



COUNTY OF GALVESTON
SPECIFICATIONS AND CONTRACT DOCUMENTS

BLUE HERON DRIVE IMPROVEMENTS

Bid #B201049



Giti Zarinkelk
9/11/2020

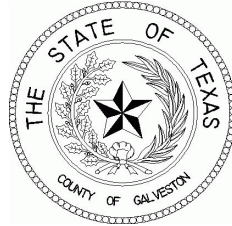
October 2020

ZARINKELK ENGINEERING SERVICES, INC.
Texas PE Firm No: F-004270

CONTENTS

Invitation to Bid – General Provisions.....	1
Special Provisions – Exhibit A.....	39
Certification Regarding Lobbying.....	57
Non-Collusion Affidavit.....	58
Bid Forms.....	59
Acknowledgment and Certification Regarding Debarment.....	62
Vendor Qualification Packet.....	63
Special Provisions for Construction.....	76
Prevailing Wage Rate.....	92
Bid Proposal.....	98
Contract Award.....	101
Affidavit and Surety Forms.....	103
Specifications.....	107
Small Construction Site Notice.....	222
Geotechnical Engineering Study.....	Separate Document
Plans.....	Separate Document

**GALVESTON COUNTY
PURCHASING DEPARTMENT**



INVITATION TO BID

ITB #B201049

BLUE HERON DRIVE IMPROVEMENTS

BID DUE DATE: 10/22/2020

2:30 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
BLUE HERON DRIVE 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 **2:30 P.M. CST, on Thursday, October 22, 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 2:30 P.M. CST on the specified date will be returned unopened.**

Purpose:

Galveston County is seeking a contractor for the re-construction of Blue Heron Drive located in Bayou Vista, Texas 77563. The project scope includes the following:

- the removal of the existing asphalt surface with base and replace with proposed three (3) inch thick asphalt surface over a proposed nine (9) inch thick black base.
- The project consists of approximately 2,775 linear feet of roadway in the Base Bid and approximately 560 linear feet of roadway in the Alternate Bid.
- proposes to construct drainage swale of approximately 1,835 linear feet with grate inlets and storm sewer leads of 12" HDPE along east side of the roadway.

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

ITB #B201049, Blue Heron Drive 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 Tuesday, October 6, 2020 at 10:45 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 Blue Heron Drive Improvements. 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 Zarinkelk Engineering Services, Inc., at 832.242.2426 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

**INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

Table of Contents

GENERAL PROVISIONS:

1.	BID PACKAGE.....	1
2.	BIDDER’S RESPONSIBILITY	1
3.	TIME FOR RECEIVING BIDS	1
4.	COMPETITIVENESS, INTEGRITY, INQUIRIES AND QUESTIONS	2
5.	BID OPENING	3
6.	WITHDRAWAL OF BID/FIRM BID RULE.....	3
7.	COMMISSIONERS COURT	3
8.	REJECTION OF BIDS/DISQUALIFICATION.....	3
9.	RESTRICTIVE OR AMBIGUOUS SPECIFICATIONS.....	4
10.	SUBSTITUTES/DESCRIPTION OF MATERIALS AND EQUIPMENT	4
11.	EXCEPTIONS TO BID	4
12.	PRICING.....	4
13.	PROCUREMENT CARD (P-CARD) PROGRAM.....	5
14.	PASS THROUGH COST ADJUSTMENTS	5
15.	MODIFICATION OF BIDS	5
16.	PRE-BID CONFERENCE	6
17.	SIGNATURE OF BIDS.....	6
18.	AWARD OF BIDS – EVALUATION CRITERIA AND FACTORS	6
19.	DISPUTE AFTER AWARD/PROTEST	7
20.	PUBLIC INFORMATION ACT (f/k/a Open Records Act).....	8
21.	BIDDER’S E-MAIL ADDRESSES – CONSENT TO DISCLOSURE	8
22.	RESULTANT CONTRACT.....	8
23.	CONTRACT TERM.....	9
24.	TERMINATION FOR DEFAULT	9
25.	TERMINATION FOR CONVENIENCE.....	9
26.	FORCE MAJEURE	10

**INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

27.	ESTIMATED QUANTITIES	10
28.	CONTRACTOR INVESTIGATION.....	10
29.	NO COMMITMENT BY COUNTY OF GALVESTON.....	10
30.	BID COSTS BORNE BY BIDDER	10
31.	BEST AND FINAL OFFIERS (BAFO)	11
32.	SINGLE BID RESPONSE.....	11
33.	CHANGES IN SPECIFICATIONS.....	11
34.	BID IDEAS AND CONCEPTS	11
35.	BID DISCLOSURES	11
36.	INDEMNIFICATION.....	11
37.	REQUIREMENT OF AND PROOF OF INSURANCE	12
38.	BID GUARANTEE	13
39.	PERFORMANCE AND PAYMENT BONDS (if required)	14
40.	PATENT AND COPYRIGHT PROTECTION	14
41.	CONFLICT OF INTEREST DISCLOSURE REPORTING (FORM CIQ)	15
42.	DISCLOSURE OF INTERESTED PARTIES/FORM 1295	16
43.	CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS & REQUIREMENT TO REGISTER IN SAM.....	17
44.	SOVEREIGN IMMUNITY	18
45.	CONTROLLING LAW AND VENUE.....	18
46.	MERGERS, ACQUISITIONS.....	18
47.	DELAYS.....	18
48.	ACCURACY OF DATA	18
49.	SUBCONTRACTING/ASSIGNMENT	19
50.	INDEPENDENT CONTRACTOR.....	19
51.	MONITORING PERFORMANCE	19
52.	SUBJECT TO APPROPRIATION OF FUNDS.....	19
53.	CONTRACTS SUBJECT TO GRANT FUNDING	19
54.	PROCUREMENT ETHICS.....	19
55.	NON-COLLUSION AFFIDAVIT.....	21

**INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

56. CERTIFICATION REGARDING LOBBYING 22

57. NON-DISCRIMINATION 22

58. RECORD RETENTION AND RIGHT TO AUDIT 23

59. TITLE VI ASSURANCES/TxDOT..... 23

60. SECTION 231.006, FAMILY CODE/DELINQUENT CHILD SUPPORT 24

61. ANTITRUST 25

62. LABOR STANDARDS 25

63. PROCUREMENT LAWS..... 25

64. ENTIRETY OF AGREEMENT AND MODIFICATION..... 30

65. NOTICE..... 30

66. USE OF DHS SEAL, LOGO, AND FLAGS PROHIBITED WITHOUT PRIOR APPROVAL..... 31

67. FEDERAL GOVERNMENT NOT A PARTY..... 31

68. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS..... 31

69. LEAD AND ASBESTOS 31

70. ACKNOWLEDGMENT OF GOVERNMENT RECORD..... 32

71. COMPLIANCE WITH GALVESTON COUNTY PURCHASING POLICIES AND PROCEDURES 32

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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) unbound 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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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,

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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).

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

GENERAL PROVISIONS – INVITATION TO BID BLUE HERON DRIVE IMPROVEMENTS GALVESTON COUNTY, TEXAS

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:

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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:

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

- (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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

- (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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

- (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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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.

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

- (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

**GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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 APPROVAL

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.

GENERAL PROVISIONS – INVITATION TO BID
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

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
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

TABLE OF CONTENTS

A.	PURPOSE	1
B.	DEFINITIONS	1
C.	BID SURETY	1
D.	PERFORMANCE AND PAYMENT BONDS	1
E.	DAVIS-BACON WAGE RATES	1
F.	BEST AND FINAL OFFERS (BAFO)	1
G.	PROCUREMENT TIMELINE	2
H.	PRE-BID CONFERENCE	2
I.	PERSONNEL TO CONTACT	2-3
J.	PROGRAM ADMINISTRATION & CONTRACT MANAGEMENT	3
K.	TYPE OF CONTRACT	3-4
L.	COLLATERAL CONTRACT	4
M.	LABOR	4
N.	INSURANCE	4-5
O.	EXCEPTIONS	5

**SPECIAL PROVISIONS
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

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 contractor for the re-construction of Blue Heron Drive located in Bayou Vista, Texas 77563. The project scope includes the following:

- the removal of the existing asphalt surface with base and replace with proposed three (3) inch thick asphalt surface over a proposed nine (9) inch thick black base.
- The project consists of approximately 2,775 linear feet of roadway in the Base Bid and approximately 560 linear feet of roadway in the Alternate Bid.
- proposes to construct drainage swale of approximately 1,835 linear feet with grate inlets and storm sewer leads of 12" HDPE along east side of the roadway.

The engineer's construction cost estimate to complete this project is \$510,000.00.

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.

**SPECIAL PROVISIONS
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY**

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)	Thursday, September 24, 2020
Advertise BID (second date of publication)	Thursday, October 1, 2020
Pre-Bid Conference	Tuesday, October 6, 2020 at 10:45 a.m.
Deadline for Questions & Inquiries	Monday, October 12, 2020 by 5:00 p.m.
Bids due from public/Bid Opening	Thursday, October 22, 2020 at 2:30 p.m.

H. PRE-BID CONFERENCE

A non-mandatory pre-bid conference will be held on Tuesday, October 6, 2020 at 10:45 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 attendee name, attendee company name, and email address (for contact and addenda issuance purposes)**
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:

**SPECIAL PROVISIONS
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY**

**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 “**Blue Heron Drive Improvements – Bid# B201049– 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 an 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**

**SPECIAL PROVISIONS
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY**

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 the Board of Insurance Commissioners of the State of Texas, with coverage provisions insuring the public

**SPECIAL PROVISIONS
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY**

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

**EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS**

PROCUREMENT STANDARDS

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

TABLE OF CONTENTS

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

2 C.F.R. § 200.318. General procurement standards.....2-3

2 C.F.R. § 200.319. Competition.....4-5

2 C.F.R. § 200.320. Methods of procurement to be followed.....5-7

2 C.F.R. § 200.321. Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms..... 7

2 C.F.R. § 200.322. Procurement of recovered materials..... 8

2 C.F.R. § 200.323. Contract cost and price..... 8

2 C.F.R. § 200.324. Federal awarding agency or pass-through entity review.....8-9

2 C.F.R. § 200.325. Bonding requirements.....9-10

2 C.F.R. § 200.326. Contract provisions..... 10

2 C.F.R. Part, 200, Appendix II.....11-12

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

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

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

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.

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

(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

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

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.

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

(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]

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

(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

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

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.

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

(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.

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

(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

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

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

EXHIBIT A
BLUE HERON DRIVE IMPROVEMENTS
GALVESTON COUNTY, TEXAS

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 #B201049, Blue Heron Drive 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. B201049, Blue Heron Drive 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
BLUE HERON DRIVE 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
BLUE HERON DRIVE 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
BLUE HERON DRIVE 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: _____

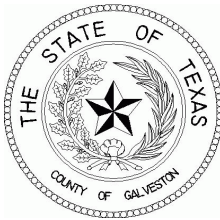
2. Business Name of Supplier _____
Name of Person: _____
Title of Individual within business: _____
Business address: _____

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 #B201049

Solicitation Title: Blue Heron Drive 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).

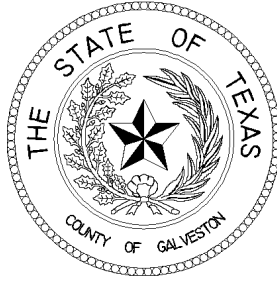
For Proposer's convenience, a blank CIQ Form is enclosed with this proposal. Blank CIQ Forms may also be obtained by visiting the Galveston County Clerk's website and/or the Purchasing Agent's website - both of these web sites are linked to the Galveston County homepage at <http://www.galvestoncountytexas.gov>

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	

Request for Taxpayer Identification Number and Certification

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

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type.	See Specific Instructions on page 3.	<p>1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.</p> <hr/> <p>2 Business name/disregarded entity name, if different from above</p> <hr/> <p>3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.</p> <p><input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate</p> <p><input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____</p> <p>Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.</p> <p><input type="checkbox"/> Other (see instructions) ▶ _____</p>	<p>4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):</p> <p>Exempt payee code (if any) _____</p> <p>Exemption from FATCA reporting code (if any) _____</p> <p style="font-size: small;">(Applies to accounts maintained outside the U.S.)</p>
		<p>5 Address (number, street, and apt. or suite no.) See instructions.</p> <hr/> <p>6 City, state, and ZIP code</p> <hr/> <p>7 List account number(s) here (optional)</p> <hr/>	<p>Requester's name and address (optional)</p> <hr/>

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number											
				-			-				
or											
Employer identification number											
				-							

Part II Certification

Under penalties of perjury, I certify that:

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

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

Sign Here	Signature of U.S. person ▶	Date ▶
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

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

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

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

SPECIAL PROVISIONS FOR CONSTRUCTION

1. Contract and Contract Documents

The Plans, Specifications and Addenda, General Provisions 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 the County of Galveston, 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 Zarinkelk Engineering Services, 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: Invitation to Bid, , Signed Copy of Bid, General Conditions, Special Provisions For Construction, Acknowledgement and Certification Regarding Debarment, Non-Collusion Affidavit, Vendor Qualification Packet, Payment and Performance Bonds, Contract Award, Addenda (if any), Technical Specifications, and Drawings (as listed in the Schedule of Drawings).
- (e) The term "Substantially Complete" shall mean that the work is fully completed with the exception of minor miscellaneous work and adjustments.

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. 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.
- (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) If applicable unit prices are contained in the Agreement, the Owner may order the Contractor to proceed with desired unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase the original total amount of the agreement by more than twenty-five percent (25%) or decrease the original the total amount by eighteen percent (18%).
- (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.

8. 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.

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. Time

The Contractor is advised that time for completion will consist of the number of calendar days set out in the Contract Award. The time for completion will begin to run on the day after the issuance of a notice to proceed by the County. The Contractor is required to start work no later than ten (10) working days after the issuance of the written notice to proceed. Failure to timely commence operations may be deemed by the County to be a default. The Contractor will complete the work at that site within the time period specified. If there is more than one site listed on the notice to proceed, work for all sites must be completed not later than is specified for each site.

11. Termination, Delays, and Liquidated Damages

- (a) Right of the Owner to Terminate Contract.

In the event that any of the provisions of this contract are violated by the Contractor, or by any of his subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate the contract. The notices shall contain the reasons for such intention to terminate the contract, and unless such violation or delay shall cease and satisfactory arrangement of correction be made within ten days, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination, the Owner shall immediately serve notice thereof upon the Surety and the Contractor. The Surety shall have the right to take over and perform the contract. Provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the Owner may take over the work and complete the project by bid/contract or by force account at the expense of the Contractor and his Surety shall be liable to the Owner

for any excess cost incurred. In such event the Owner may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore.

(b) Liquidated Damages for Delays.

Contractor agrees that time is of the essence of this contract and that for each day of a delay of a day beyond the number of working days or calendar days herein agreed upon the completion of the work herein specified and contracted for (after due allowance for such extension of time as is provided for under Extension of Time hereinabove) County may withhold permanently from Contractor's total compensation the sum of **\$1,000.00** for each calendar day of delay, until the work is completed, as liquidated damages for such delay. The Contractor and his sureties shall be liable to the Owner for the amount thereof.

(c) Excusable Delays.

- 1) The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due to:
 - a. Any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, national defense, or any other national emergency;
 - b. Any acts of the Owner;
 - c. Causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in the performance of some other contract with the Owner, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions.
- 2) Provided, however, that the Contractor promptly notifies the Owner within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the Owner shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this contract, the delay is properly excusable, the Owner shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

12. Assignment or Novation

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the Owner; provided, however, that assignments to banks or other financial institutions may be made without the consent of the Owner. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

13. 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.

14. 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.

15. Shop Drawings

- (a) All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in 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.

16. 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.

17. 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.

18. 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.

19. 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.

20. 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.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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.

31. 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.

32. 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.

33. Contract Period

The work to be performed under this contract shall commence within the time stipulated by the Owner in the Notice to Proceed, and shall be fully completed within Ninety calendar days thereafter.

34. Keeping Of Plans And Specifications Accessible

The Contractor shall keep one (1) copy of all Plans and Specifications constantly accessible at the work site and available for inspection at all times.

35. Utilities

Contractor shall be responsible for any charges which may be made by any city or utility companies for the work to be performed by Contractor.

36. Parking

Contractor shall be responsible for the expense of parking the Contractor's vehicle(s) in a legal manner and at no expense or inconvenience to the County.

37. Fire And Safety

Contractor is completely responsible for fire protection at the job site as well as the safety of its own employees as well as those entering onto the job site.

38. Contractor's Buildings

The building of structures for housing men, or the erection of tents or other forms of protection will be permitted only at such places as the County shall permit, and the sanitary conditions of the grounds in or about such structures shall at all times be maintained in the manner satisfactory to the County.

39. Worksite Security

Contractor shall maintain the security of the worksite.

Contractor shall provide adequate protection to persons on the worksite, adjacent properties, and utilities as is necessary to keep each free of damage or injury. Contractor shall furnish all barricades, warning lights and other safety devices necessary for the safety and protection of the public and shall remove them upon completion of the work performed on those premises under the terms of this contract.

Contractor will have complete control over the work site and shall be fully responsible for any loss of or damage to any County property from any cause and will reimburse County in the event of any loss or damage to County's property from any cause.

Contractor shall take proper means to protect adjacent or adjoining properties which might be injured or seriously affected by construction undertaken under this Agreement from any damage or injury by reason of said process of construction. Contractor shall be liable for any and all claims for such damage on account of its failure to fully protect all adjoining properties.

40. Final Grading

If grading is required, when work is complete, Contractor shall grade the site to fill in holes and make a presentable appearance without disturbing trees and add fill dirt if needed. Contractor may not leave voids in the grading and compaction of the property. The land shall have a smooth appearance without concrete, bricks, building materials, and other debris on the surface.

41. Changes And Alterations

Contractor further agrees that County may make such changes and alterations as County may see fit, in the line, grade, form dimensions, plans or materials for the work herein contemplated, or any part thereof, either before or after the beginning of the contract construction, without affecting the validity of this Contract and the accompanying bonds.

If such changes or alterations diminish the quantity of the work to be done, they shall not constitute the basis for a claim for damages, or anticipated profits on the work that may be dispensed with. If they increase the amount of the work, and the increased work can fairly be classified under the specifications, such increase shall be paid for according to the quantity actually done and at the unit price established for such work under this contract; otherwise such additional work shall be paid for as provided under the paragraph entitled "EXTRA WORK". In case the County shall make such changes or alterations as shall make useless any work already done or material already furnished or used in said work, then County shall recompense Contractor for any material or labor so used, and for any actual loss occasioned by such change due to actual expenses incurred in preparation for the work as originally planned.

42. Extra Work

The term "Extra Work" as used in this contract shall be understood to mean and include all work that may be required by the County to be done by Contractor to accomplish any change, alteration or addition to the work shown in the plans and specifications.

It is agreed that Contractor shall perform all Extra Work under the direction of the County when presented with a Written Work Order signed by the County. 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. The County 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 County. 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 County 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 County 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.

43. Salvage

Any materials, equipment and fixtures specifically ordered to be salvaged under these specifications shall remain the property of County and will be delivered to the site designated by the County. All other items shall be disposed of by Contractor in compliance with all applicable laws and regulations.

44. Compliance With Codes

Contractor shall comply with all city, county, and state codes, laws, and ordinances in force at the time of award of contract and applicable to such work. Contractor shall obtain, at Contractor's own expense such permits, certificates, and licenses as may be required in the performance of the specified work.

45. Laws And Ordinances

Contractor shall at all times observe and comply with all Federal, State and Local Laws, ordinances and regulations which in any manner effect the contract or the work, and shall indemnify and save harmless the County against any claim arising from the violation of any such laws and ordinances, whether by Contractor or its employees.

46. Permits And Licenses

Contractor shall be responsible for obtaining and furnishing all necessary permits and licenses, City, County, State or Federal as are required for the performance of this contract.

47. Lines And Grades

The Engineer will furnish points for horizontal and vertical control. Any additional stakes required by the Contractor shall be set at his expense. Whenever necessary, work shall be suspended to permit this work, but such suspension will be as brief as practicable and the Contractor shall be allowed no extra compensation therefor. The Contractor shall give the Engineer ample notice of the time and place where control lines and bench marks will be needed. All control stakes, marks, etc. shall be carefully preserved by the Contractor, and in case of careless destruction or removal by him or his employees, such control stakes, marks, etc. shall be replaced by the Engineer at the Contractor's expense.

48. Excess, Waste Material And Debris

All excess material, waste material and debris shall become the property of the Contractor and shall be properly disposed of off-site. No separate payment shall be made for same.

49. Material Hauling

Hauling of materials will not be paid for directly, but shall be considered as subsidiary work pertaining to the respective bid items. Haul routes for full and empty loads shall be restricted to State Highways. Hauling of equipment is also restricted to State Highways.

