated for that purpose. Designated areas shall be located, designed, and maintained so as oils, gasoline, grease, solvents, and other potential pollutants cannot be washed into the storm sewer system or any other receiving stream. Contractor shall not allow oils, gasoline, waste fluids, and other potential pollutants to spill onto the soil or seep into the ground and groundwater. Adequate waste disposal receptacles shall be provided for liquid waste, as well as solid waste. Proper spill response measures and materials will be the responsibility of the Contractor. Designated maintenance areas shall be inspected and properly maintained daily.

On a site where designated equipment maintenance and repair areas are not feasible, care shall be taken during each individual repair or maintenance operation to prevent spills of potential pollutants. All applicable federal, state, and local requirements shall be followed for the proper handling, storage, and waste disposal of oils, gasoline, grease,

solvents, and other designated potential pollutants associated with the maintenance and repair of construction machinery and equipment.

Waste Collection and Disposal:

A plan shall be implemented for the collection and disposal of on site general trash, as well as construction debris. Disposal of waste materials shall be in accordance with applicable federal, state, and local requirements. Trash and debris shall not be allowed to overflow its receptacle or accumulate for excessively long periods of time. Receptacles shall be located where they will least likely be affected by storm water runoff.

Special provisions shall be made for the collection and disposal of liquid, toxic, or hazardous materials.

Sanitary Facilities:

Adequate sanitary facilities shall be provided for workers. Sanitary collection and disposal shall be in accordance with applicable federal, state, and local requirements.

Vehicle Washing:

Construction equipment and vehicles, such as concrete trucks, shall be washed in designated areas only, as approved by the Engineer. These designated wash areas shall be designed and maintained such as to prevent runoff from leaving the site, as well as preventing the runoff from entering a storm sewer system or into a watercourse. The designated areas shall be located where the wash water will evaporate or infiltrate directly into the ground and where runoff can be collected in a temporary holding or seepage basin. Wash areas shall not be located immediately adjacent to a storm sewer system or other watercourse or near a designated jurisdictional wetland. Concrete waste shall be permitted to dry in a controlled pit, sump, or other, and the waste shall be removed from the project site.

Storage of Construction Materials and Chemicals:

Storage of chemicals, cements, solvents, paints, pesticides, herbicides, fuels, or other potential pollutants shall be stored so that they will not be in contact with storm water runoff or cause potential leachate to the soil or groundwater. These items shall not be stored adjacent to a storm sewer system or other watercourse. Storage and use shall be in accordance with all applicable federal, state, or local requirements, as well as manufacturer's guidelines.

Contractor shall have a spill response program which addresses spills of construction related hazardous and toxic materials.

Demolition Areas:

Demolition projects usually generate large amounts of dust with significant concentrations of heavy metals and other toxic pollutants. Dust control techniques shall be used to limit the transport of the airborne pollutants. Water or slurries used to control dust shall not be allowed to flow into the storm sewer system or other watercourse.

Street Cleaning:

Street cleaning, such as sweeping, vacuuming, or shoveling, shall be provided along project area roadways where erosion have deposited or construction traffic have tracked sediments, mud, or debris. Contractor shall inspect the roadways daily, and perform the cleaning on a daily basis, if necessary. Washing or flushing of sediments, mud, or debris into adjacent drainage systems is prohibited.

Dewatering:

The pumping of ponded storm water, or other waters, from the project site directly into an adjacent watercourse or storm sewer system shall not be permitted unless the water has been pretreated through a sediment basin or other method, and as approved by the Engineer.

Pesticides, Herbicides, and Fertilizers:

Contractor shall only use pesticides, herbicides, and fertilizers on the construction site as indicated in the construction specifications and plans or as approved the Engineer. Pesticides, herbicides, and fertilizers shall be stored, used, applied, and disposed of in accordance with manufacturer's guidelines and with local, state, and federal regulations. Contractor shall not dispose of the pesticide, herbicide, and fertilizer wastes, and containers, on site or in the storm sewer system or other watercourse.