50. Abatement And Mitigation Of Excessive Or Unnecessary Construction Noise

Throughout all phases of the construction of this project, including the moving, unloading, operating and handling of construction equipment prior to commencement of work, during the project and after the work is complete, the contractor shall make every reasonable effort to minimize the noise imposed upon the immediate neighborhood surrounding the area of construction. Particular and special efforts shall be exercised by the Contractor to avoid the creation of unnecessary noise impacts on adjacent sensitive receptors in the placement of non-mobile equipment such as air compressors, generators, pumps, etc. The placement of temporary parked mobile equipment with the engine running shall be such as to cause the least disruption of normal adjacent activities not associated with the work to be performed by the contractor.

All equipment associated with the work shall be equipped with components designed by the manufacturer wholly or in part to suppress excessive noise and these components shall be maintained in their original operating condition considering normal depreciation. Noise-attenuation devices installed by the manufacturer such as mufflers, engine covers, insulation, etc., shall not be removed nor rendered ineffectual nor be permitted to remain off the equipment while the equipment is in use.

51. Working Hours

Work shall not be commenced by the contractor before sunrise and shall be so conducted that all equipment is off the road and safely stored by sunset. Specific permission shall be obtained by the contractor from the Engineer for work during those hours between 7:00 P.M. and 6:00 A.M. of the following day.

52. Pipeline, Utility Locations And Contractor Responsibility

An effort to determine all pipelines and utilities which may impact the project has been made. All known pipelines and utilities have been approximately located and shown on the plans. The Contractor shall notify all utility and pipeline owners before beginning the work. Additional unknown utilities and pipelines may be found. Adjustments of these utilities or pipelines shall be done by others at no expense to the contractor. However, the Contractor shall cooperate and coordinate his work with the adjustment

The Contractor will anticipate this in making his bid. The contractor will not be allowed claims for damages or delays for these adjustments should they be necessary. However, additional time will be considered for the

contract period.

This action, however, shall in no way be interpreted as relieving the Contractor of his responsibilities under the terms of the contract as set out in the plans and specifications. The Contractor shall repair any damage to the facilities caused by his operations at the Contractor's expense and shall restore facilities to service in a timely manner.

53. Incidentals

All items of work required under this contract not specifically called for in the proposal as pay items shall be considered incidental to the various bid items and no separate payment shall be made for same.

54. Flagmen

During certain phases of construction flagmen will be required to direct and control traffic. This work will not be paid for directly, but shall be considered incidental the various bid items and no separate payment shall be made for same.

55. Field Office

For this project the Contractor will not have to provide a field office.

56. Wage Rates:

The attached schedule of wages per hour for this Contract follows.

"General Decision Number: TX20200038 01/03/2020

Superseded General Decision Number: TX20190038

State: Texas

Construction Type: Highway

Counties: Austin, Brazoria, Chambers, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, San Jacinto and Waller Counties in Texas.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

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

* SUTX2011-013 08/10/2011

Rates Fringes

CEMENT MASON/CONCRETE
FINISHER (Paving and
Structures).....\$ 12.98

ELECTRICIAN.....\$ 27.11

FORM BUILDER/FORM SETTER
Paving & Curb.....\$ 12.34
Structures.....\$ 12.23

LABORER
Asphalt Raker.....\$ 12.36
Flagger.....\$ 10.33
Laborer, Common.....\$ 11.02
Laborer, Utility.....\$ 11.73
Pipelayer.....\$ 12.12
Work Zone Barricade
Servicer.....\$ 11.67

PAINTER (Structures).....\$ 18.62

POWER EQUIPMENT OPERATOR:
Asphalt Distributor.....\$ 14.06
Asphalt Paving Machine.....\$ 14.32
Broom or Sweeper.....\$ 12.68
Concrete Pavement
Finishing Machine.....\$ 13.07
Concrete Paving, Curing,
Float, Texturing Machine....\$ 11.71
Concrete Saw.....\$ 13.99
Crane, Hydraulic 80 Tons
or less.....\$ 13.86
Crane, Lattice boom 80
tons or less.....\$ 14.97
Crane, Lattice boom over
80 Tons.....\$ 15.80
Crawler Tractor.....\$ 13.68
Excavator, 50,000 pounds
or less.....\$ 12.71
Excavator, Over 50,000
pounds.....\$ 14.53
Foundation Drill, Crawler
Mounted.....\$ 17.43
Foundation Drill, Truck
Mounted.....\$ 15.89

Front End Loader 3 CY or
 Less.....\$ 13.32
 Front End Loader, Over 3 CY.\$ 13.17
 Loader/Backhoe.....\$ 14.29
 Mechanic.....\$ 16.96
 Milling Machine.....\$ 13.53
 Motor Grader, Fine Grade....\$ 15.69
 Motor Grader, Rough.....\$ 14.23
 Off Road Hauler.....\$ 14.60
 Pavement Marking Machine....\$ 11.18
 Piledriver.....\$ 14.95
 Roller, Asphalt.....\$ 11.95
 Roller, Other.....\$ 11.57
 Scraper.....\$ 13.47
 Spreader Box.....\$ 13.58

Servicer.....\$ 13.97

Steel Worker

Reinforcing Steel.....\$ 15.15
 Structural Steel Welder.....\$ 12.85
 Structural Steel.....\$ 14.39

TRUCK DRIVER

Low Boy Float.....\$ 16.03
 Single Axle.....\$ 11.46
 Single or Tandem Axle Dump..\$ 11.48
 Tandem Axle Tractor w/Semi
 Trailer.....\$ 12.27

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

"

BID PROPOSAL

The bidder hereby proposes to furnish all labor, material, equipment and incidentals for:
BLUE HERON DRIVE 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.	_____

BID PROPOSAL
Blue Heron Drive Improvements

ITEM NO.	SPEC. NO.	DESCRIPTION	UNIT	QUAN.	UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
BASE BID							
1	110	EXCAVATION FOR ROADWAY	CY.	43	_____ DOLLARS AND _____ CENTS	\$	\$
2	500	REMOVE AND RELOCATE OF EXISTING TRAFFIC SIGN, MAIL BOX	LS	1	_____ DOLLARS AND _____ CENTS	\$	\$
3	501	TREE PROTECTION	LS	1	_____ DOLLARS AND _____ CENTS	\$	\$
4	540	REMOVE AND DISPOSE EXISTING ASPHALTIC SURFACE AND BASE MATERIAL (ALL DEPTHS)	SY.	5,955	_____ DOLLARS AND _____ CENTS	\$	\$
5	PLAN	PROJECT SIGNS	EA.	1	_____ DOLLARS AND _____ CENTS	\$	\$
6	COH 02505	12" HDPE PIPE CROSS CULVERT	LF.	46	_____ DOLLARS AND _____ CENTS	\$	\$
7	472	STORM TYPE "A" INLET	EA.	3	_____ DOLLARS AND _____ CENTS	\$	\$
8	250	9-INCH COLD-IN-PLACE BLACK BASE COURSE	TON	3,162	_____ DOLLARS AND _____ CENTS	\$	\$
9	310	TACK COAT (0.05 GAL/SY)	GAL	329	_____ DOLLARS AND _____ CENTS	\$	\$
10	340	3-INCH HMA SURFACE COURSE	TON	971	_____ DOLLARS AND _____ CENTS	\$	\$
11	494	GEOTEXTILE - FURNISH AND INSTALL	SY	6,554	_____ DOLLARS AND _____ CENTS	\$	\$
12	162	SODDING	SY.	1,640	_____ DOLLARS AND _____ CENTS	\$	\$
13	713	REINFORCED FILTER FABRIC BARRIER	LF.	2,800	_____ DOLLARS AND _____ CENTS	\$	\$
14	751	SWPPP INSPECTION AND MAINTENANCE	MO	2	_____ DOLLARS AND _____ CENTS	\$	\$
15	719 741	INLET PROTECTION BARRIER (IPB)	EA.	3	_____ DOLLARS AND _____ CENTS	\$	\$
16	671	TRAFFIC CONTROL	MO	2	_____ DOLLARS AND _____ CENTS	\$	\$
TOTAL BASE BID:					_____ DOLLARS AND _____ CENTS	\$	\$
SUPPLEMENTAL ITEMS							
17	130	BORROW	CY.	25	_____ DOLLARS AND _____ CENTS	\$	\$
18	433	CEMENT STABILIZED SAND BEDDING & BACKFILL	CY.	25	_____ DOLLARS AND _____ CENTS	\$	\$
19	436	WELL POINTING	LF	40	_____ DOLLARS AND _____ CENTS	\$	\$
TOTAL SUPPLEMENTAL ITEMS:					_____ DOLLARS AND _____ CENTS	\$	\$

BID PROPOSAL
Blue Heron Drive Improvements

ITEM NO.	SPEC. NO.	DESCRIPTION	UNIT	QUAN.	UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
ALTERNATE BID							
20	500	REMOVE AND RELOCATE OF EXISTING TRAFFIC SIGN, MAIL BOX	LS	1	_____ DOLLARS AND _____ CENTS	\$	\$
21	501	TREE PROTECTION	LS	1	_____ DOLLARS AND _____ CENTS	\$	\$
22	540	REMOVE AND DISPOSE EXISTING ASPHALTIC SURFACE AND BASE MATERIAL (ALL DEPTHS)	SY.	1,200	_____ DOLLARS AND _____ CENTS	\$	\$
23	250	9-INCH COLD-IN-PLACE BLACK BASE COURSE	TON	635	_____ DOLLARS AND _____ CENTS	\$	\$
24	310	TACK COAT (0.05 GAL/SY)	GAL	68	_____ DOLLARS AND _____ CENTS	\$	\$
25	340	3-INCH HMAC SURFACE COURSE	TON	196	_____ DOLLARS AND _____ CENTS	\$	\$
26	494	GEOTEXTILE - FURNISH AND INSTALL	SY	1,320	_____ DOLLARS AND _____ CENTS	\$	\$
27	162	SODDING	SY.	250	_____ DOLLARS AND _____ CENTS	\$	\$
28	713	REINFORCED FILTER FABRIC BARRIER	LF.	580	_____ DOLLARS AND _____ CENTS	\$	\$
29	751	SWPPP INSPECTION AND MAINTENANCE	MO	1	_____ DOLLARS AND _____ CENTS	\$	\$
30	671	TRAFFIC CONTROL	MO	1	_____ DOLLARS AND _____ CENTS	\$	\$
TOTAL ALTERNATE BID:					_____ DOLLARS AND _____ CENTS	\$	\$
BID SUMMARY							
TOTAL - BASE BID:					_____ DOLLARS AND _____ CENTS	\$	\$
TOTAL - SUPPLEMENTAL ITEMS:					_____ DOLLARS AND _____ CENTS	\$	\$
TOTAL - ALTERNATE BID:					_____ DOLLARS AND _____ CENTS	\$	\$
TOTAL - BID (BASE BID + SUPPLEMENTAL ITEMS + ALTERNATE BID):					_____ DOLLARS AND _____ CENTS	\$	\$

This Proposal consists of a Base Bid, Supplemental Items and an alternate Bid. For a bid to be considered responsive all sections must be completed. Any combination of Base Bid and Supplemental Items with or without the Alternate Bid may be awarded for contract, however in no case will the alternate Bid only be awarded. The award of the contract will be based on the combination considered to be in the best interest of Galveston County.

CONTRACT AWARD

CONTRACT FOR: BLUE HERON DRIVE 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: 20-1120

Bid No: _____

Contractor: _____

The Specifications and Drawings are enumerated as follows:

Standard Specifications: **Harris County Standard Specifications For Construction
And Maintenance Of Roads And Bridges
Effective Date: September 1, 2017**

Special Provisions: **None**

Special Items: **City Of Houston Specification 02505**

DRAWINGS: **1 Thru 30**

ADDENDA: _____

Contract Award (continued)

Invitation to Bid, General Provisions, Special Provisions, Bid Forms, Non-Collusion Affidavit, Vendor Qualification Packet, Debarment Form, Special Provisions for Construction, Bid Proposal, Affidavit and Surety Forms, Wage Rates, Specifications and Plans 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 **Ninety** 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 ___/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 - Title

Printed Name

CONSENT OF SURETY COMPANY TO FINAL PAYMENT

TO (Owner):

PROJECT NO:

PROJECT:
(name, address)

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.

CONSENT OF SURETY TO REDUCTION IN OR PARTIAL RELEASE OF RETAINAGE

TO (Owner):

PROJECT NO:

PROJECT:
(name, address)

CONTRACT FOR:

CONTRACT DATE:

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,

on bond of (here insert name and address of Contractor as it appears in the bond)

, CONTRACTOR,

hereby approves the reduction in or partial release of retainage to the contractor as follows:

The Surety agrees that such reduction in or partial release of retainage to the Contractor shall not relieve the Surety of any of its
obligations to (here insert name and address of Owner)

, OWNER,

as set forth in the said Surety's bond.

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

day of

20 .

Surety

Signature of Authorized Representative

Title

ATTEST:
(Seal):

CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

TO (Owner):

PROJECT NO:

CONTRACT FOR:

PROJECT:
(name, address)

CONTRACT DATE:

State of:

County of:

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):

PROJECT NO:

CONTRACT FOR:

PROJECT:
(name, address)

CONTRACT DATE:

State of:

County of:

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:

GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

All Specifications and Special Provisions and applicable to this Project are identified as follows:

Standard Specifications:

"Standard Specifications for Construction and Maintenance of Roads and Bridges" as adopted by the Harris County, effective date September 01, 2017.

"Standard Construction Specifications of City of Houston, Houston Public Works, effective since 2019.

GENERAL: The above listed specification items are those under which payment is to be made. These, together with such other pertinent items, if any as may be referred to in the above listed specification items, and including the special provisions listed above, constitute the complete specification for this project. No separate payment will be made for any item that is not specifically set further in the bid sheets and all costs therefore shall be included in the prices named in the bid sheets for the various appurtenant items of work.

TECHNICAL SPECIFICATIONS TABLE OF CONTENTS

ITEM	HARRIS COUNTY SPECIFICATION
110	ROADWAY EXCAVATION
130	BORROW
162	SODDING FOR EROSION CONTROL AND STABILIZATION
250	HOT MIX ASPHALTIC CONCRETE BASE COURSE (BLACK BASE)
310	PRIME COAT/SEALER
340	HOT MIX-HOT LAID ASPHALTIC CONCRETE
433	CEMENT STABILIZED SAND BEDDING AND BACKFILL MATERIAL
436	WELL POINTING
472	INLETS
494	GEOTEXTILES
500	REMOVE AND RELOCATE OR DISPOSE OF TRAFFIC SIGNS, MAIL BOXES AND ROADWAY SIGNS
501	TREE PROTECTION AND TRIMMING
540	REMOVING AND DISPOSING OF EXISTING ASPHALTIC SURFACE AND BASE MATERIAL
671	TRAFFIC CONTROL
713	REINFORCED FILTER FABRIC BARRIER
719	INLET PROTECTION BARRIERS
741	INLET PROTECTION BARRIER
751	SWPPP INSPECTION AND MAINTENANCE
ITEM	COH SPECIFICATION
02505	HDPE WALL PIPE
SPECIAL PROVISION TO HARRIS COUNTY GENERAL CONDITIONS	
SPECIAL PROVISION TO ITEM 1 - DEFINITIONS OF TERMS	
SPECIAL PROVISION TO CITY OF HOUSTON GENERAL REQUIREMENTS	
SPECIAL PROVISION TO ITEM 01270 - MEASUREMENT AND PAYMENT	

ITEM 110

ROADWAY EXCAVATION

110.1 Description. This Item shall govern the required excavation within the roadway limits, including roadside ditches, and either of the following:

- A. proper re-use of the suitable material for embankment within project limits, or
- B. removal and disposal of excess or unsuitable excavated materials.

This Item includes stripping, constructing, shaping, and grading of all earthwork along the entire length of the roadway including approaches to the same. Both structural and channel excavation are excluded from this Item.

The roadway excavation shall conform to the required lines, grades and typical cross-sections as shown on the construction drawings, and conform to the requirements of this Item.

All suitable excavation material available at the time of need shall be used for embankment before using borrow material. Stripped material is unsuitable for re-use as embankment within the project. Compaction of embankments shall be as outlined in the Item 132 "Embankment".

The roadway limits are defined as being from right-of-way line to right-of-way line, and from beginning station to ending station.

110.2 Construction Methods. All roadway excavation and corresponding embankment construction shall be performed as specified herein and in accordance with the Item 132 "Embankment" and the completed roadway shall conform to the established alignment, grades and cross-sections.

All suitable excavated materials shall be utilized, insofar as practicable, for constructing the required roadway sections or embankments, flattening slopes, etc., or as directed by the Engineer. Materials suitable for onsite use shall be defined by the Engineer. Unsuitable roadway excavation and roadway excavation in excess of that needed for construction shall be considered as waste and shall become the property of the Contractor to be disposed of legally outside the project limits.

No disposal site(s) shall be located within an environmentally sensitive area, "Water of the United States", wetland, 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. If the disposal site(s) 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, as necessary. Unsuitable material encountered below the top of subgrade elevation, shall be replaced with suitable material from the roadway excavation, or from other suitable material sources (see "Special Roadway Excavation below).

During construction, Item 560 "Maintenance and Cleanup of the Project Site" shall be implemented for the duration of the Contract. The roadbed and ditches shall be maintained in a condition to insure proper drainage at all times. Ditches shall be so constructed and maintained as to avoid damage to the roadway section.

All roadway excavation utilized as embankment shall be placed in accordance with Item 132 "Embankment".

In those cases where the Contractor has over-excavated beyond the lines and grades shown on the drawings, or designated by the Engineer, it shall be the Contractor's responsibility to replace the material and recompact it at his own expense. The material shall be replaced in accordance with the Item 132 "Embankment".

At the location of pipeline crossings, the Contractor shall suspend machine excavation at a location 5 feet before reaching the pipeline right-of-way, until a company representative is present to identify pipeline locations and to further direct excavation operations. The notification to the pipeline company of the Contractor's operations and the request for their representative's 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 roadway excavation.

110.3 Special Roadway Excavation. When geotechnical conditions dictate, the Engineer may direct the Contractor to remove material which will not properly support the roadway, and replace it with suitable backfill material. Measurement will be by cubic yard of material as computed by volumetric calculations based on actual measured dimensions of the over-excavated area.

When Special Excavation is required by the Engineer, the cubic yardage calculated will be added to the plan quantity.

Payment shall include hauling, placing, compacting and any other incidentals necessary for completing the work. The backfill used to replace the unsuitable excavation shall be either of the following:

- A. suitable onsite material
- B. imported material, when directed by the Engineer, in accordance with sections 130.2 & 130.3 of Item 130 "Borrow" and shall be paid for as provided under "Borrow" The material shall be placed in accordance with the Item 132 "Embankment".

110.4 Contesting Earthwork Plan Quantities. For all earthwork items (110, 120, 130) that are designated as "plan quantity" pay items, the following procedures shall apply for contesting the plan quantities:

If, after project award, the Contractor believes there is an error in the estimated quantities for earthwork items as shown on the bid sheet, the Contractor shall provide, at no expense to Harris County, sufficient documentation in the form of recoverable cross-sections and supporting computations. If the Contractor is required to re-survey a portion of the project for the purpose of contesting the quantity shown on the plan, the cross-sections must be taken at the same locations and orientation of those presented in the plan set, and using the same control points. The quantities shall be determined using the Harris County Earthwork Quantities Worksheet. The Engineer shall, at the County's expense, designate a representative, either a Consultant's or Harris County's surveyor, to verify the re-survey process meets the above requirements. The Contractor's documentation shall be provided prior to proceeding with any items of earthwork. No adjustments to the plan quantity will be allowed once any excavation, including stripping, has begun.

The Contractor may submit a written notice of protest for earthwork at any time after the award date, but shall submit all required documentation no more than 30 calendar days after the latter of the following:

- A. Project start date, or
- B. Establishment of horizontal and vertical control points

If the documentation provided by the Contractor is deemed by Harris County to be sufficient, and is representative of actual field conditions, then the quantities derived there from shall be the basis of payment.

If the documentation provided by the Contractor is deemed by Harris County to be insufficient, additional supporting information may be required at no expense to Harris County. The Contractor shall submit the

additional documentation no more than 14 calendar days after being notified of the County's request.

Incentivized Project.

The time of early completion for receiving the incentive will not be extended on any incentivized project for any reason, including any time associated with a Contractor's protest of earthwork quantities. If the Contractor chooses to protest earthwork quantities on an incentivized project, and is successful in gaining acceptance of the revised earthwork quantities, he may be granted extra days on the project in the same manner discussed below for "Non-Incentivized Project" as well as revision of the plan quantity, but that result shall not affect the early completion incentive time as per the "Supplement to Harris County General Condition (For Roads, Bridges, and Related Work)".

Non-Incentivized Project.