725.4 Measurement and Payment. No separate payment shall be made for this item. The work performed under this item shall be paid for and considered subsidiary to Specification Item 751, "SWPPP Inspection and Maintenance".

There are no line codes for this item.

END OF ITEM 725

ITEM 730

CONCRETE TRUCK WASHOUT STRUCTURES

730.1 DESCRIPTION

Item includes requirements for construction, installation and removal of concrete washout structures. The description for maintenance is included in this specification, but payment for maintenance is part of item 751, "SWPPP Inspection and Maintenance".

730.2 SUBMITTALS

Concrete truck washout structure will be used per drawing detail for: "Concrete truck washout structure".

Submit site plan showing location(s) of concrete truck washout structure(s) for approval.

Material Disposal. Submit plan for disposal of both concrete truck washout water and solid concrete wastes for approval.

730.3 CONCRETE TRUCK WASHOUT STRUCTURE

Refer to the drawing detail for "Concrete Truck Washout Structure", with Sandbags.

730.4 PLACEMENT

Do not locate concrete washout structures within 50 feet of storm drain inlets, open drainage facilities or watercourses.

Locate away from construction traffic or access areas to prevent disturbance or tracking.

730.5 CONSTRUCTION

Install a sign adjacent to each temporary concrete washout structure to inform concrete equipment operators to utilize the proper facilities. See attached Detail sheets for sign dimensions.

Detail – "Below Grade Concrete Truck Washout Structure with Sandbags".

- Construct temporary concrete truck washout structures below grade with a minimum length and width of 10 feet. Construct and maintain concrete truck washout structures in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.

- Remove rocks and other debris in soil base of structure that might tear or

- puncture the plastic lining.
- Provide plastic lining material which is a minimum of 10-mil thick polyethylene sheeting. Sheeting shall be free of holes, tears or other defects that compromise the impermeability of the lining. Install lining seams in accordance with manufacturers' recommendations.
- Install 15 feet by 35 feet by 8 inches thick granular fill truck parking pad underlain with geotextile per Item 724 – Stabilized Construction Access.
- Install orange safety fence around three sides of the structure as shown on the drawing detail.

730.6 MAINTENANCE

Once concrete wastes are washed into the designated structure and allowed to harden, break up the concrete remove and dispose in accordance with approved submittal.

Inspect lining integrity and level in concrete washout structure before each rainfall to prevent overtopping due to rainfall and daily during periods of daily rainfall and, at a minimum, once every week.

Repair or replace damaged lining or other damaged or missing parts of the washout structure immediately.

Maintain level in washout structure(s) to provide adequate holding capacity with a minimum freeboard of 12 inches.

Existing structure(s) must be cleaned, or new structure(s) constructed and ready for use once the washout structure is 75% full.

730.7 REMOVAL OF CONCRETE WASHOUT STRUCTURES

Once concrete washout structures are no longer required, as determined by the Engineer, remove and dispose the hardened concrete and concrete washout water per the approved submittal.

730.8 MATERIAL DISPOSAL

Dispose materials used to construct truck washout structure(s) and granular fill parking pad(s) properly.

Remove unusable, objectionable or excess material from the construction work area. Properly dispose of such material.

Disposal of material in the 100-year flood plain without permits is prohibited.

Disposal of material in wetlands or other environmentally sensitive areas without permits is prohibited.

Material disposed of without permits shall be removed and properly disposed of at no cost to the County. Restore the site at no cost to the County.

Cleared and grubbed material may be chipped on-site and chips disposed of in areas approved by the Engineer, provided the following items are adhered to:

- Scatter chips sufficiently to prevent killing turf grass or other desirable vegetation.
- Dispose of excess chips in accordance with this Item

730.9 SITE RESTORATION

Compact clean fill in pit up to surrounding grade.

Backfill and repair all holes, depressions or other ground disturbances caused by the construction and removal of the concrete washout structure(s).

Restore concrete washout structure area to match surrounding grade and vegetation.

730.10 MEASUREMENT

Measurement is as noted as lump sum. No separate measurement will be made for maintenance or removal of accumulated washout structure wastes.

730.11 PAYMENT

Payment is lump sum, for the duration of the project. Payment shall include and be full compensation for all labor, equipment, materials, supervision and for all incidental expenses for the construction of these items, complete in place, where 60% of the total cost shall be for the furnishing and installation with embankment and excavation. Thus, 40% of the total cost shall be for the removal of erosion protection and sediment control systems: concrete truck washout structures, after final stabilization, at the end of the project.

Construction and maintenance of sediment traps or basins associated with the stabilized construction access for the purpose of washing equipment or vehicles prior to egress to public right of way shall be considered incidental to stabilized construction access.

No separate payment will be made for maintenance or removal of accumulated washout structure wastes, per this item. Removal of the concrete washout structure and site restoration is a part of the cost bid for the concrete washout structure. For the Below Grade Concrete Washout Structure shown on the drawing detail, the sandbags and geotextile are incidental to the cost of the concrete truck washout structure.

There are line code(s), description(s), and unit(s) for this item.

NOTE: This specification requires a drawing that shall be incorporated into the proposed Standard Construction Drawings.

END OF ITEM 730

ITEM 750

ROCK FILTER DAMS

750.1 Description. This work shall consist of the installation of temporary erosion protection and sediment control rock filter dams utilized during construction operations and prior to final stabilization in accordance with these specifications and construction drawings, and as directed by the Engineer. Rock filter dams are temporary berms constructed of stone to intercept and slow storm water runoff to retain sediment on the construction site. Depending upon the type of rock filter dam specified in the construction plans as Type 1, 2, 3, 4, or 5, the aggregate fill may be unwrapped, wrapped in twisted hexagonal wire mesh, or confined in a gabion wire basket.

Applications of RockFilter Dams:

- A. Type 1 dams may be used at toe of slopes, around inlets, in small ditches, and at dike or swale outlets. Type 1 dams are recommended for erosion and sediment control from a drainage area of 5 acres or less.
- B. Type 2 dams may be used in ditches and at dike or swale outlets.
- C. Type 3 dams may be used in stream flow.
- D. Type 4 sack gabions may be used in ditches and smaller channels to form an erosion and sediment control dam.
- E. Type 5: As shown in plans.

750.2 Materials. Geotextile fabric shall consist of a woven monofilament or spunbond nonwoven fibers consisting of long-chain synthetic polymers composed of at least 95 percent by weight of polyolefins. Geotextile fabric shall equal or exceed the following average roll values or as directed by the Engineer:

- A. Minimum average roll value.
 - (1) Elongation \geq 50 percent.
 - (2) Grab Strength – 200 pounds.
 - (3) Puncture Strength – 75 pounds.
 - (4) UV Stability (retained strength) – 50 percent after 500 hours of exposure.
 - B. Maximum average roll value.
 - (1) Apparent Opening Size (AOS) – 0.6 mm/#30 US sieve.
- Geotextile fabric shall be resistant to commonly encountered soil chemicals, mildew, rot, insects, and deterioration resulting from exposure to sunlight or heat. Geotextile fabric shall provide an expected useable life comparable to the anticipated construction period.

Aggregate for the rock filter dams shall consist of crushed stone. Aggregate particles shall be composed of clean, hard, durable materials free from adherent coatings, salt, alkali, dirt, clay, loam, shale, soft or flaky materials or organic and injurious matter. Aggregate shall be cubic or rounded form, not elongated, flat, shapes. Spalls, fragments, and chips shall not exceed 5 percent by weight. Crushed concrete shall not be substituted for the crushed stone unless as approved by the Engineer.