If the Contractor's protest of earthwork quantities is accepted, the Contract Time may be adjusted for the contract time lost due to any of the following which falls after project start date:

- A. Contractor's time for submitting the original documentation after the project start date up to a maximum of 30 calendar days.
- B. Additional calendar days may be granted for any part of Harris County's original review period that occurs subsequent to the project start date.
- C. Any additional days which were required for providing additional documentation pursuant to Harris County's request, up to a maximum of 14 calendar days.
- D. Any additional days which were required for Harris County to review additional documentation and render a decision.

If the Contractor's protest of earthwork quantities is rejected, neither the Contract Time nor the plan quantity shall be adjusted.

- 110.5 Measurement and Payment. The quantity of excavation to be paid for shall be the number of cubic yards of material computed by theoretical cross-sections, obtained from the drawings and natural ground lines, including stripping, using the average end area method. This result represents a plan quantity amount that is paid for as such by the Roadway Excavation bid item.

With the exception of "Special Roadway Excavation" (as documented in Section 110.3) all work performed as required by this Item and measured as provided above, shall be paid for at the unit price bid for "Roadway Excavation", which price shall be full compensation for preparing and maintaining roadside ditches, trimming of slopes, hauling and storage of excavated material for other uses, disposal of unsuitable or surplus materials (wastage), preparation and completion of subgrade, shoulders, roadway, any necessary hauling, placing, compacting and the furnishing of all labor, tools, equipment and incidentals necessary to complete the work.

Re-grading of existing roadside ditches outside the limits of roadway excavation shall be measured in its original condition along the centerline and the total length be computed, in linear feet and shall be full compensation for furnishing all labor, supervision, supplies, materials, permits, and equipment required to complete the work, including all items of excavation, disposal, haul, compaction, grading, and ditch dressing as specified, in the project documents.

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires other Standard Specifications

Item 130 "Borrow"

Item 132 "Embankment"

Item 200 "Stripping"

Item 205 "Subgrade"

Item 560 "Maintenance and Cleanup of the Project Site"

END OF ITEM 110

ITEM 130

BORROW

- 130.1 Description. This Item shall govern proper utilization of fill materials secured from offsite 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 onsite material available as outlined by Item 132 "Embankment". Borrow shall be used only as authorized by the Engineer, and shall be supplied from approved sources only.

- 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 D4318 "Standard Test Methods for 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 Engineer of the location of the pit or pits from 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 onsite 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.

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 located within 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.

County Borrow Source.

During construction, the borrow source 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.

130.4 Measurement and Payment. Borrow is a plan quantity pay item that represents the excess embankment needed over the total excavated material from all onsite sources. These sources include, but may not be limited to:

- A. roadway excavation (Item 110),
- B. detention pond and/or channel excavation (Item 120),
- C. storm sewer excavation,
- D. and/or structural excavation (Item 400).

Roadway excavation and detention pond and/or channel excavation are calculated by cross sections using the average end area method, whereas storm sewer excavation and structural excavation are volumetrically calculated.

After project award, if the Contractor feels there is an error in the estimated quantities for excavation, as shown on the bid sheet, the plan quantity may be protested as delineated in Item 110.4 "Contesting Earthwork Quantities".

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.

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires other Standard Specifications

Item 110 "Roadway Excavation"

Item 120 "Excavation for Channels and Other Drainage Facilities"

Item 132 "Embankment"
Item 205 "Subgrade"
Item 400 "Structural Excavation and Backfill"

END OF ITEM 130

ITEM 162

SODDING FOR EROSION CONTROL AND STABILIZATION

162.1 Description. This Item shall govern for providing and planting Bermuda grass, St. 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 living, growing Bermuda grass, St. 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 1/2 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 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 166 "Fertilizer" shall be applied to the entire sodded area at the prescribed rates, immediately following laying the sod. Immediately after fertilizing, water the entire area until a saturated depth of 2 inches has been reached. 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.

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, only as approved by the Engineer. 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 percent 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 1 mowing per month between the months of April to October. The Contractor shall also be responsible for 1 mowing every 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 60 day period described above.

Contractor shall make as many repeat plantings as necessary to achieve a minimum of 95 percent 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 Item requires other Standard Specifications.

Item 166 "Fertilizer"

Item 725 "General Source Controls (SWPPP)"

END OF ITEM 162

ITEM 250

HOT MIX ASPHALTIC CONCRETE BASE COURSE (BLACK BASE)

250.1 Description. This Item shall consist of a base course mixture of compacted mineral aggregate and asphaltic material, constructed on an approved subgrade, in accordance with the plans and specifications and in conformity with the lines and grades.

It is the intent of these specifications that the asphaltic mixtures produced and placed shall meet the requirements of these specifications, for one hundred percent payment. The Contractor shall have the responsibility for the design, production, transportation and laydown of asphaltic concrete mixtures. All phases of this work shall meet the requirements of this Item and be subject to inspection and acceptance by the Engineer.

The Contractor shall exercise quality control over materials and their assembly, design, processing production, hauling, laydown, compaction and all associated equipment. Quality control is defined as the constant monitoring of equipment, materials and processes to ensure that asphaltic concrete mixtures produced and laid are uniform, and are within control limits, and meet all acceptance requirements of this Item and other specification requirements. If these specifications are not being met, and satisfactory control adjustments are not being made, operations shall be discontinued until proper adjustments and uniform operations are established. Control shall be accomplished by a program independent of, but correlated with, the Engineer's quality assurance testing program and shall verify that all requirements of the job mix are being achieved and that necessary adjustments provide specification results.

At all times, when the plant is in operation, the Contractor shall require his supplier to have a level II specialist certified by TxDOT's approved hot mix asphalt certification program and will be available to the plant operator who is capable of designing asphaltic concrete mixes, performing tests and analyses to put the plant into operation and producing a mixture meeting the specifications. The daily operations at the plant will not begin without the presence of the qualified technician, as stated above.

The tests made by the Engineer in his quality assurance testing program shall not relieve the Contractor of his responsibility of quality control.

250.2 Materials. Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications.

- A. Mineral Aggregate: The mineral aggregate shall be composed of a coarse aggregate and a fine aggregate and, if required, mineral filler and may include reclaimed asphalt pavement (RAP) that meets the requirements of this Item. The use of RAP may be required on the plans. Samples of coarse aggregate, fine aggregate and mineral filler shall be submitted in minimum 10 pound bags when requested by the Engineer. Unless otherwise required, one or more mineral aggregates containing both coarse and fine aggregate may be used to produce the specified mixture. The documented aggregate test results shall be submitted with the asphalt mix design.
1. Coarse Aggregate: Coarse aggregate stockpiles shall have no more than 20% material passing the No. 8 sieve and shall consist of clean, tough, durable fragments of aggregate and/or mechanically crushed aggregate, reclaimed asphalt pavement (RAP) or a combination thereof, as hereinafter specified, of uniform quality throughout and shall be free from dirt, organic or other injurious matter occurring either freely in the material or as a coating on the aggregate. Samples of each aggregate shall be tested for approval by the Engineer. The coarse aggregate shall have an abrasion of not more than 40% when subjected to the Los Angeles Abrasion Test, test method ASTM C131 "Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine."

**PHYSICAL REQUIREMENTS FOR COARSE
AGGREGATE¹**

TEST	REQUIREMENT
Abrasion Loss	Not more than 40%
Deleterious Material	Less than 1.5%
Decantation	Less than 1.5%

1. Aggregate contained in RAP will not be required to meet these requirements except as shown on the plans.
2. Reclaimed Asphalt Pavement (RAP). RAP is defined as a salvaged, milled, pulverized, broken or crushed asphaltic pavement. The RAP to be used in the mix shall be crushed or broken to the extent that 100 percent will pass the 2 inch sieve.

The stockpiled RAP shall not be contaminated by dirt or other objectionable materials. Do not use RAP if the decantation value exceeds 5% and the plasticity index is greater than 8. Test the stockpiled RAP for decantation in accordance with Tex-406-A, Part I. Determine the plasticity index in accordance with Tex-106-E if the decantation value exceeds 5%. This requirement applies to stockpiled RAP from which the asphalt has not been removed by extraction.

Only RAP from designated sources will be allowed in mixes using more than 25 percent RAP, unless otherwise shown on the plans.

3. Fine Aggregate: Fine aggregates consist of manufactured sands, screenings, and field sands. At most 15 percent of the total aggregate may be field sand or other uncrushed fine aggregate. The fine aggregate shall be that part of the aggregate passing the No. 8 sieve and shall consist of sand and fine aggregate particles from the coarse aggregate material sources or a combination thereof. Sand shall be composed of durable particles free from injurious foreign matter. Screening shall be of the same or similar materials as specified for coarse aggregates. Fine aggregate from each source shall be non-plastic.

PHYSICAL REQUIREMENTS FOR FINE AGGREGATE

TEST	REQUIREMENT
Plasticity Index	Not more than 6%
Sand Equivalent Value	Not less than 45

4. Mineral Filler: Mineral filler, when required, shall consist of thoroughly dried stone dust, slate dust, portland cement, lime, fly ash or other mineral dust approved by the Engineer. The mineral filler shall be free from foreign matter. Fines collected by bag house or other air cleaning or dust collecting equipment may be permitted as mineral filler in amounts up to two percent of the asphaltic mixture, provided that the portion passing the No. 200 master gradation limit is not exceeded. When these fines are permitted in the asphaltic mixture, they shall be introduced in the same manner prescribed for other mineral fillers.

When mineral filler is permitted by the Engineer, it shall be controlled by a measuring device acceptable to the Engineer.

A hopper or other acceptable storage system shall be required to maintain a constant supply of mineral filler to the measuring device.

Mineral filler shall meet the following gradations, when tested in accordance with TxDOT's Test Procedure Tex-200-F.

SIEVE SIZE	% PASSING, BY WIEGHT OR VOLUME
No. 8	100
No. 200, not less than	55

B. Bituminous Material:

Asphalt Binder: Unless otherwise shown on the plans, the asphalt binder shall be PG 64-22, Performance Grade, asphalt binder in accordance with TxDOT's Item 300, Section 300.2.10, "Performance Graded Binders", of the Texas Department of Transportation's, "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges", Latest Edition.

C. Tack Coat. Furnish CSS-1H, SS-1H, or a PG binder with a minimum high-temperature grade of PG 58 for tack coat binder in accordance with TxDOT's Item 300, "Asphalts, Oils, and Emulsions." Specialized or preferred tack coat materials may be allowed or required when shown on the plans. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use.

The Engineer will obtain at least one sample of the tack coat binder per project in accordance with Tex-500-C, Part III, and test it to verify compliance with Item 300, "Asphalts, Oils, and Emulsions." The Engineer will obtain the sample from the asphalt distributor immediately before use.

D. Additives: Additives to facilitate mixing and/or improving the quality of the asphaltic mixture shall be used when noted on the plans or in the specifications. It may be used with written permission of the Engineer. If lime or a liquid antistripping agent is used, then add in accordance with, Item 301 "Asphalt Antistripping Agent", in the

Texas Department of Transportation's "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges", Latest Edition.

250.3 Mixtures.

A. General: The paving mixture shall consist of a uniform mixture of:

1. coarse aggregate,
2. fine aggregate,
3. asphaltic material binder.

If required, the paving mixture may also include any or all of the following:

1. RAP,
2. mineral fillers,
3. additives.

B. The supplier of the black base shall submit a proposed mixture design report, which conforms to all the requirements of this Item, for verification by the Engineer. Include the following items in the mixture design report:

1. The combined aggregate gradation, source, specific gravity, and percent of each material used.
2. Plotted job-mix gradation on a gradation chart with sieve sizes raised from 0.45 power. This plot must show that the proposed gradation of the job-mix formula is within the limits of master gradation.
3. Results of all applicable tests.
4. Signature of the Level II person or persons who performed the design.
5. Date the mixture design was performed, and a unique identification number for the mixture design.

Approval of the proposed design, by the County, will require that the supplier maintain the source and quality of aggregates

proposed throughout production and changes which require modification of the proposed mix design shall require the written approval of the Engineer. The supplier of the black base shall follow the established job mix formula both as to asphalt content and gradation.

The grading of each constituent shall be such as to produce, when properly proportioned, a mixture conforming to the following limitations for grading for the type specified. The exact proportions of each constituent producing the total aggregate within these limits shall meet the following requirements:

TABLE 1

GRADATION OF COMPOSITE AGGREGATE

SIEVE SIZE	% PASSING, BY WEIGHT
1-1/2 Inch	100
1 Inch	90 – 100
3/8 Inch	45 – 70
No. 4	30 – 55
No. 40	15 – 30

TABLE 2

GRADATION OF COMPOSITE AGGREGATE
(Hot In-Place Recycled Asphalt)

SIEVE SIZE	% PASSING, BY WEIGHT
1-1/2 Inch	100 ¹
1 Inch	98 – 100
3/4 Inch	84 – 98
3/8 Inch	60 – 80
No.4	40 – 60
No. 8	29 – 43
No. 30	13 – 28
No. 50	6 – 20
No. 200	2 – 7

1. Defined as maximum sieve size. No tolerance allowed.

Testing for gradation shall be in accordance with TxDOT's Test Procedure Tex-200-F, Latest Edition.

The gradation of the material produced shall not vary from the designated grading limits for any sieve size by more than plus/minus 5 percent by weight, based on total mixture, for sieve sizes greater than or equal to the No. 8 and plus/minus 3 percent for sieve sizes less than the No. 8. The average asphalt content shall not vary from the optimum asphalt content tolerance determined from the approved job mix design, by more than plus/minus 0.3 percent.

Laboratory density and stability of the mixture when designed and tested, during production, in accordance with these Standard Specifications and the test procedures outlined in the Latest Edition of Texas Department of Transportation's "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges" shall meet the following physical properties:

LAB DENSITY, PERCENT			HVEEM STABILITY
Minimum	Maximum	Optimum	Not less than
94%	98%	96.5%	35 %

Stability and density tests are intended for control tests. If the laboratory stability and/or density of the mixture produced has a value lower than that specified and in the opinion of the Engineer is not due to a change in source or quality of materials, production may proceed with consequent changes in the mix until the laboratory stability and density equals or exceeds the specified values. If, in the opinion of the Engineer, there is a change in the source, types, or quality of material from that used in the design mixture, production will be discontinued until a new design mixture is determined by trial mixes and the Contractor shall pay all costs of redesigning the mix. The Contractor may submit a new mixture-design at any time during the project. The compacted thickness of the mixture or mixtures used shall be as specified by the plans or specifications. The specific test method to be used in this specification is listed in Section 250.4. The supplier's daily QA/QC test results shall be forwarded to Harris County's Material Engineer, on a daily basis.

- C. Extraction or Ignition Test: The percentage of asphalt binder in any mixture shall not vary from the proportion established by the job mix formula.

When required by the Engineer, samples of the hot mixture may be taken at the plant or from the trucks or from the finished pavement. The location of sampling of the mixture shall be in accordance with ASTM D979 "Standard Practice for Sampling Bituminous Paving Mixtures." When tested in accordance with ASTM D2172 "Standard Test Methods for Quantitative Extraction of Asphalt Binder from Asphalt Mixtures," or TxDOT's: Tex-236-F and Tex-200-F, the average of the results of the aggregate gradations and asphalt content shall not vary from the values established in the job mix formula. Provide the Engineer with split samples of the mixtures and blank sample used to determine the ignition oven correction factors. TxDOT's Test Procedure, Tex-236-F should be used to determine the aggregate and asphalt correction factors from ignition oven.

The mix shall be designed in accordance with Texas Department of Transportation's Test Procedure Tex-204-F "Design of Bituminous Mixtures" to conform with the requirements of this Item, with the exception that the laboratory density will be determined as a percentage of the mixture theoretical maximum density. The theoretical maximum specific gravity shall be determined in accordance with Texas Department of Transportation's Test Procedure Tex-227-F "Theoretical Maximum Specific Gravity of Bituminous Mixtures" on trial samples at each asphalt content. The optimum asphalt binder content will correspond to 96 percent laboratory density provided the mixture satisfies the minimum Hveem stability of 35 percent.

- D. Stock Pile Gradations: Once a job mix design has been established in accordance with the Latest Edition of Texas Department of Transportation's Test Procedure Tex-204-F "Design of Bituminous Mixtures", the coarse aggregate delivered to the stockpiles shall not vary on any grading size fraction by more than plus or minus 8 percentage points from the percentage found in the samples submitted by the Contractor and upon which the job mix design was based. The intent of this requirement is to insure consistency and uniformity of the asphaltic mixture produced in the drum mix plant. Should the gradation of coarse aggregates in the stockpiles vary by more than the allowed tolerance, the Engineer may stop the production and may require that new aggregate be furnished to the stockpiles that meet the gradations of the aggregates submitted for the design mix formula.

- E. Tolerances: If the paving mixture produced varies from the job-mix formula gradation and/or asphaltic material content by more than the tolerances and restrictions, proper changes shall be made until the mixture meets the requirements, as directed by the Engineer.

250.4 Test Methods.

Testing of Materials: The Engineer will perform random tests to determine if the materials and construction procedures produce a product which meets the contract documents. The specific test methods for material analysis are outlined in the following Tables.

- A. Testing of mineral aggregates shall be in accordance with the following ASTM standard laboratory test procedures:

PROPERTY	TEST METHOD
Sampling Aggregates	ASTM D75 "Standard Practice for Sampling Aggregates"
Sieve Analysis	TxDOT's Test Procedure Tex-200-F "Sieve Analysis of Fine and Coarse Aggregates"
Abrasion Resistance	ASTM C131 "Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine"
Specific Gravity	ASTM C127 "Standard Test Method for Relative Density (Specific Gravity), and Absorption of Coarse Aggregate" ASTM C128 "Standard Test Method for Relative Density (Specific Gravity) and Absorption of Fine Aggregate"

PROPERTY	TEST METHOD
Sand Equivalent	ASTM D2419 "Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate" or TxDOT's Test Procedure Tex-203-F "Sand Equivalent Test"
Atterberg Limit	ASTM D4318 "Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils"
Deleterious Materials	TxDOT's Test Procedure Tex-217-F "Determining Deleterious Material and Decantation Test for Coarse Aggregates" Part I
Decantation	TxDOT's Test Procedure Tex-217-F "Determining Deleterious Material and Decantation Test for Coarse Aggregates" Part II

- B. Performance Graded Binders, PG binders must be smooth and homogeneous material which will not foam when heated to 350°F and meet the requirements of Section 300.2.10 "Performance Graded Binders" of TxDOT Specification Item 300, Latest Edition.

Testing of bituminous mixtures shall be in accordance with the following standard laboratory test procedures:

PROPERTY	TEST METHOD
Sampling Bituminous Mixtures	TxDOT's Test Procedure Tex-222-F "Sampling Bituminous Mixtures" or ASTM D979 "Standard Practice for Sampling Bituminous Paving Mixtures"

PROPERTY	TEST METHOD
Molding of Specimens	TxDOT's Test Procedure Tex-206-F "Compacting Specimens Using the Texas Gyrotory Compactor (TGC)"
Height of Specimens	ASTM D3549 "Standard Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens"
Bulk Density of Specimens	TxDOT's Test Procedure Tex-207-F "Determining Density of Compacted Bituminous Mixtures"
HVEEM Stability	TxDOT's Test Procedure Tex-208-F "Test for Stabilometer Value of Bituminous Mixtures"
Maximum Theoretical Density	TxDOT's Test Procedure Tex-227-F "Theoretical Maximum Specific Gravity of Bituminous Mixtures"
Method of Mix Design	TxDOT's Test Procedure Tex-204-F "Design of Bituminous Mixtures"
Extraction	TxDOT's Test Procedure Tex-210-F, "Determining Asphalt Content of Bituminous Mixtures" or TxDOT's Test Procedure Tex-236-F "Determining Asphalt Content from Asphalt Paving Mixtures by the Ignition Method"

PROPERTY	TEST METHOD
Gradation	TxDOT's Test Procedure Tex-200-F, "Sieve Analysis of Fine and Coarse Aggregates" or TxDOT's Test Procedure Tex-236-F "Determining Asphalt Content from Asphalt Paving Mixtures by the Ignition Method"

250.5 Equipment. Provide equipment to produce, haul, place, and compact asphalt pavement, that complies with requirements of the Latest Edition of Item 320 "Equipment for Asphalt Concrete Pavement" and in the Texas Department of Transportation's "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges" (hereinafter referred to simply as "TxDOT's Specifications").

The Engineer, or his authorized representative, shall have access at any time to all parts of the paving plant.

250.6 Heating and Discharge of Materials.

A. Heating of Materials: Do not heat the asphalt binder above the temperatures specified in Item 300 "Asphalts, Oils, and Emulsions", of TxDOT's Specifications, Latest Edition; or outside the manufacturer's recommended values. On a daily basis, provide the engineer with records of asphalt binder and hot-mix asphalt discharge temperatures in accordance with Item 320, "Equipment for Asphalt Concrete Pavement", of TxDOT's Specifications, Latest Edition.