Aggregate size shall depend upon the type of rock filter dam specified in the construction plans. Aggregate size based on type of rock filter dam is as follows:

- A. Type 1: 3 inches to 5 inches, open-graded.
- B. Type 2: 3 inches to 5 inches, open-graded.
- C. Type 3: 4 inches to 8 inches, open-graded.
- D. Type 4: 3 inches to 5 inches, open-graded.
- E. Type 5: As shown on the plans.

Mesh is required for reinforced type rock filter dams. Mesh shall be 20 gauge galvanized double twisted hexagonal wire mesh with 1-inch diameter hexagonal openings. Mesh wire shall be zinc coated prior to being double twisted. Reinforcing spiral binders, lacing wire, and stiffeners shall be made of wire having the same coating material and same wire size as the wire mesh. Gabion wire baskets shall equal or exceed the requirements of the wire mesh.

750.3

Construction Methods. No clearing and grubbing or rough cutting, other than as specifically directed by the Engineer to allow for soil testing, surveying and installation of erosion protection and sediment control measures, shall be permitted until sediment control and erosion protection systems are in-place.

Rock filter dams shall be installed at the locations shown on the construction plans and in accordance with the drawing attached to this specification or as directed by the Engineer. Rock filter dams shall be the types specified in the construction plans. Rock filter dams shall be constructed in accordance with an approved schedule that clearly describes the timing during the construction process that the various erosion control measures will be implemented. Rock filter dams shall be installed so as to prevent downstream deposition of sediment and debris from the construction site.

Rock filter dams shall be constructed to meet the following criteria:

- A. **Type 1:**
 - (1.) Non-reinforced.
 - (2.) Height: 18-24 inches.
 - (3.) Top width: 2 feet minimum.
 - (4.) Upstream and downstream side slope of dam: 2:1 maximum.
 - (5.) Open graded aggregate 3-5 inches.

- B. **Type 2:**
- (1.) Reinforced with wire mesh.
 - (2.) Height: 18-36 inches.
 - (3.) Top width: 2 feet minimum.
 - (4.) Upstream and downstream side slope of dam: 2:1 maximum.
 - (5.) Open graded aggregate 3-5 inches.
- C. **Type 3:**
- (1.) Reinforced with wire mesh.
 - (2.) Height: 36-48 inches.
 - (3.) Top width: 2 feet minimum.
 - (4.) Upstream and downstream side slope of dam: 3:1 maximum.
 - (5.) Open graded aggregate 4-8 inches.
- D. **Type 4:**
- (1.) Reinforced in a gabion wire basket.
 - (2.) Height: 30 inches minimum.
 - (3.) Top width: 2 feet minimum.
 - (4.) Upstream and downstream side slopes of dam: none specified.
 - (5.) Open graded aggregate 3-5 inches.
- E. **Type 5:**
- (1.) As shown on construction plans.

The separation geotextile fabric and wire mesh shall be sized and placed in accordance with the rock filter dam detail and as specified by the type of rock filter dam shown in the construction plans. The separation geotextile fabric may be omitted only as approved by the Engineer. The separation geotextile fabric and wire mesh shall be securely staked with wooden or metal stakes to the bottom and side slopes of the ditch or channel prior to aggregate placement. Sack gabions for Type 4 rock filter dams shall be securely staked with wooden or metal stakes to the bottom and side slopes of the ditch or channel, as well.

Aggregate fill shall be placed to the width, length, height and slopes in accordance with this specification and the rock filter dam detail and as specified by the type of rock filter dam shown in the construction plans. The height of the dam shall be measured vertically from the existing ground to the top of the filter dam. The length of the dam shall be measured across the top centerline of the dam from embankment to embankment and includes the additional length embedded into the embankment. Width of the dam shall be measured along the top face of the dam.

Wire mesh shall be folded upstream side over the aggregate fill and tightly secured to itself on the downstream side using wire ties. Hog rings may be substituted for wire ties.

Additional aggregate fill or gravel bags shall be placed and secured at the embedded section to prevent low flows from short circuiting the dam at the adjacent dirt embankment area. Gravel bags shall meet the specifications of Item 741 Gravel Bag Inlet Protection Barrier.

The Contractor shall be responsible for periodic reshaping, repairing, and maintaining of rock filter dams as directed by the Engineer.

The Contractor shall inspect the rock filter dam at least once every week or as directed by the Engineer. Damage caused to rock filter dams shall be repaired immediately. Rock filter dams shall be maintained by the Contractor until construction staging requires removal or upon final stabilization of the construction site. Upon removal of the rock filter dam, the area shall be stabilized with vegetation, or other.

The Contractor is responsible for removal and proper disposal of sediment and debris from the rock filter dam. Removed sediment and debris shall not be allowed to flush into the storm sewer system, waterways, jurisdictional wetlands, or onto adjacent properties. Sediment deposits shall be removed before they reach one-third of the height of the dam.

Uncontaminated sediment can be placed at the project spoil site or, if properly handled, spread out to supplement fill requirements. The Engineer will designate how the sediment deposits are to be handled. Uncontaminated sediment shall not be placed in waterways or jurisdictional wetlands, unless as approved by the Engineer. If sediment has been contaminated, then it shall be disposed of in accordance with the applicable federal, state, and local regulations. Offsite disposal shall be the responsibility of the Contractor.

After final stabilization and at the direction of the Engineer, the Contractor, when required, shall be responsible for removing all erosion protection and sediment control systems that are not permanent, from the project.

Pursuant to Section 404 of the Clean Water Act, a permit may be required for placement of fill, rock filter dams, into Waters of the United States, Waters of the State, and their associated jurisdictional wetlands. The Contractor shall not proceed with the construction of the rock filter dams in Waters of the United States, Waters of the State, and their associated jurisdictional wetlands until the permits are obtained.

750.4

Quality Assurance. The Contractor is responsible for the control of the quality of materials incorporated into the construction and quality of completed construction. The County will engage materials engineering services to provide quality assurance testing and inspection to assist the

County Engineer in determining the acceptability of materials and completed construction. Quality assurance services provided by the County do not relieve the Contractor of his responsibility for quality control. The Materials Engineer shall not have control of the means, methods, techniques, sequences or procedures of construction selected by the Contractor.

750.5 Measurement. When paid for separately as a pay item, measurement for rock filter dams, Types 1,2,3,4, or 5 shall be by the linear foot, as shown on the plans, complete and in-place. Measurement shall be along the centerline of the top of the dam from embankment to embankment and includes the additional length which is embedded into the embankment.

751.6 Payment. Payment for rock filter dams shall include and be full compensation for all labor, equipment, materials, supervision and for all incidental expenses for the construction of these items, complete in-place, where 60% of the total unit cost shall be for furnishing and installation with embankment and excavation. Thus, 40% of the total unit cost shall be for the removal of erosion protection and sediment control systems: rock filter dams, after final stabilization, at the end of the project. Geotextile fabric, reinforcement, aggregate fill, and gravel bags shall be considered incidental expenses to this item. Disposal of sediment and debris are considered incidental expenses to this item.

There are line code(s), description(s), and unit(s) for this item.

Note: This specification requires two drawing details that shall be incorporated into the proposed Standard Construction Drawings.

END OF ITEM 750

ITEM 751

SWPPP INSPECTION AND MAINTENANCE

751.1 Description. This item shall consist of inspecting, maintaining, cleaning, and replacing as necessary, all SWPPP items, in conformance with the drawings and/or as directed by the Engineer. Included in the maintenance of the SWPPP will be once per week inspections and reports, or as directed by the Engineer. The day of the week established for the inspections, shall be mutually agreed to, by Galveston County and the Contractor, prior to the Contract start date.

A Storm Water Pollution Prevention Plan (SWPPP) has been established (see drawings) for this project in accordance with the EPA and TCEQ regulations, and as defined by the TPDES General Permit.