B. Mixing and Discharge of Materials: Notify the Engineer of the target discharge temperature and produce the mixture within 25°F of the target. Monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 350°F. Harris County will not pay for or allow placement of any mixture produced at more than 350°F.

Control the mixing time and temperature so that substantially all moisture is removed from the mixture before discharging from the plant. If requested, determine the moisture content by oven drying in accordance with TxDOT's Test Procedure, Tex-212-F, Part II, and verify that the mixture contains no more than 0.2 percent of moisture by weight. Obtain the sample immediately after

discharging the mixture into the truck, and perform the test promptly.

250.7 Asphalt Mixing Plants. Mixing plants may be either the weigh batch type, or the drum mix type. Both types of plants shall be equipped with satisfactory conveyors, power units, aggregate handling equipment, bins and dust collectors, etc. and comply with the requirements of the Latest Edition of TxDOT's, Specification Item 320 "Equipment for Asphalt Concrete Pavement".

250.8 Spreading and Finishing Machine. The spreading and finishing machine shall conform to the requirements of the Latest Edition of TxDOT's Specification, Item 320 "Equipment for Asphalt Concrete Pavement", and as specified herein:

The spreading and finishing machine shall be of a type approved by the Engineer and shall be capable of producing a surface that will meet the requirements of the typical cross-section and the surface test, when required by the Engineer, and when the mixture is dumped directly into the finishing machine shall have adequate power to propel the delivery vehicles in a satisfactory manner. The finishing machine shall be equipped with a flexible spring and/or hydraulic type hitch sufficient in design and capacity to maintain contact between the rear wheel of the hauling equipment and the pusher rollers of the finishing machine while the mixture is being unloaded. The paver shall have a receiving hopper of sufficient capacity for a uniform spreading operation.

The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed. The screed or strike-off assembly shall produce a surface of the required evenness and texture without tearing, shoving, gouging or displacing the mixture.

The use of any vehicle which requires dumping directly into the finishing machine and which the finishing machine cannot push or propel in such a manner as to obtain the desired lines and grades without resorting to hand finishing will not be allowed. Unless waived by the Engineer, automatic screed controls will be required for asphaltic concrete spreading and finishing machines.

Asphaltic-concrete spreading and finishing machines shall be equipped with an approved automatic dual longitudinal screed control system and a transverse screed control system. The longitudinal controls shall be capable of operating from any longitudinal grade reference including a stringline, 40 foot ski, mobile stringline or matching shoe. The asphaltic concrete spreading and finishing machine shall be equipped with a screed heater and vibrator.

The Contractor shall furnish all equipment required for grade reference. It shall be maintained in good operating condition by personnel trained in the use of this type of equipment. The equipment shall be capable of constructing a finished surface within specified tolerances.

The automatic grade control device shall produce a finished surface meeting the requirements of the surface test on the items of work for which a spreading and finishing machine is required. Skin-patching will not be permitted unless approved by the Engineer and any section of pavement not meeting the minimum tolerance shall be corrected at the Contractor's expense.

The spreader shall be capable of spreading and finishing courses of bituminous plant mix material in lanes not less than 10 feet in width and shall be capable of operating at forward speeds consistent with the satisfactory laying of the mixture.

The asphaltic mixture, when placed with a spreading and finishing machine, shall not be placed unless the air temperature is at least 40° F. and rising. The air temperature shall be taken in the shade away from artificial heat. Asphalt shall not be placed when the temperature of the surface on which the mat is to be placed is below 60° F.

It is further provided that the asphaltic mixture shall be placed only when the humidity, general weather conditions and temperature and moisture condition of the base, in the opinion of the Engineer, are suitable.

250.9 Transporting Asphaltic Concrete. The asphaltic concrete mixture, heated and prepared as specified, shall be hauled to the work site in tight vehicles previously cleaned of all foreign material.

The dispatching of the vehicles shall be arranged so that all material delivered may be placed and all rolling shall be completed during daylight hours. Cover each truck load of mixture with waterproof tarpaulins. The inside of the trucks body may be given a light coating of, lime slurry or other approved release agent to prevent the mixture from adhering to the body. A hole for inserting a thermometer shall be installed in the truck body. Truck beds shall be clean before they are loaded with asphalt. If, in the opinion of the Engineer, the truck bed is damaged, it shall be removed from the project.

250.10 Lay-Down Operations.

A. Minimum Mixture Placement Temperatures. Use Table below for suggested minimum mixture placement temperatures.

SUGGESTED MINIMUM MIXTURE PLACEMENT
TEMPERATURE

HIGH-TEMPERATURE BINDER GRADE	MINIMUM PLACEMENT TEMPERATURE (Before Entering Paver)
PG 64 or lower	260°F
PG 70	270°F
PG 76	280°F
PG 82 Or higher	290°F

- B. Windrow Operations. When hot mix is placed in windrows, operate windrow pickup equipment so that substantially all the mixture deposited on the roadbed is picked up and loaded into the paver.
- C. Placing. The Contractor shall have the option of placing material in either one or more lifts, in order to maintain uniform compaction. Lifts shall not exceed 4 inches in thickness. Tack Coat shall be required between lifts. Tack Coat shall conform to Item 340 "Hot Mix-Hot Laid Asphaltic Concrete", Section 340.10.

The asphaltic mixture shall be placed and spread on the approved prepared surface with the specified spreading and finishing machine, in such a manner that when properly compacted the finished pavement will be smooth, of the required density and will meet the requirements of the typical cross-sections and the surface tests. During the application of asphaltic material, care shall be taken to prevent splattering of adjacent pavement, curb and gutter and structures.

When the asphaltic mixture is placed in a narrow strip along the edge of an existing pavement, or used to level up small areas of an existing pavement, or placed in small irregular areas where the use of a finishing machine is not practical, the finishing machine may be eliminated, provided a satisfactory surface can be obtained by other approved methods.

Adjacent to flush curbs, gutters, liners and structures, the surfaces shall be finished uniformly high so that when compacted it will be slightly above the edge of the gutter and flush to the structure.

- 250.11 Compaction. The pavement shall be compacted thoroughly and uniformly with the necessary rollers to obtain the density, stability and cross-section

of the finished paving mixture meeting the requirements of the plans and specifications.

Rolling equipment shall consist of pneumatic tire and steel wheel rollers. Breakdown rolling shall be accomplished immediately after placing, using steel wheel rollers. Vibratory rollers will not be permitted unless prior approval is obtained from the Engineer and unless the equipment is operated by personnel who are properly certified to operate this equipment.

All equipment shall be in good mechanical condition, properly adjusted and free from wear that would impair the quality of the work. Necessary precautions shall be taken to prevent the dropping of gasoline, oil, grease or other foreign matter on the pavement, by the compaction, or any equipment.

Pneumatic tired rollers shall have tires of equal size and diameter capable of exerting an average contact pressure varying from 40 to 90 psi, by adjusting ballast and/or tire pressure. All tires shall have equal pressure. The wheels will be placed so that one pass will accomplish one complete coverage equal to the width of the roller with a minimum of 1/4 inch overlap. The wheels shall not wobble. The operating weight and tire pressure shall be as such as to provide the required density. The rollers shall be in the best mechanical condition. Pneumatic tire rollers shall be equipped with water systems and fiber mats.

Steel wheel rollers shall be a three wheel two-axle tandem (bull wheel) or three-axle tandem roller weighing not less than 8 tons and developing compression in the rear wheels of not less than 250 pounds per inch of roller width. The rollers shall have power units and be equipped with scrapers to keep the wheels clean and with the means of keeping the wheels wet, to prevent mixes from sticking to the rollers.

Vibratory rollers shall have a minimum of one vibratory drum weighing no less than 8 tons. The vibratory roller shall be capable of obtaining frequency and amplitude combinations that will produce an impact spacing smaller than the thickness of the mat, or a minimum of 8 to 10 blows per foot.

All rolling with any type of roller shall be done as directed by the Engineer. Breakdown (initial pass) rolling shall be conducted with a steel wheel roller or vibratory roller, intermediate rolling shall be conducted with a steel-wheel roller or pneumatic-tired roller and finished rolling shall be conducted with a steel wheel roller or pneumatic-tired roller unless directed otherwise by the Engineer. When rolling with vibratory steel

wheel rollers, the manufacturer's recommendation shall be followed, unless otherwise directed by the Engineer.

The specific rollers used in sequence to obtain the required compaction shall be approved by the Engineer. The ambient temperature, humidity, wind velocity, temperature of existing surface, mat thickness, and temperature of paving mixture shall be considered by the Engineer in determining the type and amount of rollers needed to achieve the required compaction. Approval of the Engineer will not relieve the Contractor of his responsibility to produce the required density.

Rolling pattern shall be established daily and verified as outlined in Test Procedure Tex-207-F, Part IV and III respectively, to achieve the required air void content. The daily established rolling pattern used is subject to approval by the Engineer. The daily established rolling pattern shall be followed unless changes in the mixture or placement conditions occur which affect compaction. A new rolling pattern will be established at this time. If required, test strips approximately 300-500 feet in length shall be established to determine proper rolling patterns. A maximum of two strips will be allowed. If the required rolling patterns cannot be determined that will give the required density with two strips, the first two strips will be removed, before the third strip is constructed.

The mixture shall be placed at a temperature of between 260°F and 325°F. Rolling shall begin as soon as the paving mixture will not be displaced laterally by the weight of the roller. When rolling with the steel-wheel, pneumatic-tired roller or vibratory roller, longitudinal joints shall be rolled initially, however rolling shall begin at the low side of the pavement and proceed toward the higher side of the pavement, overlapping on successive trips by at least half the width of the rear wheel unless otherwise directed by the Engineer. Alternate trips of the roller shall be a minimum of six inches difference in length. The motion of the roller shall be slow enough at all times to avoid displacement of the mixture. To prevent adhesion of the surface mixture to the roller, the rollers shall be kept thoroughly moistened with water, but an excess of water will not be permitted. The roller shall not be allowed to stand on pavement which has not been fully compacted. If any displacement occurs, it shall be repaired at once by the use of rakes, and fresh mixture where required, any repair is subject to the Engineer's approval.

The maximum roller speed for any compaction equipment shall comply with the following table unless directed otherwise by the Engineer. The speed of the roller shall, at all times, be slow enough to avoid displacement of the hot mixture and shall not be greater than the speed indicated below.

MAXIMUM ROLLING SPEEDS
TYPE OF ROLLING

COMPACTOR	BREAKDOWN (miles/hr)	INTERMEDIATE (miles/hr)	FINISH (miles/hr)
Steel Wheel Roller	2	3	3
Pneumatic-tire Roller	-	3	5
Vibratory Roller	3	3	3

Rolling shall be continued until required compaction can be obtained and all roller marks are eliminated. Complete all compaction operations before the pavement temperature drops below 160°F unless otherwise allowed. The Engineer may allow compaction with a light finish roller operated in static mode for pavement temperatures below 160°F.

Rolling with a trench type roller will be required on widening areas in trenches and other limited areas where satisfactory compaction cannot be obtained with the rollers specified or approved.

The roller must not stand on the compacted pavement which has not cooled to normal atmospheric temperature. To prevent adhesion of the paving mixtures to the rollers, the wheels shall be kept properly moistened with water; however, excess water will not be permitted.

If, in the opinion of the Engineer, the asphaltic concrete surface course is not being properly compacted, specimens shall be taken to determine the density of the asphaltic concrete at various locations.

Density of the completed asphaltic concrete shall be uniform over the entire roadway area. The Engineer may have the material (part or all) removed and replaced on areas where density is found not to be that specified, when tested. The entire cost of removing and replacing material from areas because of unacceptable density variations shall be borne by the Contractor and at no cost to the County.

Hand Tamping: The edges of the pavement along curbs, headers and similar structures, and all places not accessible to the roller, or in such positions as will not allow thorough compaction with the rollers, shall be thoroughly compacted with lightly oiled tamps.

250.12

Compaction Criteria. In place compaction methods used to obtain the required density necessary to gain the Engineer's approval shall be divided into Type A or Type B construction.

Type A construction shall represent asphalt being laid over New Construction, that is, all phases of construction beginning at the sub-base level and ending with the asphalt surface mix shall be New Construction.

Type B construction shall represent asphalt being laid over in-situ material or base repair, that is, all asphalt overlay, level-up, base repair, cold in-placed recycled asphalt or hot in-placed recycled asphalt. For all base repair used to construct an asphalt overlay and level-up the gradation of composite aggregate shall be as shown in Table 1. However, all base repairs used to construct hot in-placed recycled asphalt, the gradation of the composite aggregate shall be as shown in Table 2.

Type A:

In place compaction control is required of all paving mixtures. Asphaltic concrete shall be placed and compacted to obtain from 3 to 8 percent air voids. Do not increase the asphalt content of the mixture to reduce pavement air voids. In no case shall the compacted roadway specimen have air voids in excess of 8 percent. The Contractor shall establish a rolling pattern as outlined in Test Procedure Tex-207-F, Part IV, to achieve the required air void content. The Contractor shall confirm compaction as outlined in Test Procedure Tex-207-F, Part III, through nuclear density testing supplied by the laboratory retained by Harris County. The target density can be established daily and verified with a nuclear density gauge as outlined in Tex-207-F, Part IV and III, respectively. It is recommended that the Thin Lift Asphalt Gauge be used, however other nuclear equipment may be used with prior approval of the Engineer as long as proper correlation is performed and correlation proof is maintained and kept with the gauge at all times. The Contractor shall understand that all nuclear density testing is performed only as an aid to construction, and the Engineer's approval will not relieve the Contractor of his responsibility to produce the required density. Acceptance of the asphalt by Harris County shall be by the acceptable core density and other methods of determining in-place density, which correlate satisfactory with results obtained from roadway specimens, may also be used when approved by the Engineer. Correlation of average nuclear gauge readings to core density results shall be performed after each day's production, as outlined herein after. The Laboratory Technician shall continue to check and verify the rolling pattern by use of nuclear equipment every 100 feet, at a minimum and mark core locations every 500 feet, at center of alternate lane. For Parking Lots, every 1,100 square yards, take 4 nuclear gauge readings at each marked core location. Cores shall be taken the same day, or no later than the beginning of the next day. Core locations must be back filled and compacted with similar pavement material. The in-place density and air void shall be measured in accordance with Test

Procedures Tex-207-F and Tex-227-F. Correlation of average nuclear gauge density reading to core density results shall be established for the cores taken daily and forwarded to Harris County on a daily basis. This process will continue for each day's placement, until the Engineer determines that a good bias has been established for that nuclear gauge. Then the same nuclear gauge should be utilized to establish and verify the in-place densities afterward. The specific rolling pattern used is subject to approval by the Engineer. The daily established rolling pattern shall be followed unless changes in the mixture or placement conditions occur which affect compaction. A new rolling pattern will be established at this time. If required, test strips approximately 300-500 feet in length shall be established to determine proper rolling patterns. A maximum of two strips will be allowed. If the required rolling patterns cannot be determined that will give the required density, with two strips, then the first two strips will be removed, before the third strip is constructed.

Type B:

The Contractor shall establish a rolling pattern as outlined in Test Procedure Tex-207-F, Part IV, to achieve an acceptable density. The Contractor shall confirm compaction as outlined in Test Procedure Tex-207-F, Part III, through nuclear density testing supplied by the Laboratory retained by Harris County. The target density shall be established and controlled with a nuclear gauge as outlined in Tex-207-F, Part IV and III respectively. It is recommended that the Thin Lift Asphalt Gauge be used, however other nuclear equipment may be used with prior approval of the Engineer. The Laboratory Technician shall continue to check and verify the rolling pattern by use of nuclear equipment, at a minimum of every 100 feet per lane. Acceptance of the asphalt by Harris County shall be upon receiving final reports from the Material Engineer verifying Mix Design and Conformance to the Rolling Pattern. Cores shall not be taken for densities unless otherwise directed by the Engineer. Cores will be used to verify depth as required. The daily established rolling pattern used is subject to approval by the Engineer. The daily established rolling pattern shall be followed unless changes in the mixture or placement conditions occur which affect compaction. A new rolling pattern will be established at this time.

250.13

Construction Joints. Placing of the surface course shall be as nearly continuous as possible, and the roller shall pass over the unprotected end of the freshly laid mixture only when the laying of the course is discontinued for such length of time as to permit the mixture to become chilled. In all such cases, when the work is resumed, the material laid shall be cut back so as to produce a slightly beveled edge for the full thickness of the course.

The old material which has been cut away shall be removed from the work site, and the new mix laid against the fresh cut.

When the work is resumed, the materials laid shall be cut back to a point where material is full depth, which will be removed altogether with the surplus material, and the fresh mix laid against the joint thus formed.

Hot smoothing irons may be used for sealing joints, but in such cases extreme care shall be exercised to avoid burning the surface. Any unevenness indicated by a 10 foot straight edge laid perpendicular to the joint, immediately after final rolling, shall be corrected at that time.

- 250.14 Irregularities. Immediately take corrective action if surface irregularities, including but not limited to segregation, rutting, raveling, flushing, fat spots, mat slippage, color, texture, roller marks, tears, gouges, streaks, or uncoated aggregate particles, are detected. The Engineer may suspend production or placement operations until the problem is corrected. At the expense of the Contractor and to the satisfaction of Engineer, remove and replace any mixture that does not bond to the existing pavement or that has other surface irregularities identified above.
- 250.15 Surface Requirements. The final surface of the pavement after compaction shall be smooth and true to the established line and grade and typical cross-sections shown on the plans and, when tested with a standard 10 foot or 16 foot straightedge laid parallel to the centerline of the roadway, shall have no deviation in excess of 1/8 inch per foot for a 16 foot straightedge or 1/16 inch per foot for a 10 foot straightedge from the nearest point of contact and the maximum ordinate measured from the face of the straightedge shall not exceed 1/4 inch at any point. Any areas of the surface not meeting these requirements shall be immediately corrected as directed. Tests shall be made at transverse construction joints out at randomly selected locations.
- 250.16 Opening to Traffic. Allow the compacted pavement to cool before opening to traffic unless directed by the Engineer. If the surface ravel or deteriorates in any manner, it will be the Contractor's responsibility to correct this condition at his expense.
- 250.17 Measuring Devices. All templates, straight edges, and measuring devices necessary for the proper construction and checking of the work shall be furnished, operated and maintained by the Contractor at his entire expense.
- 250.18 Quality Assurance. The County will engage a Testing Firm to provide quality assurance services for Hot Mix Asphaltic Concrete (Black Base).

The Testing Firm will sample and test stockpiles for gradation, in accordance with TxDOT’s Test Procedure Tex-200-F and deleterious materials and decantation in accordance with TxDOT’s Test Procedure Tex-217-F (Parts I and II) for each 3,000 tons production. The abrasion loss of the material shall be determined in accordance with ASTM C131, for each 4,000 tons of production.

Asphalt binder will not be sampled and tested, provided that the supplier will provide copies of test results for PG-grade binder used for the project. Undocumented asphalt binder will require sampling and testing in accordance with ASTM D3381 “Standard Specification for Viscosity-Graded Asphalt Cement for Use in Pavement Construction” and AASHTO Method T-102 or Tex-540-C and shall meet the requirements of, “Performance Graded Binder”, Item 300 of TxDOT’s Specifications, Latest Edition. The Contractor will be responsible for the cost of these tests. The Engineer may verify the quality of the asphalt binder at any time, by sampling and testing, in accordance with the aforementioned methods.

The mixture shall be sampled, for each 400 (cumulative) tons of production and the following tests will be made for each sample of the mixture.

TEST	DESIGNATION
Laboratory Density	Tex-207-F
Maximum Theoretical Density	Tex-227-F
Hveem Stability	Tex-227-F
Extraction and Gradation	Tex-210-F or Tex-236-F

Based on daily and total production, Harris County may waive the sampling and laboratory testing.

Type A:

Following compaction of the mixture in the pavement, the Laboratory representative shall sample the pavement by cutting cores and determining the in-place density in accordance with TxDOT’s Procedure Tex-207-F, and air voids as outlined in Section 250.12 of this Item. Additional samples and/or tests will be taken to provide quality assurance only when approved by the Engineer.

Type B:

Construction shall be acceptable by Harris County upon receiving final reports from the Materials Engineer verifying Mix Design and conformance to the rolling pattern.