751.2 Construction Methods. All SWPPP items shall conform to details shown on the drawings and the STORM WATER POLLUTION PREVENTION PLAN in the PROJECT MANUAL.

Prior to beginning work, the Contractor shall designate in writing an authorized representative who will be responsible and available on the project site or in the immediate area to insure compliance with the SWPPP.

The Contractor is solely responsible for inspecting and maintaining all the SWPPP items. The Contractor's responsibility in this regard extends for the entire duration of the project, from the start of construction until acceptance by the County.

All SWPPP items such as Sodding, Hydro-Mulch Seeding, Reinforced Filter Fabric Barrier, Inlet Protection Barrier (Stage I and/or Stage II), Stabilized Construction Access, Concrete Truck Washout, etc. shall be maintained at all times by cleaning, replacing or a combination thereof such that after rain or other inclement weather the SWPPP items shall be equal to or exceed their like new installed condition.

The Contractor shall receive compensation for inspecting and maintaining the necessary SWPPP items, and any incidentals necessary to achieve turf establishment and an approved final inspection and acceptance by the County.

The above does not preclude the requirements of the "Galveston County General Conditions".

751.3 Submittal. The Contractor shall be required to submit and fill out the Storm Water Construction Site Inspection Report at least once per week, or as directed by the Engineer. The Inspection and the Report shall be completed in conformance with the STORM WATER POLLUTION

PREVENTION PLAN, and maintained at the project site. If required, the Contractor shall maintain a corrective action log, and the SWPPP Amendment Log.

751.4 Measurement & Payment. Inspecting, maintaining, cleaning, and replacing any or all SWPPP items, shall be paid for by the month, provided the SWPPP is properly maintained, as approved by the Engineer. Included in the maintenance of the SWPPP will be the issues described in Item 725, "General Source Controls" and required weekly inspections and reports. All items noted in each weekly inspection report shall be corrected within 72 hours, or prior to the next rain event, whichever come first, and/or as approved by the Engineer.

The SWPPP Monthly Maintenance fee will be designated by a minimum bid amount.

If in the opinion of the Engineer, the Contractor does not comply with the above requirements of the work, the SWPPP monthly inspection and maintenance fee (total amount) will be withheld from any money due or to become due to the Contractor.

There are line code(s), description(s) and unit(s) for this item.

NOTE: This specification requires other Standard Specifications as designated in the Project Manual.

END OF ITEM 751

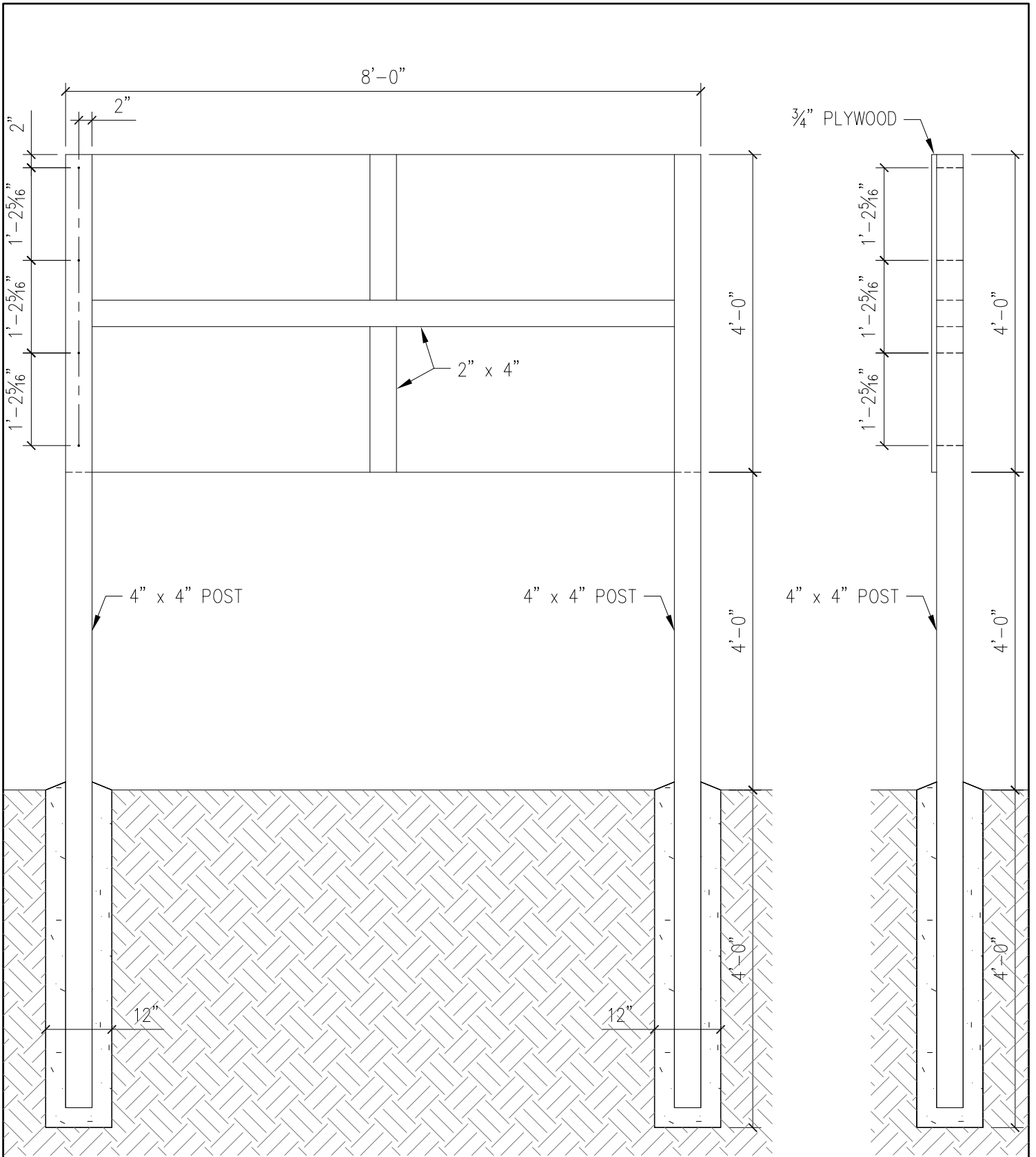
PROJECT SIGN REQUIREMENTS

Public buildings, facilities, and centers constructed with Texas General Land Office TxCDBG-DRS assistance shall have permanent signage placed in a prominent visible public area with the wording provided below. The formatting of such signage will be at local discretion to best fit the architectural design of the facility constructed but should be legible from at least three (3) feet distance. The Texas General Land Office and United States Department of Housing and Urban Development logos should be included on the sign.

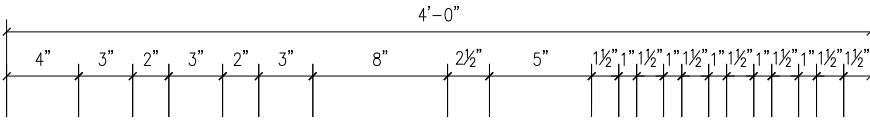
Other construction projects, e.g., water transmission lines, sewer collection lines, drainage, roadways, housing rehabilitation, etc. utilizing Texas General Land Office TxCDBG-DRS funding shall have temporary signage erected in a prominent location at the construction project site or along a major thoroughfare within the locality as directed by the owner.

Project Sign Wording:

“This project is funded by the General Land Office of the State of Texas, to provide for disaster recovery and restoration of infrastructure for communities impacted by the 2008 hurricanes. Funds allocated by the United States Department of Housing and Urban Development through the Community Development Block Grant Program.”



NOTE:
SEE NEXT SHEET FOR
SIGN INFORMATION.