- 250.19 Truck Scales. A set of standard platform truck scales will be placed at the plant and shall be provided with a suitable weigh office adjacent to the scales for the use of the trucks weigher. Scales which are not accurate to within 4 pounds per 1,000 pounds total load shall not be used. Scales shall meet the requirements of the Item 520 "Weighing and Measuring Equipment".
- 250.20 Measurement. Hot mix asphaltic concrete base course, as specified by this Item, shall be measured by the ton of 2,000 pounds. Measurement by weight shall be made on truck scales as previously specified. Records shall be kept on the tare weight, total weight and net weight of asphaltic concrete for each load of same. A day ticket shall accompany each load to the job site, indicating the net weight, gross weight, tare weight, and road name. The asphaltic material for tack coat will be measured at the point of delivery on the road in gallons at the applied temperature. The quantity to be paid for shall be the number of gallons used, as directed, for the tack coat.
- 250.21 Payment shall be made as follows:
- A. Where the bid sheet specifies FOB the job site, the asphaltic concrete shall be transported to the job site in Harris County specified on the bid sheet, and unloaded at the location indicated.
 - B. Where the bid sheet specifies FOB the plant, the material shall be loaded on Harris County vehicles.
 - C. The "Hot Mix Asphaltic Concrete Base Course" furnished and placed as prescribed by this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Hot Mix Asphaltic Concrete Base Course", which price shall be full compensation for furnishing all materials, for all freight involved, for all heating, mixing, hauling, cleaning the subgrade, placing asphaltic concrete mixture, rolling and finishing; for all manipulations, labor, tools, equipment and incidentals necessary to complete the work.
 - D. The work performed and materials furnished for "Tack Coat" and measured as provided for under measurement will be paid for at the contract unit price bid for "Tack Coat" as provided in Item 340 "Hot Mix-Hot Laid Asphaltic Concrete", of the type specified, which price shall be full compensation for cleaning the area or subgrade; for furnishing, heating, hauling and distributing the asphaltic material as specified; for all freight involved; for all manipulation,

labor, tools, equipment and incidentals necessary to complete the work.

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires other Standard Specifications

Item 340 "Hot Mix-Hot Laid Asphaltic Concrete"

Item 520 "Weighing and Measuring Equipment"

END OF ITEM 250

ITEM 310

PRIME COAT/SEALER

310.1 Description. This Item shall govern the application of asphaltic material on the completed subgrade, base course or other designated area in accordance with these Standard Specifications.

310.2 Materials. Use material of the type and grade shown on the plans in accordance with Item 300 "Asphalts, Oils, and Emulsions" of the Texas Department of Transportation's "Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges", Latest Edition. The asphaltic material shall be tested in accordance with ASTM D2027 "Standard Specification for Cutback Asphalt (Medium-Curing Type)."

If the asphaltic material selected for prime coat is MC-30, it shall be applied at the rate of 0.25 - 0.35 gallons per square yard.

310.3 Construction Methods. Apply the prime coat when the air temperature is at least 60°F or above 50°F and rising. Measure the air temperature in the shade away from artificial heat. The Engineer will determine when weather conditions are suitable for application.

When, in the opinion of the Engineer, the subgrade or base is satisfactory to receive the prime coat, the surface shall be cleaned by sweeping or other approved methods. The surface shall be lightly sprinkled just prior to application of the asphaltic material, if the Engineer deems it necessary. The asphaltic material shall be applied on the clean surface by an approved type of self-propelled distributor that distributes the material in the quantity specified, evenly and smoothly under pressure necessary for proper distribution. The Contractor shall provide all necessary facilities for:

- A. determining the temperature of the asphaltic material in all of the heating equipment and in the distributor,
- B. determining the application rate and for securing uniformity at the junction of two distributor loads.

The distributor shall have been recently calibrated and the Engineer shall be furnished an accurate and satisfactory record of such calibration. If, after beginning the work, the yield on the asphaltic material appears to be in error, the distributor shall be recalibrated in a manner satisfactory to the Engineer before proceeding with the work.

All storage tanks, piping, retorts, booster tanks and distributors used in storing or handling asphalt shall be kept clean and in good operating conditions at all times and shall be operated in such manner that there will be no contamination of the asphaltic material with foreign material. It shall be the responsibility for the Contractor to provide and maintain in good working order, a recording thermometer at the storage heating unit at all times. Prime coat shall be applied within the recommended temperature range as designated in Table 19 of TxDOT's Item 300, and at a rate designated in the bid item description.

310.4 Measurement. The asphaltic material for prime coat will be measured at the point of delivery on the road, in gallons, at the applied temperature. The method of measurement shall be strapping before and after application. "Strapping" a distributor is a method of measuring the amount of asphalt that is in a distributor with a strapping stick that is supplied by the manufacturer and calibrated to a specific unit.

310.5 Payment. The work performed and materials furnished as prescribed by this Item and measured as provided under "Measurement" will be paid for at the unit price bid for prime coat, which price shall be full compensation for cleaning the surface to be coated, and for furnishing, heating, hauling and distributing the asphalt as specified; for all freight involved; and for all manipulation, labor, tools, equipment and incidentals necessary to complete the work.

There are line code(s), description(s), and unit(s) for this Item.

END OF ITEM 310

ITEM 340

HOT MIX-HOT LAID ASPHALTIC CONCRETE

340.1 Description. This Item shall govern for a leveling up course, a surface course, or any combination of these courses, each to be composed of a compacted mixture of mineral aggregate and asphaltic material. The pavement shall be constructed on the previously approved subgrade, base, existing wearing surface or in the case of a bridge, on the prepared slab or as otherwise specified herein and in accordance with the details shown on the drawings.

It is the intent of these Standard Specifications that the asphaltic mixtures produced and placed shall meet the requirements of these specifications for one hundred percent payment. The Contractor shall have the responsibility for the design, production, transportation and laydown of asphaltic concrete mixtures. All phases of this work shall meet the requirements of this Item and be subject to inspection and acceptance by the Engineer.

The Contractor shall exercise quality control over materials and their assembly, design, processing, production, hauling, laydown and all associated equipment. Quality control is defined as the consistent monitoring of equipment, materials and processes to ensure that asphaltic concrete mixtures produced and laid are uniform, are within control limits and meet all acceptance requirements of this Item and other specification requirements. If these Standard Specifications are not being met, and satisfactory control adjustments are not being made, operations shall be discontinued until proper adjustments and uniform operations are established. Control shall be accomplished by a program independent of, but correlated with the Engineer's quality assurance testing program and shall verify that all requirements of the job mix are being achieved and that necessary adjustments provide specification results.

At all times, when the plant is in operation, the Contractor shall require his supplier to have a level II specialist certified by TxDOT, in their approved hot mix asphalt certification program or his designated representative, available to the plant operator who is capable of designing asphaltic concrete mixes, performing tests and analysis to put the plant into operation and producing a mixture meeting the specifications. The daily operations at the plant shall not begin without the certified technician present.

The tests made by the Engineer in his quality assurance testing program shall not relieve the Contractor of his responsibility of quality control and he should conduct such tests as are necessary to design, control and place mixtures within the limits of this Item.

340.2 Materials. Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications. Notify the Engineer before changing any material source or formulation. When the Contractor makes a source or formulation change, a Mix-Design using the new material satisfying the requirements of this Item must be submitted for review and approval prior to production. The Engineer may sample and test project materials at any time during the project to verify compliance.

A. Mineral Aggregate: The mineral aggregate shall be composed of a coarse aggregate and a fine aggregate and, if required, mineral filler and may include reclaimed asphalt pavement (RAP) that meets the requirements of this Item. The use of RAP may be required on the plans. RAP use will be allowed in all mixtures except as specifically excluded herein or on the plans. Samples of coarse aggregate, fine aggregate, and mineral filler, shall be submitted in minimum 10 pound bags, when requested by the Engineer. Unless otherwise required, one or more mineral aggregates containing both coarse and fine aggregate may be used to produce the specified mixture. The documented aggregate quality test results stated herein after shall be submitted with the Mix-Design.

1. Coarse Aggregate: Coarse aggregate stockpiles must have no more than 20% material passing the No. 8 sieve and shall consist of clean, tough, durable fragments of aggregate and/or mechanically crushed aggregate, reclaimed asphalt pavement (RAP) or, a combination thereof, as hereinafter specified, of uniform quality throughout and shall be free from dirt, organic or other injurious matter occurring either freely in the material or as a coating on the aggregate. Coarse aggregate from each source of supply shall meet the physical requirements outlined herein. The coarse aggregate shall meet the grading requirements herein. The aggregate contained in RAP shall not be required to meet these requirements except as shown on the plans. The polish value of RAP aggregate shall not be used in any determination of polish value specification compliance.

PHYSICAL REQUIREMENTS FOR COARSE
AGGREGATE¹

TEST	REQUIREMENT
Abrasion Loss	Not more than 40%
Deleterious Material	Less than 1.5%
Decantation	Less than 1.5%

1. Aggregate contained in RAP will not be required to meet these requirements except as shown on the plans.

When tested by Test Procedure Tex-200-F it shall meet the following requirements:

GRADATION REQUIREMENTS FOR COARSE
AGGREGATE

SIEVE SIZE	% PASSING, BY WEIGHT
1/2 Inch	100
No. 8	Not more than 20

2. Reclaimed Asphalt Pavement (RAP). RAP is defined as a salvaged, milled, pulverized, broken or crushed asphaltic pavement. The RAP to be used in the mix shall be crushed or broken to the extent that 100 percent will pass the 2 inch sieve.

The stockpiled RAP shall not be contaminated by dirt or other objectionable materials. Unless otherwise shown on the plans, stockpiled, crushed RAP must have either a decantation of no more than 5 percent or a plasticity index of no more than 8, when tested in accordance with Test Procedure Tex-406-A, Part I, or Test Procedure Tex-106-E, respectively. This requirement applies to stockpiled RAP from which the asphalt has not been removed by extraction.

RAP sources that are designated on the plans will be available for use by the Contractor. Only RAP from designated sources will be allowed in mixes using more than 10 percent RAP, unless otherwise shown on the plans. When RAP sources are designated, either in stockpile or existing pavements, the approximate gradation, asphalt content, and asphalt cement properties of this material shall be shown on the plans.

Only RAP from Harris County or other designated sources may be used in surface courses.

RAP designated for use in surface courses shall not exceed 15 per cent by weight.

3. Fine Aggregate: Fine aggregates consist of manufactured sands, screenings, and field sands. Fine aggregate stockpiles must meet the gradation requirements herein after specified. Supply fine aggregates that are free from organic impurities. The fine aggregate should be tested in accordance with Tex-408-A to verify the material is free from organic impurities. At most 15% of the total aggregate may be field sand or other uncrushed fine aggregate. With the exception of field sand, use fine aggregate from coarse aggregate sources that meet the requirements herein after specified or otherwise approved.

Fine aggregate from each source shall satisfy the requirements outlined herein. The fine aggregate shall meet the grading herein.

PHYSICAL REQUIREMENTS OF FINE AGGREGATE

TEST	REQUIREMENT
Plasticity Index	Not more than 6%
Sand Equivalent Value	Not less than 45%

When tested by Test Procedure Tex-200-F it shall meet the following requirements:

GRADATION REQUIREMENTS FOR FINE AGGREGATE

SIEVE SIZE	% PASSING, BY WEIGHT
3/8 Inch	100
<u>No. 8</u>	<u>70 – 100</u>
No. 200	<u>0 – 30</u>

4. Mineral Filler: Mineral filler, when required, shall consist of thoroughly dried stone dust, slate dust, portland cement, lime, fly ash or other mineral dust approved by the Engineer. The mineral filler shall be free from foreign matter. Fines collected by bag house or other air cleaning

or dust collecting equipment may be permitted as mineral filler in amounts up to two percent of the asphaltic mixture, provided that the portion passing the No. 200 master gradation limit is not exceeded. When these fines are permitted in the asphaltic mixture, they shall be introduced in the same manner prescribed for other mineral fillers.

When mineral filler is permitted by the Engineer, it shall be controlled by a measuring device acceptable to the Engineer.

A hopper or other acceptable storage system shall be required to maintain a constant supply of mineral filler to the measuring device. Mineral filler shall meet the following gradations when tested in accordance with TxDOT's Test Procedure Tex-200-F.

GRADATION REQUIREMENTS FOR MINERAL FILL

SIEVE SIZE	% PASSING, BY WEIGHT OR VOLUME
No. 8	100
No. 200	<u>55 – 100</u>

B. Bituminous Material:

1. Asphalt Binder: Unless otherwise shown on the plans, the asphalt binder shall be PG 64-22, Performance Grade. The performance graded (PG) asphalt binder specified herein or on the plans shall conform to the requirements of TxDOT's Item 300 "Asphalts, Oils and Emulsions", as published by the Texas Department of Transportation's "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges", Latest Edition (hereinafter referred to simply as "TxDOT's Specifications") Section 300.2.J, "Performance Graded Binder".,

The material shall be homogeneous, shall be free from water, shall not foam when heated to 350°F., and shall meet the following requirements:

2. Additives: Additives to facilitate mixing and/or improve the quality of the asphaltic mixture shall be used when noted on the plans or specifications or may be used upon written permission by the Engineer. If lime or a liquid antistripping

agent is used, add in accordance with the Latest Edition of TxDOT's Specification Item 301 "Asphalt Antistripping Agents".

340.3 Mixtures.

- A. General: The paving mixture shall consist of a uniform mixture of coarse aggregate, fine aggregate, mineral filler, if required, and asphalt binder. The supplier of the asphaltic material shall submit a proposed mixture design report, which conforms to all the requirements of this Item, for verification by the Engineer. Include the following items in the mixture design report:
1. The combined aggregate gradation, source, specific gravity, and percent of each material used.
 2. Plotted Job-mix gradation, on a gradation chart with sieve sizes raised to 0.45 power. This plot must show that the gradation of the proposed job-mix formula is within the limits of master gradation.
 3. Results of all applicable tests.
 4. Signature of the Level II Specialist who performed the design.
 5. Date the mixture design was performed, with a unique identification number for the mixture design.

Approval of the proposed design, by the County, will require that the supplier maintain the source and quality of aggregates proposed throughout production and changes which require modification of the proposed mix design will be subject to the approval of the Engineer. The supplier of the asphaltic concrete shall follow the established job mix formula both as to asphalt content and gradation.

Extraction and Ignition Test: The percentage of asphalt binder in any mixture shall not vary from the proportion established by the job mixture design.

When required by the Engineer, samples of the hot mixture may be taken at the plant, or from the trucks, or from the finished pavement. The location of the sampling of the mixture shall be in accordance with ASTM D979 "Standard Practice for Sampling Bituminous Paving Mixtures." When tested in accordance with

ASTM D2172 "Standard Test Methods for Quantitative Extraction of Asphalt Binder from Asphalt Mixtures" or TxDOT's Test Procedure Tex-236-F and Tex-200-F, the average of the results of the aggregate gradations and asphalt content shall not vary from the values established in the job mix formula, by allowable tolerance established herein.

Provide the Engineer with split samples of the mixtures and blank samples used to determine the Ignition Oven correction factors. TxDOT's Test Procedure Tex-236-F should be used to determine the aggregate and asphalt correction factors

The mix shall be designed in accordance with the Latest Edition of Texas Department of Transportation Test Procedure Tex-204-F "Design of Bituminous Mixtures" to conform with the requirement herein, with the exception that the laboratory density will be determined as a percentage of the mixture Theoretical Maximum Density. The Theoretical Maximum Specific Gravity shall be determined in accordance with Texas Department of Transportation Test Procedure Tex-227-F "Theoretical Maximum Specific Gravity of Bituminous Mixtures" on trial samples at each asphalt content. The optimum asphalt binder content will correspond to 96.5 percent laboratory density provided the mixture satisfies the minimum Hveem Stability of 40 percent.

The average asphalt content shall not vary by more than plus or minus 0.3 percent by weight (based on total mixture), from the optimum asphalt binder content determined by the approved job mix formula. However, in no case shall the asphalt binder be less than 4.7 percent of the mixture by weight.

- B. Stockpile Gradations: Once a job mix design has been established in accordance with the Latest Edition of Texas Department of Transportation's Test Procedure Tex-204-F "Design of Bituminous Mixtures", the coarse aggregate delivered to the stockpiles shall not vary on any grading size fraction by more than plus or minus 8 percentage points from the percentage found in the samples submitted by the Contractor and upon which the job mix design was based. The intent of this requirement is to insure consistency and uniformity of the asphaltic mixture produced in the drum mix plant. Should the gradation of coarse aggregates in the stockpiles vary by more than the allowed tolerance, the Engineer may stop the production and may require that new aggregate be furnished to the stockpiles that meet the gradations of the aggregates submitted for the design mix formula.

- C. The grading of each constituent shall be such as to produce, when properly proportioned, a mixture conforming to the master limitations listed herein. The exact proportions of each constituent shall produce the total aggregate blend within these limits.

FINE GRADED (TYPE D) SURFACE COURSE PAVING
MIXTURE MASTER GRADING LIMITS

SIEVE SIZE	% PASSING, BY WEIGHT OR VOLUME
3/4 Inch	100
1/2 Inch	98 – 100
3/8 Inch	85 – 100
No. 4	50 – 70
No. 8	35 – 46
No. 30	15 – 29
No. 50	7 – 20
No. 200	2 – 7

- D. Tolerances: The aggregate portion of the paving mixture produced shall not vary from the design gradation by more than the tolerances allowed herein. The material is further restricted to conform to the limitations of the master grading for the type specified. The asphaltic material portion of the paving mixture shall not vary from the design amount by more than the allowed tolerance and is also restricted to conform to the master limits. The test method for determining the aggregate gradation and asphalt content of the mixture is listed in Section 340.4.

TABLE 1

OPERATIONAL TOLERANCES

<u>DESCRIPTION</u>	<u>TEST METHOD</u>	<u>ALLOWABLE DIFFERENCE BETWEEN TRIAL BATCH AND JMF1 TARGET</u>	<u>ALLOWABLE DIFFERENCE FROM CURRENT JMF TARGET</u>
<u>Individual % retained for #8 sieve and larger</u>	<u>Tex-200-F or Tex-236-F</u>	<u>Must be within master grading limits in Table 8</u>	<u>±5.0^{1,2}</u>

<u>DESCRIPTION</u>	<u>TEST METHOD</u>	<u>ALLOWABLE DIFFERENCE BETWEEN TRIAL BATCH AND JMF1 TARGET</u>	<u>ALLOWABLE DIFFERENCE FROM CURRENT JMF TARGET</u>
<u>Individual % retained for sieves smaller than #8 and larger than #200</u>		<u>±3.0</u> ^{1,2}	
<u>% passing the #200 sieve</u>		<u>±2.0</u> ^{1,2}	
<u>Asphalt binder content, %</u>	<u>Tex-236-F</u>	<u>±0.5</u>	<u>±0.3</u> ²
<p>1. <u>When within these tolerances, mixture production gradations may fall outside the master grading limits; however, the % passing the #200 will be considered out of tolerance when outside the master grading limits.</u></p> <p>2. <u>Only applies to mixture produced for Lot 1 and higher.</u></p>			

If the paving mixture produced varies from the job-mix formula gradation and/or asphaltic material content by more than the tolerances and restrictions, proper changes shall be made until the type mixture meets the requirements, as directed by the Engineer.

Laboratory density and stability of the mixture when designed and tested during production, in accordance with these Standard Specifications and the test methods outlined in Section 340.4 shall meet the following physical properties.

<u>LABORATORY DENSITY, PERCENT</u>			<u>HVEEM STABILITY, PERCENT</u>	
<u>Minimum</u>	<u>Maximum</u>	<u>Optimum</u>	<u>Minimum</u>	<u>Maximum</u>
94	98	<u>96.5</u>	40	57

Stability and density tests are intended for control tests. If the laboratory stability and/or density of the mixture produced has a value lower than that specified and in the opinion of the Engineer is not due to a change in source or quality of materials, production may proceed with consequent changes in the mix until the laboratory stability and density equals or exceeds the specified values. If, in the opinion of the Engineer, there is a change in the source, type or quality of material from that used in the design mixture, production shall be discontinued until a new design

mixture is determined by trial mixes and the Contractor shall pay all costs of redesigning the mix. The Contractor may submit a new mixture design at anytime during the project. The compacted thickness of the mixture or mixtures used shall be as specified by the plans or specifications. The specific test method for determining laboratory density, HVEEM Stability and compacted thickness is listed in Section 340.4. The Supplier's daily QA/QC test results shall be forwarded to Harris County's Materials Engineer on a daily basis.

340.4 Test Methods.

Testing of Materials: The Testing Laboratory's representative shall perform random tests to determine if the materials and construction procedures produce a product which meets the contract documents. The specific test methods for material analysis are outlined in the following Tables. Testing procedures are ASTM Standards unless otherwise noted.

- A. Testing of mineral aggregates shall be in accordance with the following standard laboratory test procedures:

PROPERTY	TEST METHOD
Sampling Aggregate	ASTM D75 "Sampling Aggregates"
Sieve Analysis	TxDOT Test Procedure Tex-200-F "Sieve Analysis of Fine and Coarse Aggregates"
Abrasion Resistance	C131 "Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine"
Specific Gravity	C127 "Specific Gravity and Absorption of Coarse Aggregate" C128 "Specific Gravity and Absorption of Fine Aggregate"

PROPERTY	TEST METHOD
Sand Equivalent	D2419 "Test Method for Sand Equivalent Value of Soils and Fine Aggregate" or Tex-203-F
Atterberg Limit	D4318 "Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils"
Deleterious Materials	TxDOT Test Procedure Tex-217-F "Determining Deleterious Material, Part I."
Decantation	TxDOT Test Procedure Tex-217-F "Decantation, Part II."