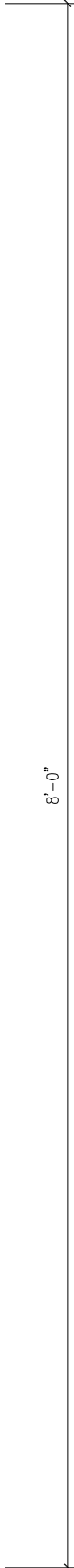


CONSTRUCTION
OF
"PROJECT NAME"

HURRICANE RECOVERY PROJECT



THIS PROJECT IS FUNDED BY THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, TO PROVIDE FOR DISASTER RECOVERY AND RESTORATION OF INFRASTRUCTURE FOR COMMUNITIES IMPACTED BY THE 2008 HURRICANES. FUNDS ALLOCATED BY THE UNITED STATES DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT THROUGH THE COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM.
WWW.GLO.TEXAS.GOV



PROJECT SIGN GENERAL NOTES:

1. Design Requirements
 - a. Design sign and structure to remain in place and withstand 60 miles-per-hour wind velocity.
 - b. Sign Manufacturer/Maker/Painter: Experienced as a professional sign company.
 - c. Finishes, Painting: Adequate to withstand weathering, fading and chipping for duration of construction.
 - d. Appearance: Project signs shall present a fresh, new and neat look. All project signs shall be new or refurbished so as to look new.

2. Sign Materials
 - a. Structure and Framing: Use new 4-inch by 4-inch wood posts to reach 8-feet above existing grade. Paint structural members white on all sides and edges to resist weathering. Set posts approximately 4-feet apart.
 - b. Sign: For sign use 4-foot by 8-foot marine plywood, minimum $\frac{3}{4}$ -inch thick. Use full size sheets for sign to minimize joints; do not piece wood to fabricate a sign face. Paint sign material white, two (2) coats, on all sides and edges to resist weathering.
 - c. Paint and Primers: White paint used to prime surfaces and to resist weathering shall be an industrial grade, fast drying, oil-based paint with gloss finish. Paint all signs surfaces with two (2) coats of this weather-protective paint prior to adding any lettering.
 - d. Sign Border: Add 2½-inch wide black border along the four edges of the project sign. For border use 3M Scotchcal Engineer Grade, Pressure Sensitive Sheeting (Black) or approved equal.
 - e. Sign Lettering: Make lettering and symbols from 3M Scotchcal Pressure Sensitive Films or approved equal, or at Contractor's option, signs may be painted using approved paints. Whether film or paint is used, match color to 3M Scotchcal Pressure Sensitive Film, Black.
 - f. Rough Hardware: Galvanized steel or brass for fasteners and other hardware.

3. Sign Components
 - a. Sign
 - (1). The 4-foot by 8-foot component of the sign has fields of information as indicated.
 - (2). The Engineer will provide the project title to the Contractor for preparation of the sign.
 - b. Sign Support Structure
 - (1). Sign Posts: 4-inch by 4-inch sign posts 12-feet long minimum for post hole mounting to set top of posts at 8-feet above existing grade.
 - c. Fasteners
 - (1). ½-inch by 5½-inch button heads carriage bolts for posts with nuts and flat head washers. Cover button heads with white reflective film or paint to match sign background

PROJECT SIGN GENERAL NOTES:
(continued)

4. Installation
 - a. Install project identification sign within fourteen (14) calendar days after date of Notice to Proceed.
 - b. Erect at location designated by the Engineer or where shown on the Plans and/or Exhibits. In either case, position the sign in such a manner as to be fully visible and readable to the general public.
 - c. Erect sign level and plumb.
 - d. If post hole mounted, sink posts at least 4-feet below grade. Stabilize posts to minimize lateral motion.
 - e. Erect sign so that the top edge of the sign is at a nominal 8-feet above existing grade.

5. Maintenance and Removal
 - a. Maintain signs and supports clean. Repair deterioration and damage.
 - b. Remove signs, framing, supports and foundations at completion of project and restore the area.