- B. Performance Graded Binders. PG binders must be smooth and homogeneous material which will not foam when heated to 350°F and meet the requirements of TxDOT's Specification Item 300, Latest Edition.

Testing of asphalt binder shall be in accordance with the following standard laboratory test procedures:

PROPERTY	TEST METHOD
Viscosity, 140°F	D2171 "Test Method for Viscosity of Asphalts By Vacuum Capillary Viscometer"
Viscosity, 135°C	D4402 "Standard Test Method for Viscosity Determination"
Penetration, 77°F	D5 "Test Method of Penetration of Bituminous Materials"
Flash Point	D92 "Test Method for Flash and Fire Points by Cleveland Open Cup"

PROPERTY	TEST METHOD
Solubility in Trichloroethylene	D2042 "Test Method for Solubility of Asphalt Materials in Trichloroethylene"
Ductility	D113 "Test Method for Ductility of Bituminous Materials"
Spot Test	AASHTO T-102 "Spot Test of Asphaltic Materials"

- C. Testing of bituminous mixtures shall be in accordance with the following standard laboratory test procedures:

PROPERTY	TEST METHOD
Sampling Bituminous Mixtures	TxDOT Test Procedure Tex-222-F "Sampling Bituminous Mixtures" or ASTM D979
Molding of Specimens	TxDOT Test Procedure Tex-206-F "Compacting Specimens Using the Texas Gyration Compactor (TGC)"
Height of Specimens	D3549 "Test Method for Thickness or Height of Compacted Bituminous Paving Mixtures Specimens"
Bulk Density of	TxDOT Test Procedure Specimens Tex-207-F "Determining Density of Compacted Bituminous Mixtures"
HVEEM Stability	TxDOT Test Procedure Tex-208-F "Test for Stabilometer Value of Bituminous Mixtures"

PROPERTY	TEST METHOD
Maximum Theoretical Density	TxDOT Test Procedure Tex-227-F "Theoretical Maximum Specific Gravity of Bituminous Mixtures"
Method of Mix Design	TxDOT Test Procedure Tex-204-F "Design of Bituminous Mixtures"
Extraction	TxDOT Test Procedure Tex-210-F "Determining Asphalt Content of Bituminous Mixtures by Extraction", <u>or</u> <u>Tex-236-F "Determining Asphalt Content from Asphalt Paving Mixtures by the Ignition Method"</u>
Gradation	Tex-200-F "Sieve Analysis of Fine and Coarse Aggregate"

340.5 Equipment. Provide equipment to produce, haul, place, and compact that complies with the requirements of the Latest Edition of TxDOT's Specification Item 320 "Equipment for Asphalt Concrete Pavement", and herein after specified.

340.6 Heating and Discharge of Materials.

- A. Heating of Materials. Do not heat the asphalt binder above the temperatures specified in TxDOT's Specification Item 300 "Asphalts, Oils, and Emulsions", Latest Edition; or outside the manufacturer's recommended values. On a daily basis, provide the Engineer with the records of asphalt binder and hot-mix asphalt discharge temperatures in accordance with Item 320 "Equipment for Asphalt Concrete Pavement", of TxDOT's Specifications, Latest Edition.
- B. Mixing and Discharge of Materials. Notify the Engineer of the target discharge temperature and produce the mixture within 25°F of the target. Monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 350°F and is not lower than 215°F. Harris County will not pay for or allow placement of any mixture produced above 350°F.

Control the mixing time and temperature so that substantially all moisture is removed from the mixture before discharging from the plant. The Engineer may determine the moisture content by oven-drying in accordance with Tex-212-F, Part II, and verify that the mixture contains no more than 0.2% of moisture by weight. The Engineer shall obtain the sample immediately after discharging the mixture into the truck, and perform the test promptly.

340.7 Asphalt Mixing Plants. Mixing plants may be either the weigh batch type, or the drum mix type. Both types of plants shall be equipped with satisfactory conveyors, power units, aggregate handling equipment, bins and dust collectors, etc. and comply with the requirements of the Latest Edition of TxDOT's Specification Item 320 "Equipment for Asphalt Concrete Pavement".

340.8 Spreading and Finishing Machine. The spreading and finishing machine shall conform to the requirements of the Latest Edition of TxDOT's Specification, Item 320 "Equipment for Asphalt Concrete Pavement", and as specified herein:

The spreading and finishing machine shall be of a type approved by the Engineer and shall be capable of producing a surface that will meet the requirements of the typical cross-section and the surface test, when required by the Engineer, and when the mixture is dumped directly into the finishing machine shall have adequate power to propel the delivery vehicles in a satisfactory manner. The finishing machine shall be equipped with a flexible spring and/or hydraulic type hitch sufficient in design and capacity to maintain contact between the rear wheel of the hauling equipment and the pusher rollers of the finishing machine while the mixture is being unloaded. The paver shall have a receiving hopper of sufficient capacity for a uniform spreading operation, equipped with a vibrating screed and heater.

The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed.

The screed or strike-off assembly shall produce a surface of the required evenness and texture without tearing, shoving, gouging or displacing the mixture.

The use of any vehicle which required dumping directly into the finishing machine and which the finishing machine cannot push or propel in such a manner as to obtain the desired lines and grades without restoring to hand finishing will not be allowed. Unless waived by the Engineer,

automatic screed controls shall be required for asphaltic concrete spreading and finishing machines.

Asphaltic-concrete spreading and finishing machines shall be equipped with an approved automatic dual longitudinal screed control system and a transverse screed control system. The longitudinal controls shall be capable of operating from any longitudinal grade reference including a stringline, 40 foot ski, mobile stringline or matching shoe. The asphaltic concrete spreading and finishing machine shall be equipped with a screed heater and vibrator.

The Contractor shall furnish all equipment required for grade reference. It shall be maintained in good operating condition by personnel trained in the use of this type of equipment. The equipment shall be capable of constructing a finished surface within specified tolerances.

The automatic grade control device shall produce a finished surface meeting the requirements of the surface test on the items of work for which a spreading and finishing machine is required. Skin-patching will not be permitted unless approved by the Engineer and any section of pavement not meeting the minimum tolerance shall be corrected at the Contractor's expense.

The spreader shall be capable of spreading and finishing courses of bituminous plant mix material in lanes not less than 10 feet in width and shall be capable of operating at forward speeds consistent with the satisfactory laying of the mixture.

The asphaltic mixture, when placed with a spreading and finishing machine, shall not be placed unless the air temperature is 40°F. and rising, or 50°F and dropping. The air temperature shall be taken in the shade away from artificial heat. Asphalt shall not be placed when the temperature of the surface on which the mat is to be placed is below 60°F.

It is further provided that the asphaltic mixture shall be placed only when the humidity, general weather conditions and temperature and moisture condition of the base, in the opinion of the Engineer, are suitable.

The Engineer can reject individual truckloads of hot-mix. When a load of hot-mix is rejected for reasons other than temperature, contamination, or excessive uncoated particles, the Contractor may request that the rejected load be tested. Make this request within 4 hr. of rejection. The Engineer will sample and test the mixture. If test results are within the operational tolerances shown in Table 1 above, payment will be made for

the load. If test results are not within operational tolerances, no payment will be made for the load.

- 340.9 Transporting Asphaltic Concrete. The asphaltic concrete mixture, heated and prepared as specified, shall be hauled to the work site in tight vehicles previously cleaned of all foreign material.

The dispatching of the vehicles shall be arranged so that all material delivered may be placed and all rolling shall be completed during daylight hours. Cover each load of mixture with waterproof tarpaulins. The inside of the trucks body may be given a light coating of, lime slurry or other approved release agent necessary to prevent the mixture from adhering to the body. A hole for inserting a thermometer shall be installed in the truck body. Truck beds shall be clean of debris or material that is damaging to the asphalt being hauled before they are loaded with asphalt. If, in the opinion of the Engineer, the truck bed is damaged, it shall be removed from the project.

- 340.10 Tack Coat. Unless otherwise shown on the plans or approved, furnish CSS-1H, SS-1H, or a PG binder with a minimum high temperature grade of PG-58 for tack coat binder in accordance with the Latest Edition of TxDOT's Specification Item 300 "Asphalts Oils, and Emulsions".

Asphalt for tack coat shall meet the requirements of Specification Item 300 "Asphalts, Oils and Emulsions", as published by the Texas Department of Transportation's "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges", Latest Edition.

Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use. If required, verify that emulsified asphalt proposed for use meets the minimum residual asphalt percentage specified in the Latest Edition of TxDOT's Specification, Item 300 "Asphalts, Oils, and Emulsions". The diluted emulsion shall be applied at an approximate rate of 0.05 to 0.15 gal./sq. yd., evenly and smoothly under a pressure necessary for proper distribution. No more shall be placed than can be covered in one day.

Before the asphaltic surface course is laid, the surface of the base, or the surface of the concrete bridge, as the case may be, shall be thoroughly broomed to the satisfaction of the Engineer. When an application of tack coat is required, the base shall be coated with an application of diluted emulsion or, as directed, with an approved distributor and at the application rate indicated by the Design Engineer.

Tack coat shall not be applied when the air temperature is below 50°F. and falling, but may be applied when the air temperature is above 50°F.

and rising. Tack coat shall not be placed when the temperature of the surface on which the asphalt is to be placed is below 60°F.

340.11 Lay Down Operations.

- A. Minimum Mixture Placement Temperatures. Use Table below for suggested minimum mixture placement temperatures.
- B. Windrow Operations. When hot mix is placed in windrows, operate windrow pickup equipment so that substantially all the mixture deposited on the roadbed is picked up and loaded into the paver.

SUGGESTED MINIMUM MIXTURE PLACEMENT TEMPERATURE

HIGH TEMPERATURE BINDER GRADE	MINIMUM PLACEMENT TEMPERATURE (Before Entering Paver)
PG 64 or lower	260°F
PG 70	270°F
PG 76	280°F
PG 82 or higher	290°F

340.12 Placing. The asphaltic mixture shall be dumped and spread on the approved prepared surface with the specified spreading and finishing machine, in such a manner that when properly compacted the finished pavement will be smooth, of the required density and will meet the requirements of the typical cross-sections and the surface tests. During the application of asphaltic material, care shall be taken to prevent splattering of adjacent pavement, curb and gutter and structures.

When the asphaltic mixture is placed in a narrow strip along the edge of an existing pavement, or used to level up small areas of an existing pavement, or placed in small irregular areas where the use of a finishing machine is not practical, the finishing machine may be eliminated, provided a satisfactory surface can be obtained by other approved methods.

Adjacent to flush curbs, gutters, liners and structures, the surfaces shall be finished uniformly high so that when compacted it will be slightly above the edge of the gutter and flush to the structure.

340.13 Compacting. The pavement shall be compacted thoroughly and uniformly with the necessary rollers to obtain the density, stability and

cross-section of the finished paving mixture meeting the requirements of the plans and specifications.

Rolling equipment shall consist of pneumatic tire and steel wheel rollers. Breakdown rolling shall be accomplished immediately after placing, using steel wheel rollers.

All equipment shall be in good mechanical condition, properly adjusted and free from wear that would impair the quality of the work. Necessary precautions shall be taken to prevent the dropping of gasoline, oil, grease or other foreign matter on the pavement, by the compaction, or any equipment.

Pneumatic tire rollers shall have tires of equal size and diameter capable of exerting an average contact pressure varying from 40 to 90 psi, by adjusting ballast and/or tire pressure. All tires shall have equal pressure. The wheels shall be placed so that one pass will accomplish one complete coverage equal to the width of the roller with a minimum of 1/4 inch overlap. The wheels shall not wobble. The operating weight and tire pressure shall be as such as to provide the required density. The rollers shall be in the best mechanical condition. Pneumatic tire rollers shall be equipped with water systems and fiber mats. The Contractor shall provide a second steel wheel roll for wipe of pneumatic tire roller marks on all overlay projects.

The rollers shall have power units and be equipped with scrapers to keep the wheels clean and with the means of keeping the wheels wet, to prevent mixes from sticking to the rollers.

Vibratory rollers shall have a minimum of one vibratory drum weighing no less than 8 tons. The vibratory roller shall be capable of obtaining frequency and amplitude combinations that will produce an impact spacing smaller than the thickness of the mat, or a minimum of 8 to 10 blows per foot.

All rolling with any type of roller shall be done as directed by the Engineer. Breakdown (initial pass) rolling shall be conducted with a steel wheel roller or vibratory roller, intermediate rolling shall be conducted with a steel wheel roller or pneumatic tire roller and finished rolling shall be conducted with a steel wheel roller unless directed otherwise by the Engineer. When rolling with vibratory steel wheel rollers, the manufacturer's recommendation shall be followed, unless otherwise directed by the Engineer.

The specific rollers used in sequence to obtain the required compaction shall be approved by the Engineer. The ambient temperature, humidity,

wind velocity, temperature of existing surface, mat thickness, and temperature of paving mixture shall be considered by the Engineer in determining the type and amount of rollers needed to achieve the required compaction. Approval of the Engineer will not relieve the Contractor of his responsibility to produce the required density.

Rolling pattern shall be established daily and verified as outlined in Test Procedure Tex-207-F, Part IV and III, respectively, to achieve the required air void content. The daily established rolling pattern used is subject to approval by the Engineer. The daily established rolling pattern shall be followed unless changes in the mixture or placement conditions occur which affect compaction. A new rolling pattern shall be established at this time. If required, test strips approximately 300-500 feet in length shall be established to determine proper rolling patterns. A maximum of two strips will be allowed. If the required rolling patterns cannot be determined that will give the required density with two strips, the first two strips will be removed, before the third strip is constructed.

The mixture shall be placed at a temperature of between 260°F and 325°F.

Rolling shall begin as soon as the paving mixture will not be displaced laterally by the weight of the roller. When rolling with the steel-wheel, pneumatic tire roller or vibratory roller, longitudinal joints shall be rolled initially, however rolling shall begin at the low side of the pavement and proceed toward the higher side of the pavement, overlapping on successive trips by at least half the width of the rear wheel unless otherwise directed by the Engineer. Alternate trips of the roller shall be a minimum of six inches difference in length. The motion of the roller shall be slow enough at all times to avoid displacement of the mixture. To prevent adhesion of the surface mixture to the roller, the wheel shall be kept thoroughly moistened with water, but an excess of water will not be permitted. The roller shall not be allowed to stand on pavement which has not been fully compacted. If any displacement occurs, it shall be repaired at once by the use of rakes, and fresh mixture where required, any repair is subject to the Engineer's approval.

The maximum roller speed for any compaction equipment shall comply with the following table unless directed otherwise by the Engineer. The speed of the roller shall, at all times, be slow enough to avoid displacement of the hot mixture and shall not be greater than the speed indicated below.

MAXIMUM ROLLING SPEEDS
TYPE OF ROLLING

CAMPACTOR	BREAKDOWN (miles/hr)	INTERMEDIATE (miles/hr)	FINISH (miles/hr)
Steel Wheel Roller	2	3	3
Pneumatic Tire Roller	-	3	5
Vibratory Roller	3	3	3

Rolling shall be continued until the specified compaction can be obtained and all roller marks are eliminated. Complete all compaction operations before the pavement temperature drops below 160°F unless otherwise allowed. The Engineer may allow compaction with a light finish roller operated in static mode for pavement temperatures below 160°F.

Rolling with a trench type roller or other approved method, will be required on widening areas in trenches and other limited areas where satisfactory compaction cannot be obtained with the rollers specified or approved.

The roller must not stand on the compacted pavement which has not cooled to normal atmospheric temperature.

To prevent adhesion of the paving mixtures to the rollers, the wheels shall be kept properly moistened with water, however, excess water will not be permitted.

If, in the opinion of the Engineer, the asphaltic concrete surface course is not being properly compacted, specimens shall be taken to determine the density of the asphaltic concrete at various locations.

Density of the completed asphaltic concrete shall be uniform over the entire roadway area. The Engineer may have the material (part or all) removed and replaced on areas where density is found not to be that specified, when tested. The entire cost of removing and replacing material from areas because of unacceptable density variations shall be borne by the Contractor and at no cost to the County.

The Contractor shall have the option of placing material in either one or more lifts, in order to maintain uniform compaction. Lifts shall not exceed 2 inches in thickness.

Hand Tamping: The edges of the pavement along curbs, headers and similar structures, and all places not accessible to the roller, or in such positions that do not allow thorough compaction with the rollers, shall be thoroughly compacted with lightly oiled tamps.

340.14 Compaction Criteria. In place compaction methods used to obtain the required density necessary to achieve Engineers approval shall be divided into Type A or Type B construction.

Type A construction shall represent asphalt being laid over New Construction, that is, all phases of construction beginning at the sub-base level and ending with the asphalt surface mix shall be new construction.

Type B construction shall represent asphalt being laid over in-situ material, that is, all Asphalt Overlays, Hot In-Place Recycled Asphalts, or other similar construction that places a surface asphalt on top of an existing roadway.

Type A:

In place compaction control is required of all paving mixtures. Asphaltic concrete shall be placed and compacted to obtain from 3 to 8 percent air voids. Do not increase the asphalt content of the Mixture to reduce pavement air voids. In no case shall the compacted roadway specimens have air voids in excess of 8 percent.

The Contractor shall establish a rolling pattern as outlined in Test Procedure Tex-207-F, Part IV, to achieve the required air void content. The Contractor shall confirm compaction as outlined in Test Procedure Tex-207-F, Part III, through nuclear density testing supplied by the laboratory retained by Harris County. The target density can be established daily and verified with a nuclear density gauge as outlined in Tex-207, IV and III respectively. It is recommended that the Thin Lift Asphalt Gauge be used, however other nuclear equipment may be used with prior approval of the Engineer as long as proper correlation is performed and correlation proof is maintained and kept with the gauge at all times. Correlation of average nuclear gauge readings to core density results shall be performed after each day's production as outlined herein after. The Laboratory Technician shall continue to check and verify the rolling pattern by use of nuclear equipment at minimum every 100 feet and mark core locations every 500 feet, at center of alternate lane. The Contractor shall understand that all nuclear density testing is performed only as an aid to construction, and the Engineer's approval will not relieve the Contractor of his responsibility to produce the required density. Acceptance of the asphalt by Harris County shall be by the acceptable

core density. Other Methods of determining in-place density which correlate satisfactory with results obtained from roadway specimens may also be used when approved by the Engineer. For Parking Lots, every 1100 square yards, take 4 nuclear gauge readings, at each marked core location. Cores shall be taken the same day or no later than the beginning of the next day, as the asphalt is laid. Core locations must be back filled and compacted with similar pavement material. The in-place density and air void shall be measured in accordance with Test Procedures Tex-207-F and Tex-227-F. Correlation of average nuclear gauge density reading to core density results shall be established for the cores taken daily and forwarded to Harris County on the daily basis. This process shall continue for each day's placement until the engineer determines that a good bias has been established for that nuclear gauge. Then the same nuclear gauge should be utilized to establish and verify the in-place densities, afterwards. The specific rolling pattern used is subject to approval by the Engineer. The daily established rolling pattern shall be followed unless changes in the mixture or placement conditions occur which affect compaction. A new rolling pattern shall be established at this time. If required, test strips approximately 300-500 feet in length shall be established to determine proper rolling patterns. A maximum of two strips will be allowed. If the required rolling patterns cannot be determined that will give the required density with two strips, the first two strips shall be removed, before the third strip is constructed.

Type B:

The Contractor shall establish a rolling pattern as outlined in Test Procedure Tex-207-F, Part IV, to achieve an acceptable density. The Contractor shall confirm compaction as outlined in Test Procedure Tex-207-F, Part III, through nuclear density testing supplied by the Laboratory retained by Harris County. The target density shall be established and controlled with a nuclear gauge as outlined in Tex-207-F, Part IV and III respectively. It is recommended that the Thin Lift Asphalt Gauge be used, however other nuclear equipment may be used with prior approval of the Engineer. The Laboratory Technician shall continue to check and verify the rolling pattern by use of nuclear equipment at minimum every 100 feet per lane. Acceptance of the asphalt by Harris County shall be upon receiving final reports from the Material Engineer verifying Mix Design and Conformance to the Rolling Pattern. Cores shall not be taken for densities unless otherwise directed by the Engineer. Cores will be used to verify depth as required. The daily established rolling pattern used is subject to approval by the Engineer. The daily established rolling pattern shall be followed unless changes in the mixture or placement conditions occur which affect compaction. A new rolling pattern shall be established at this time.

340.15 Construction Joints. Placing of the surface course shall be as nearly continuous as possible, and the roller shall pass over the unprotected end of the freshly laid mixture only when the laying of the course is discontinued for such length of time as to permit the mixture to become chilled. In all such cases, when the work is resumed, the material laid shall be cut back so as to produce a slightly beveled edge for the full thickness of the course.

The old material which has been cut away shall be removed from the work site, and the new mix laid against the fresh cut.

A 10 foot straight edge shall be used immediately after final rolling and any unevenness shall be corrected at that time.

Hot smoothing irons may be used for sealing joints, but in such cases extreme care shall be exercised to avoid burning the surface.

Irregularities. Immediately take corrective action if surface irregularities, including but not limited to segregation, rutting, raveling, flushing, fat spots, mat slippage, color, texture, roller marks, tears, gouges, streaks, or uncoated aggregate particles, are detected. The Engineer may suspend production or placement operations until the problem is corrected.

At the expense of the Contractor and to the satisfaction of the Engineer, remove and replace any mixture that does not bond to the existing pavement or that has other surface irregularities identified above.

340.16 Surface Requirements. The final surface of the pavement after compression shall be smooth and true to the established line and grade and typical cross-sections shown on the plans and, when tested with a standard 10 foot or 16 foot straightedge laid parallel to the centerline of the roadway, shall have no deviation in excess of 1/8 inch per foot for a 16 foot straight edge or 1/16 inch per foot for a 10 foot straight edge from the nearest point of contact and the maximum ordinate measured from the face of the straightedge shall not exceed 1/4 inch at any point. Any areas of the surface not meeting these requirements shall be immediately corrected as directed. Tests shall be made at transverse construction joints out at randomly selected locations. Any unevenness indicated by a 10 foot straight edge laid perpendicular to the job, immediately after final rolling, shall be corrected at that time.

340.17 Opening to Traffic. Allow the compacted pavement to cool before opening to traffic unless otherwise directed by the Engineer. If the surface ravels or deteriorates in any manner, it will be the Contractor's responsibility to correct this condition at his expense.

340.18 Measuring Devices. All templates, straight edges, and other measuring devices necessary for the proper construction and checking of the work shall be furnished, operated and maintained by the Contractor at his entire expense.

340.19 Quality Assurance. The County will engage a Testing Firm to provide quality assurance services for the Hot Mix Hot Laid Asphaltic Concrete. The Testing Firm will sample and test stockpiles for gradation in accordance with TxDOT's Test Procedure Tex-200-F and deleterious materials and decantation in accordance with TxDOT's Test Procedure Tex-217-F (Parts I and II) for each 3,000 tons of production. The abrasion loss of the material shall be determined in accordance with ASTM C131 "Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine", for each 4,000 tons of production.

Asphalt binder will not be sampled and tested, provided that the supplier will provide copies of test results for PG grade binder used for the project. Undocumented asphalt binder will require sampling and testing in accordance with AASHTO Method T-102 "Standard Method of Test for Spot Test of Asphaltic Materials" or TxDOT's Test Procedure Tex-540-C and shall meet the requirements of the Latest Edition, of TxDOT's Specification Item 300. The Contractor will be responsible for the cost of these tests. The Engineer may verify the quality of the asphalt binder at any time, by sampling and testing in accordance with the aforementioned methods.

The mixture shall be sampled, for each 400 (cumulative) tons of production and the following tests will be performed on each sample of the mixture.

TEST	DESIGNATION
Laboratory Density	Tex-207-F
Maximum Theoretical Density	Tex-227-F
Hveem Stability	Tex-208-F
Extraction and Gradation	Tex-210-F or Tex-236-F

Based on daily and total production Harris County may waive the sampling and laboratory testing.

Following compaction of the mixture in the pavement, the Laboratory will sample the pavement represented by Type A Construction by cutting cores and determining the in-place density and air voids as outlined in accordance with TxDOT's Test Procedure Tex-207-F and in Section

340.14 of this Item. Additional samples and/or tests shall be taken to provide quality assurance only when approved by the Engineer.

Type B construction shall be acceptable by Harris County upon receiving final reports from the Engineer verifying Mix Design and conformance to the rolling pattern.

340.20 Truck Scales. A set of standard platform truck scales will be placed at the plant and shall be provided with a suitable weigh office adjacent to the scales for the use of the truck weighers. Scales which are not accurate to within 4 pounds per one thousand (1,000) pounds total load shall not be used. Dray tickets shall accompany each load indicating the tare load, gross load, net load, and road name of asphaltic concrete. The Engineer shall have access to the weigh office as well as all other parts of the mixing plant. Scales shall meet the requirements of the Item 520 "Weighing and Measuring Equipment".

340.21 Measurement. Hot mix-hot laid asphaltic concrete surfacing of the types specified to the thickness shown on the plans will be measured by the ton of 2,000 pounds. Measurement by weight shall be made on truck scales as previously specified. Dray tickets shall be kept on the tare load, total load, net load, and road name of asphaltic concrete for each load of same. Cut back asphalt used in the tack coat or prime coat will be measured by the gallon of material actually used for this purpose and shall be based on measurement at the point of delivery and at the applied temperature.

340.22 Payment. Payment shall be made as follows:

- A. Where the bid sheet specifies FOB the job site, the asphaltic concrete shall be transported to the job site in Harris County specified on the bid sheet, and unloaded at the location indicated.
- B. Where the bid sheet specifies FOB the plant, the material shall be loaded on Harris County vehicles.
- C. The "Hot Mix-Hot Laid Asphaltic Concrete Surfacing" furnished and placed as prescribed by this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Hot Mix-Hot Laid Asphaltic Concrete Surfacing", which price shall be full compensation for furnishing all materials, for all freight involved, for all heating, mixing, hauling, cleaning the base, placing asphaltic concrete mixture, rolling and finishing; for all manipulations, labor, tools, equipment and incidentals necessary to complete the work.

The “Hot Mix-Hot Laid Asphaltic Concrete Surfacing” material, furnished and placed, as used for partial level-up (low areas) on some roads and feathering intersections and driveways on all roads to be resurfaced, shall be paid for by a separate bid item, as variable material thickness is required for these transitional surface applications of HMHL, asphaltic concrete.

Hot Mix-Hot Laid Asphaltic Concrete Surfacing will be paid by the ton in four separate bid items, and/or as additionally described, as follows:

1. Hot Mix Hot Laid Asphaltic Concrete Surfacing, furnished and placed (specify thickness);
 2. Asphaltic Concrete Surfacing for feathering driveways;
 3. Asphaltic Concrete Surfacing for feathering intersections; and
 4. Asphaltic Concrete Surfacing for level up course (specify thickness).
- D. All work and materials incidental to the above application of the tack coats or prime coats performed and measured as prescribed above will be paid for at the contract unit price bid per gallon for tack coat or prime coat, which price shall be full compensation for the preparation of existing base course or pavement, furnishing all materials, all hauling, heating, manipulations and for all labor, tools, equipment and incidentals necessary to satisfactorily apply the tack coat or prime coat.

Records shall be kept of the tare weight and net weight of asphaltic concrete, for each load of same.

Cutback or emulsified asphalt used as the tack coat will be measured by the gallon of material actually used on the street for this purpose and shall be based on measurement taken at the point of delivery on the street and at the applied temperature.

All work and materials incidental to the application of the tack coat performed and measured as prescribed above will be paid for at the contract unit price bid per gallon for tack coat or prime coat, which price shall be full compensation for the preparation of existing base course or pavement, furnishing all materials, all hauling, heating, manipulation and for all labor, tools, equipment

and incidentals necessary to satisfactorily apply the tack coat or prime coat.

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires other Standard Specifications

Item 520 "Weighing and Measuring Equipment"

END OF ITEM 340

ITEM 433

CEMENT STABILIZED SAND BEDDING AND BACKFILL MATERIAL

433.1 Description. This Item shall govern for cement stabilized sand to be used for backfill and bedding as called for on the Standard Civil Drawings, in other parts of the Standard Specifications, or as directed by the Engineer.

433.2 Materials. Cement shall be Type I portland cement conforming to ASTM C150 "Standard Specification for Portland Cement."

Sand shall be clean durable sand containing not more than the following:

A. Deleterious Materials

1. Clay lumps, when tested in accordance with ASTM C142 "Standard Test Method for Clay Lumps and Friable Particles in Aggregates" shall be less than 0.5 percent.
2. Lightweight pieces, when tested in accordance with ASTM C123 "Standard Test Method for Lightweight Particles in Aggregate" shall be less than 5.0 percent.
3. Organic impurities when tested in accordance with ASTM C40 "Standard Test Method for Organic Impurities in Fine Aggregates for Concrete" shall not show a color darker than the standard color.

B. The plasticity index shall be 6 or less when tested in accordance with ASTM D4318 "Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils."

C. Sand shall be free of organic matter and deleterious substances and shall meet the following gradation requirement.

SIEVE SIZE	% Passing, By Weight
3/8 Inch	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 C1602 "Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete."

433.3 Sand-cement Mixture Product. The mixture shall consist of not less than 1-1/2 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 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 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 Item 430 "Construction of Underground Utilities" and Item 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 Harris 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 1 in-place density on the bedding and 2 in-place densities on backfill. The minimum number of tests shall be for each location at the rate of 1 in-place density test per 50 linear feet of bedding and 1 in-place

density test per 50 linear feet of backfill per lift placed above the top of pipe. In-place densities shall be determined in accordance with ASTM D6938 "Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods" or ASTM D1556 "Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method."

- 433.6 Performance. The sand cement mixtures shall produce a minimum unconfined compressive strength of 100 psi in 48 hours, when compacted to 95 percent of Standard Proctor density (ASTM D558 "Standard Test Methods for Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures"), without additional moisture control and when cured in plastic bags at a temperature of 73.4° F. at plus or minus 3° F. and tested in accordance with ASTM D1633 "Standard Test Methods for Compressive Strength of Molded Soil-Cement Cylinders."

Random samples of the delivered product will be taken in the field at the direction of the Engineer and tested at Harris County's expense. A minimum of 1 sample per week shall be taken at random to represent a production that is less than 100 tons per week. Two samples per week shall be taken at random to represent a production greater than 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 Harris 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.

NOTE: This Item requires other Standard Specifications

Item 430 "Construction of Underground Utilities"

Item 480 "Precast Reinforced Concrete Box Sewers"

END OF ITEM 433

ITEM 436

WELL POINTING

- 436.1 Description. This Item shall govern for the temporary dewatering of trenches for the installation of utilities. Work, in general shall include:
- A. Designing, furnishing, installing, testing, operating, monitoring and maintaining a system to control ground water and surface water as required to comply with the performance requirements specified.
 - B. Controlling and removing seepage and surface water from the excavation, including excavation slope erosion control.
 - C. Prevention of surface water from entering the trench and diverting the surface water away from the site.
 - D. Removal of the temporary dewatering system after completion of the specified portion of work.
 - E. Removal of ground water and surface water from all remaining excavation, after removal of the temporary dewatering system, until construction has reached finished grades.

- 436.2 Quality Assurance. The dewatering system work shall be performed by a firm which has at least 5 years of successful experience in the field of dewatering.

The Contractor or well pointing firm shall engage a qualified surveyor, to perform all layouts and measurements. The surveyor shall layout the work to the lines and grades required before installation and shall determine the location of each well point, piezometer and other data, as required.

The surveyor shall record and maintain all information pertinent to each well point and piezometer.

The temporary dewatering system as specified in these Standard Specifications shall be the minimum system required for controlling groundwater, regardless of source. The installed system shall be capable of lowering and maintaining the groundwater to at least 3 feet below the bottom of the excavation, until the required utilities are installed, and the seal slab with cement stabilized sand bedding has been set in place for a minimum of twelve hours. Within these limits, the Contractor shall be responsible for the design of the entire temporary dewatering system and

shall make whatever modifications and additions to the system as may be required for the system to fulfill its requirements.

436.3 Performance Requirements. The Contractor shall:

- A. Design, furnish, install, test, operate, monitor and maintain the minimum well point system as specified herein, including all discharge piping and connections at point of discharge, sufficient to lower the ground water level or hydrostatic head at 3 feet below the bottom of the excavation, or lower, so as to prevent seepage of water into the excavation and permit installation of all utilities "in the dry". This "dry" installation of utilities shall include a seal slab with cement stabilized sand bedding that has been set in place for a minimum of twelve hours.
- B. Design, furnish and install, test, operate, monitor and maintain whatever additional system that may be necessary to supplement the minimum wellpoint system as specified herein, and to maintain the excavation free of groundwater seepage and surface water, regardless of source.
- C. The periphery of the entire excavation shall be suitably diked and the dikes maintained to prevent surface water from entering the excavation.
- D. All water seeping, falling or running into the excavation as it is dug, and until the temporary dewatering system is removed as specified, shall be promptly pumped out.
- E. Dispose of all seepage and surface water removed from the project, regardless of source, by methods approved by the Engineer.
- F. Take appropriate and approved measures to prevent erosion of the excavated soils and ramp slopes.

436.4 Maintenance. The Contractor shall provide system maintenance including, but not limited to, at least daily supervision by someone skilled in the operation, maintenance, and replacement of system components and shall provide 1 spare (connected) diesel powered pump; and all other equipment and work required by the Engineer to maintain the excavation in a dewatered and hydrostatically relieved condition. Dewatering and pressure relief shall be a continuous operation and interruptions due to power outages, or any other reason, shall not be permitted. A responsible operator capable of starting, finishing and maintaining the dewatering system and starting standby equipment shall be on duty at all times.

Some responsible person shall continuously monitor the dewatering and surface water control systems, until the Contractor has received approval from the Engineer that he may discontinue surface and/or groundwater control.

436.5 Correction of Work. The Contractor shall be fully responsible for the failure of all components of the temporary dewatering work and for all damages to work in the excavation area caused by the failure to provide, maintain, and operate the temporary dewatering system, as specified. Contractor shall restore all damaged work, including failed components of the work in this Item to a condition as good as or better than existed prior to failure of components.

436.6 Job Conditions. The Contractor shall provide protection of persons and property by at least:

A. Barricading open excavations occurring as part of this work and post with warning lights. Operate warning lights during the hours from dusk to dawn, each day. All barricades, signs and other types of devices shall be installed in accordance with the "Texas Manual on Uniform Traffic Control Devices".

B. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by temporary dewatering system installation and operation.

The Contractor shall restore all streets, driveways, curbs, sidewalks and other existing items to a condition as good as or better than existed before work was commenced, at no additional cost to Harris County.

436.7 Measurement. Well point systems or dewatering systems shall be measured by the linear foot of trench being dewatered. The measurement shall be taken along the centerline of the trench.

436.8 Payment. Shall be made at the contract unit price bid for "well-pointing" measured as outlined in the preceding section. Such payment shall be full compensation for all materials, equipment and labor necessary to furnish, install, operate and maintain the well point system, including any necessary traffic warning systems or any work necessary to restore the site to its original condition, including any damaged facilities.

There are line code(s), description(s), and unit(s) for this Item.

END OF ITEM 436

ITEM 472

INLETS

472.1 Description. This Item shall govern for furnishing and installing inlets of the type designated on the plans including but not limited to all frames, plates, grates and covers.

472.2 Materials. Reinforcing steel shall conform to the Item 440 "Reinforcing Steel". Concrete shall conform to the Item 421 "Structural Concrete". Precast concrete inlets shall be manufactured in accordance with the Item 420 "Concrete Structures".

Cement mortar shall conform to ASTM C270 "Standard Specification for Mortar for Unit Masonry", Type M. Aggregate for mortar shall conform to ASTM C144 "Standard Specification for Aggregate for Masonry Mortar."

Cast iron for frames, plates, covers, I-beams and grates shall be in accordance with ASTM A48 "Standard Specification for Gray Iron Castings", Class 30 and shall be free from sand, blow holes or other defects. Frames, plates, grates and covers shall have machined bearing surfaces and conform to the Standard Civil Drawings.

472.3 Construction. All sections of the inlets will be constructed of reinforced concrete.

Prior to setting and/or casting of the inlet, the Contractor shall provide a base/bedding of 6 inch thick cement stabilized sand.

After construction/installation of the inlet, backfill with a minimum thickness of 12 inches of cement stabilized sand that completely circumvents the outside wall of the inlet, up to the elevation of the pavement. Then complete the backfill of the excavated hole, with material that's in accordance with Item 430 "Construction of Underground Utilities".

Inlets that are constructed/installed adjacent to and flush to the elevation of concrete pavement shall be constructed with a minimum 3/4 inch expansion joint material, that is in accordance with Item 360 "Concrete Pavement".

Use non-shrink grout (applied per manufacturers recommendation) to attain a water tight seal at the wall opening of the inlet with the pipe.

For box culvert and arch pipe (all non-circular applications) connections, use non-shrink grout to ensure a water tight seal.

Neatly cut off inlet leads at inside face of inlet wall and point up with mortar. Shape floor with mortar as shown on the applicable Standard Civil Drawings for inlets.

472.4 Measurement. Measure depth of inlets as the vertical distance from the flow line of inlet lead to the top of curb or top of grate.

For inlets constructed with 24 inch leads, the standard depth is 6 feet deep.

Any portion of the inlet exceeding the above depth is to be measured per vertical foot of depth.

472.5 Payment.

A. Payment for Standard Type Inlets.

Payment for inlets with a standard depth shall be made at the contract unit price for each individual standard type inlet (includes non-shrink grout, cement stabilized sand backfill, & expansion joint material).

B. Payment for Inlets with an Additional Depth Greater Than 6 Feet.

When the depth of the inlet specified is greater than the standard depth by more than 6 feet, payment shall be at the contract unit price for each individual inlet (includes non-shrink grout, cement stabilized sand backfill, & expansion joint material) as follows:

“Type B Inlet with an Additional Depth Greater than 6 Feet”

“Type B-B Inlet with an Additional Depth Greater than 6 Feet”

“Type C Inlet with an Additional Depth Greater than 6 Feet”

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires Standard Civil Drawings that shall be incorporated into the contract documents.

NOTE: This Item requires other Standard Specifications.

Item 360 “Concrete Pavement”

Item 420 “Concrete Structures”

Item 421 “Structural Concrete”

Item 430 “Construction of Underground Utilities”

Item 440 “Reinforcing Steel”

END OF ITEM 472

ITEM 494

GEOTEXTILES

494.1 Description. This Item shall govern for geotextile fabric to be used in pavements or erosion control as herein specified or as called for on the drawings or as directed by the Engineer.

494.2 Material. The Geotextile fabric and the threads used in joining Geotextiles by sewing shall be manmade long-chain synthetic polymer fibers, composed of at least 95 percent by weight of polyolefins or polyesters that form a durable woven or non-woven mat of uniform quality such that the filaments or yarns retain their dimensional stability relative to each other, including selvages. They provide separation, water proofing and stress relieving membrane within the pavement structure.

There are three classes of geotextile fabric:

- A. Class 1 is specified for more severe or harsh installation conditions where there is a greater potential damage
- B. Class 2 and 3 are specified for less severe conditions

General Requirements:

- A. Fabric fibers are continuous and randomly oriented throughout the fabric.
- B. The fabric is mildew resistant and rot-proof and it is satisfactory for use in a wet soil and aggregate environment.

Geotextiles used for separation, stabilization, subsurface drainage, temporary silt fence, paving fabric and permanent erosion control shall satisfy AASHTO M288-00 "Geotextile Specification for Highway Applications" requirements, and shall meet the following minimum physical property values:

PROPERTIES	TEST METHOD	VALUE					
		Class 1		Class 2		Class 3	
		Elongation <50%	Elongation ≥50%	Elongation <50%	Elongation ≥50%	Elongation <50%	Elongation ≥50%
Ultra-Violet Stability (Strength Retained)	ASTM D4355	50% after 500 h of exposure		50% after 500 h of exposure		50% after 500 h of exposure	

PROPERTIES	TEST METHOD	VALUE					
		Class 1		Class 2		Class 3	
		Elongation <50%	Elongation ≥50%	Elongation <50%	Elongation ≥50%	Elongation <50%	Elongation ≥50%
Trapezoid Tear (N)	ASTM D4533	500	350	400	250	300	180
Grab Tensile Strength (N)**	ASTM D4632	1400	900	1100	700	800	500
Puncture Resistant (N)	ASTM D4833	500	350	400	250	300	180
Sewn Seam Strength (N)	ASTM D4884	1260	810	990	630	720	450
Permittivity (sec ⁻¹)	ASTM D4491	0.05		0.02-0.7*			
Melting Point***	ASTM D276						
Ultimate Elongation %***	ASTM D4632						
Apparent Opening Size**	ASTM D4751						
Mass per Unit Area***	ASTM D5261						
Asphalt Retention***	ASTM D6140						

* Permittivity shall be as specified in the bid documents in accordance with tables 2, 3, 4, 5 and 6 of AASHTO M288-00 as per the requirements of various applications.

** Opening size shall be as specified in the bid documents in accordance with tables 2, 3, 4, 5 and 6 of AASHTO M288-00 as per the requirements of various applications.

*** These shall be as specified in the bid documents/construction notes in accordance with tables 1 and 7 of AASHTO M288-00 as per the requirements of various applications.

NOTES:

1. Conformance to specification property requirements shall be based on ASTM D4759 Standard Practice for Determining the Specification Conformance of Geosynthetics.”
2. All numeric values represent the minimum average roll values (i.e. the average of test results from any sample roll in a lot shall equal or exceed the minimum values). Lots shall be sampled according to ASTM D4354 “Standard Practice for Sampling of Geosynthetics and Rolled Erosion Control Products(RECPs) for Testing.”

494.3 Packaging Requirements:

- A. Provide fabric in the length and width specified on the plans or in the bid documents.
- B. Wind fabric onto suitable cylindrical forms or cores to aid in handling and unrolling.
- C. Package fabric individually in a suitable container to protect the geotextile from damage due to ultraviolet light and moisture during normal storage and handling.
- D. Identify each roll with a tag or label affixed to the outside or the roll on one end the following information: unique roll number, serially designated; manufacturer's lot number or control numbers, if any; name of fabric manufacturer; brand name of the product; manufacturer's style or catalog designation of the fabric, if any; roll width (inches); roll length (feet).

494.4 Submittal Requirement. When requested by the Engineer, the Contractor shall provide samples of the geosynthetics for testing. The test results will be used to verify that the physical properties specified in this Item have been met. The cost of the testing will be paid for by Harris County. The Contractor shall also submit manufacturer's recommended installation method for geotextile installation based on its designated application.

494.5 Quality Assurance/Quality Control. Should any individual sample selected at random from 100 rolls, or fraction thereof, fail to meet any specification requirement, then that roll will be rejected. Two additional samples will be taken, one from each of two other rolls selected at random from the same 100 roll lot, or fraction thereof. If either of these two additional samples fails to comply with any portion of the specification, then the entire quantity of rolls selected by that sample will be rejected.

494.6 Placing. The geotextile shall be placed in accordance with the specifications of the various applications.

494.7 Measurement. The geotextile fabric shall be measured in place by the square yard of material, furnished and placed as shown in the plans. Waste and overlap shall not be included in this measurement.

494.8 Payment.

- A. Payment for geotextile, complete in place shall be made at the contract unit price of the specified class per square yard, which price shall include all costs of materials, and labor to place it in position.

- B. Where the bid sheet specifies FOB the job, the materials shall be transported to the job site specified on the bid sheet and paid for by the square yard.
- C. When the Project Manual, plans or other specifications indicate the use of geotextile as 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 494

ITEM 500

REMOVE AND RELOCATE OR DISPOSE OF
TRAFFIC SIGNS, MAIL BOXES AND ROADWAY SIGNS

500.1 Description. This Item shall govern for the removal and relocation or disposal of traffic signs, mail boxes and roadway signs. Traffic signs shall be relocated in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD), Latest Edition.

500.2 Construction Methods. The Contractor shall relocate those traffic signs, roadway signs, and mail boxes that are indicated on the plans to be relocated. They shall be reinstalled with the foundation standard required by the applicable jurisdictional agencies.

All concrete for foundations shall be Class C Concrete in accordance with the Item 421 "Structural Concrete", with f'c = 3000 psi.

For any location on the job site that is to remain open to traffic, the Contractor is required to furnish and install temporary poles, fittings, fixtures, signals, signs or other incidentals necessary to construct permanent traffic control systems. Such temporary installation shall remain in place until such time as the relocated systems are operational, or until required by the Engineer.

500.3 Measurement & Payment. The basis of payment for this item shall be the lump sum, or per each as provided in the bid proposal which price shall be full compensation for all materials, equipment and labor and all other incidentals necessary to complete the work.

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires other Standard Specifications

Item 421 "Structural Concrete"

END OF ITEM 500

ITEM 501

TREE PROTECTION AND TRIMMING

501.1 Description. This Item shall govern for the protection and trimming of trees indicated to be preserved. Trees located a clear distance of 3 feet or more from the tree's dripline to the proposed face of curb are to be preserved unless field conditions determine otherwise.

501.2 Quality Assurance. All tree removing, trimming and work within the tree's dripline shall be performed by or under the supervision of an arborist certified by the International Society of Arboriculture (ISA). The arborist shall indicate the trees that need to be removed, but no removal will be done without prior approval of the Engineer.

The Latest Edition of reference standards applicable to this Item are:

- A. ASTM D2665 "Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste and Vent Pipe and Fittings"
- B. AWWA Standard U1 "Use Category System: User Specification for Treated Wood"

501.3 Job Conditions. The Contractor shall protect each tree designated to be preserved with a tree protection fence, installed in accordance with Item 559 "Construction Safety Fence" along the outside edge of the tree's dripline. The fencing shall be continuous between posts, shall be pulled taut prior to securing to posts, and shall be firmly attached to the posts with a minimum of 4 ties.

All tree protection fencing shall be installed prior to site work or construction activity. The fence shall be placed in a continuous alignment as shown on the tree protection plan or as approved by the Engineer.

Tree protection fencing shall be removed by the Contractor unless otherwise directed by the Engineer, at no additional costs, upon completion of all construction activity in each work zone area. Tree protection fencing materials used in the first work zone area(s) shall be removed and utilized in subsequent work zone areas. Materials and labor shall be paid for each linear foot of fencing installed in first two work areas. All fencing installed in subsequent work zone areas shall be paid for labor only.

Contractor shall not allow any vehicular traffic, parking of vehicles or stockpiling of excavated material or construction materials within 3 feet of the dripline of trees indicated to be preserved.

Construction equipment may operate within 3 feet of the dripline of a tree when necessary for the performance of indicated work; such operations shall be conducted with special care to avoid damaging the tree.

Water trees indicated to be preserved, as required to maintain their healthy growth during the course of construction operations (per Arborist recommendation).

501.4 Materials. Tree pruning compound shall be waterproof, antiseptic, elastic, and free of kerosene, coal tar, creosote, and other substances harmful to trees.

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.

Physical barriers, if required, shall be constructed from the following material:

- A. Wood Components: Number 2 Pine, pressure treated to prevent decay for 1 year in accordance with the requirements AWWA Standard U1, suitable for Use Category 4B.
- B. Fence Material: 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 3-1/2 inches x 1-1/2 inches. T-posts shall be made of fiberglass or steel and shall be 6 feet long (minimum).
- C. Banding: Stainless steel or varnish coated carbon steel, 3/4 inch wide x 26 gauge.
- D. PVC pipe shall conform to ASTM D2665 and be 4 inch O.D., nominal.

501.5 Execution. The Contractor shall protect tree root systems from damage due to noxious materials in solution caused by run-off or spillage during mixing and placement of construction materials, or drainage from stored materials.

The Contractor and/or any of the Contractor's workers shall not park vehicles under trees, nor perform vehicle maintenance under trees.

If required, remove branches from trees indicated to be preserved to clear for new construction. All cuts should be made sufficiently close to the parent limb or trunk without cutting into the branch collar or leaving a protruding stub, so that closure can readily start under normal conditions. All lateral cuts shall be made back to a lateral that is at least 1/3 the diameter of the parent limb. Clean cuts shall be made at all times. Where directed by the Engineer, extend the pruning operation to restore the natural shape of the entire tree.

Cut branches and roots with sharp pruning instruments. Do not break or chop branches and roots. Paint cuts over 1/2 inch in size with tree pruning compound. Apply black latex paint to all fresh wounds on Oak (*Quercus*) species immediately after each cut is made.

- 501.6 Pruning. Pruning shall be completed by ISA (International Society of Arboriculture) certified arborist who has received training in proper pruning techniques. Prior to construction, all deciduous trees indicated to be preserved shall be pruned of new or recent growth to maintain the basic branching form of the trees. Extent of pruning shall be based upon the proximity of pavement to the trunk and the size of tree blockouts and the requirements for construction adjacent to the tree.

Trees having branches which extend to the ground at their outermost limit shall have such branches pruned to a height equal to the height of all vehicles requiring access below or around such trees. Provide minimum of 14 feet and maximum of 18 feet of vertical clearance over proposed street construction. The Contractor shall notify property owner in writing 48 hours prior to trimming or pruning any trees on private property for privately owned trees extended into County right-of-way.

Pruning shall be limited as much as possible to young branches. Care shall be taken to maintain older branches which provide the basic form of the tree.

- 501.7 Excavation Around Trees. Excavate within the dripline of trees only where indicated. Where trenching for utilities is required within dripline, tunnel under or around roots by hand digging. Do not cut main lateral roots or tap roots. Smaller roots which interfere with the installation of new work may be cut.

Where excavating for new construction is required within the dripline of trees, hand excavate to minimize damage to the root system. Provide

sheeting at excavations if required. Use narrow spading forks and comb soil to expose roots.

Relocate roots in backfill areas wherever possible. If large main lateral roots are encountered, expose beyond excavating limits as required to bend and relocate without breaking. If roots are immediately adjacent to location of new construction and relocation is not practical, cut roots approximately 3 inches back from new construction.

Do not allow exposed roots to dry before permanent backfill is placed. Provide temporary earth cover, or pack with peat moss and wrap with burlap. Water and maintain exposed roots in moist condition and temporarily support and protect from damage until permanently relocated and covered with earth.

Prune branches to balance loss to root system caused by damage or cutting, per arborist recommendations.

501.8 Grading and Filling Around Trees. Maintain the existing grade within the dripline of trees, unless otherwise indicated.

Where the existing grade is above the new finish grade around trees, carefully hand excavate within the dripline to new finish grade. Cut roots exposed by excavation and provide permanent protection as recommended by the certified arborist.

Where the existing grade is 3 inches or less below new finish grade, use a topsoil fill material. Place the topsoil in a single layer and do not compact. Hand grade to the required elevation.

Where existing grade is more than 6 inches below new finish grade, provide 1 inch, schedule 40 PVC pipe, 6 feet on centers around tree perimeter, at dripline for aeration of the root system.

501.9 Repair of Trees. When trees indicated to be preserved are damaged by construction operations, remove the damaged portions as soon as possible to prevent progressive deterioration. Repair work shall be subject to the approval of the Engineer.

Remove and replace dead or damaged trees designated to be preserved which are determined by the certified arborist to be incapable of restoration to normal growth status.

501.10 Submittal Requirement. The Contractor shall submit the qualifications of ISA certified arborist for Engineer's approval.

501.11 Measurement and Payment. Measurement and payment for tree protection and trimming shall be by the lump sum or by each in accordance with the bid proposal.

Removal of trees shall be paid for as provided in the bid proposal in accordance with Item 102 "Clearing and Grubbing".

Tree protection with barrier (orange fence) shall be measured and paid per each or per linear feet in accordance with bid proposal.

There are line code(s), description(s), and unit(s), for this Item.

NOTE: This Item does require other Standard Specifications.

Item 102 "Clearing and Grubbing"

Item 559 "Construction Safety Fence"

Item 725 "General Source Control (SWPPP)"

END OF ITEM 501

ITEM 540

REMOVING AND DISPOSING OF EXISTING ASPHALTIC SURFACE
AND BASE MATERIAL

- 540.1 Description. This Item govern for the removing and disposing of existing asphaltic surface and all types of base material outside the project limits in compliance with current local, State and Federal Regulations.
- 540.2 Construction Methods. The existing asphaltic surface and all base materials (rigid and flexible base courses) shall be removed to its full depth and to the width directed by the Engineer. The surface and base material (all depths) shall be removed in such a manner as not to disturb the subgrade.
- 540.3 Measurement. The basis of measurement shall be by the square yard of surface removed, regardless of depth.
- 540.4 Payment. The basis of payment shall be at the unit price bid per square yard, which price shall be full compensation for the cutting back of shoulders at the location of construction, stripping, scarifying, removal and disposal of material, including all labor, materials, tools, equipment and incidentals necessary to complete the work.

There are line code(s), description(s), and unit(s) for this Item.

END OF ITEM 540

ITEM 671

TRAFFIC CONTROL

671.1 Description. This shall govern for furnishing, installing, moving, replacing, maintaining, cleaning and removing upon completion of work, all barricades, signs, barriers, barrels, cones, lights, delineators, pavement markings, and other such devices and detours in conformance with the drawings or as directed by the Engineer.

A Traffic Control Plan (TCP) has been established for this project in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD). The Contractor may propose an alternate TCP, and if the alternate plan is approved by the Engineer, it may be used. The alternate TCP must be prepared in accordance with Harris County Traffic Control Guidelines (Latest Edition) and sealed by a Professional Engineer registered in the State of Texas proficient in the field of Traffic Engineering.

671.2 Construction Methods. All barricades, signs and other types of traffic control devices shall conform to details shown on the drawings, and those indicated in Part VI of the TMUTCD.

Prior to beginning work, the Contractor shall designate in writing a competent person who will be responsible and available on the project site or in the immediate area to insure compliance with the TCP.

The Contractor is solely responsible for furnishing, erecting and maintaining all barricades, signs, barriers, barrels, cones, lights, delineators, pavement markings, and other such devices as necessary to adequately protect the project and workers and warn, advise and safeguard the traveling public over the entire length of the project. 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 reflective traffic control devices such as barricades, vertical panels, signs, etc. shall be maintained at all times by cleaning, replacing or a combination thereof such that during darkness and rain the reflective characteristics shall equal or exceed the retroreflective characteristics of the standard reflective panels in the Engineer's possession. Unless otherwise set forth in these Standard Specifications, the Contractor shall receive compensation for furnishing, erecting and maintaining the necessary barricades, signs, barriers, barrels, cones, lights, delineators, pavement markings, other such devices and any incidentals necessary for

the good and proper safety, convenience and direction of traffic prior to final inspection and acceptance by the County.

Detours and temporary structures necessary for public travel during the prosecution of the work will be indicated on the TCP and the cost included in the bid and contract price. Any necessary detours or temporary structures not indicated on the drawings or provided for in the specifications shall be at the expense of the Contractor. Increased maintenance costs incurred incidental to resulting traffic over an established road, street, or highway as a result of any detour shall not be considered as a cost of maintaining detours and will be paid for by the Contractor.

The Contractor shall provide at his expense, means of ingress and egress for all residents and businesses along any closed section of the work and shall provide property owners a means of access to a public road.

Temporary access driveways shall provide an all-weather surface and shall be maintained by the Contractor in a condition acceptable to the Engineer. Where indicated in the bid documents, asphalt millings may be used for temporary driveways.

No section of the work shall be closed to traffic until so directed by the Engineer. No bridge, culvert or drainage structure shall be closed until an adequate detour has been arranged and constructed.

If, in the opinion of the Engineer, the Contractor does not comply with the above requirements such work as the Engineer may deem necessary for the safety, comfort and convenience of the traveling public may be performed and the charges therefore withheld from any money due or to become due to the Contractor. The Contractor shall not be paid to provide traffic control during delays caused by the Contractor.

The above does not preclude the requirements of the "Harris County General Conditions".

Providing, installing, moving, replacing, maintaining, cleaning and removing upon completion of work all barricades, signs, barriers, barrels, cones, lights, delineators, pavement markings, and other such devices shall be in accordance with Item 665 "Work Zone Pavement Markings", Item 670 "Barricades", Item 696 "Low Profile Concrete Barrier" and Item 698 "Temporary Polyethylene Water-Filled Barrier". Flagmen shall be furnished, maintained and possess the minimum qualification and requirements stipulated in the TMUTCD. Operation of flagmen shall be as outlined in Item 672 "Flagmen."

Temporary pavement markings shall be in accordance with Item 665 "Work Zone Pavement Markings".

Temporary signs and supports shall be made from wood, metal, or other approved materials. Wood for signs shall be minimum 1/2 inch, medium density, outdoor grade plywood. Metal signs shall be in conformance with Item 624 "Aluminum Signs". Reflectorized sign sheeting shall be in conformance with Item 649 "Wide Angle Prismatic Retroreflective Sheeting for Traffic Control Signs (Diamond Grade)." Signs may be erected on portable, temporary, or fixed supports for use in the work zone. Signs erected on portable supports shall be for daytime use only. All wood supports shall be painted white. Sandbags shall be used where portable or temporary sign supports require the use of weights to prevent a sign assembly from falling over. All signs shall be placed in accordance with the drawings and the TMUTCD.

671.3 Measurement & Payment. Barricades, signs, barriers, barrels, cones, lights, delineators, and other such devices shall be paid for by the month or per each Jobsite, provided the traffic control plan is properly installed and maintained. This includes preparation of an alternative Traffic Control Plan by the Contractor, if any, and approved by the Engineer.

Detours shall be paid for in accordance with Item 673 "Constructing Detours for Maintaining Two-Way Traffic".

Work Zone Pavement Markings shall be paid for in accordance with Item 665 "Work Zone Pavement Markings".

Barriers designated as "Low Profile Concrete Barrier" and "Temporary Polyethylene Water-Filled Barrier" shall be paid for in accordance with Items 696 and 698 respectively.

Temporary driveways and the removal of temporary driveways shall be measured and paid for as follows: "Temporary Commercial Driveways per Each" and "Temporary Residential Driveways per Each". Payment shall include all labor and materials, including shaping, furnishing and hauling necessary to complete the work.

There are line code(s), description(s) and unit(s) for this Item:

NOTE: This Item requires other Standard Specifications.

Item 624 "Aluminum Signs"

Item 649 "Wide Angle Prismatic Retroreflective Sheeting for Traffic Control Signs (Diamond Grade)"

Item 665 "Work Zone Pavement Markings"

Item 670 "Barricades"

Item 672 "Flagmen"

Item 673 "Constructing Detours for Maintaining Two-Way Traffic"

Item 696 "Low Profile Concrete Barrier"

Item 698 "Temporary Polyethylene Water-Filled Barrier"

END OF ITEM 671

ITEM 713

REINFORCED FILTER FABRIC BARRIER

713.1 Description. This Item shall govern for furnishing, installing, and removing temporary erosion protection and sediment control reinforced filter fabric barrier in accordance with these Standard 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 or exceed the following specifications:

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 (Max. 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 *Geotextile Specification for Highway Applications* 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 gauge 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 rings. Wire ties shall be 14 gauge minimum, staples shall be no. 9 wire minimum with a 1/2 inch minimum crown length, and 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 so installed that the surface runoff will percolate through the system and allow sediment to be retained and accumulated, and may be used in conjunction with a rock filter dam (Item 750) at the outfall of a detention pond. Reinforced filter fabric barrier shall not be used as the sole best management practice at the outfall of a detention pond. Reinforced filter fabric barriers shall be installed at the locations shown on the construction drawings and in accordance with the Standard Civil Drawing 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 inches 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 mid-section. 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 rings, the geotextile fabric shall be attached to the net reinforced fence. The fabric shall be attached at the top and mid-section. The horizontal spacing of the attachment shall be every 24 inches, or less. Additional ties, 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. (Note: Maintenance for Item 713 is paid for under Item 751 "SWPPP Inspection and Maintenance")

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 protected by a reinforced filter fabric barrier 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 compliance with current local, State and Federal 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 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.
- 713.5 Measurement. When paid for separately as a pay item, measurement for reinforced filter fabric barrier shall be by the linear foot, complete in place, measurement being made along the centerline of the top of the barrier.
- 715.6 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 in place, where 60 percent of the total unit cost shall be for furnishing and installing all materials. Thus, 40 percent 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 Item requires a Standard Civil Drawing that shall be incorporated into the contract documents.

NOTE: This Item requires other Standard Specifications.

Item 751 "SWPPP Inspection and Maintenance"

END OF ITEM 713

ITEM 719

INLET PROTECTION BARRIERS

- 719.1 Description. This Item shall govern for furnishing, installing, and removing temporary erosion protection and sediment control inlet protection barriers in accordance with these Standard Specifications and construction drawings, and as directed by the Engineer. The inlet protection barrier consists of a geotextile fabric (filter fabric) supported by a net reinforced fence structure and constructed around a storm drain inlet, catch basin, or culvert. An alternative design of the inlet protection barrier, as approved by the Engineer, consists of fiber rolls placed around a frame, staked in place (or weighted down with clean gravel bags), and constructed around a storm drain inlet, catch basin or culvert. This work shall be performed during construction operations and prior to final stabilization to control erosion and sedimentation.
- 719.2 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 or exceed the following specifications shown in Table 1:

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 (Max. 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.

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.

Support beams shall be either steel or hardwood essentially straight. Hardwood support beams shall be 2 inch x 2 inch minimum, or equivalent. Metal support beams shall be either studded T or U steel type with or minimum weight of 1.28 lbs per linear foot, or as approved by the Engineer.

Net reinforced fence shall be 2 inch wide by 4 inch high welded wire fabric mesh, 14 gauge 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 rings. Wire ties shall be 14 gauge minimum, staples shall be no. 9 wire minimum with a 1/2 inch minimum crown length, and rings shall be galvanized, or as approved by the Engineer.

A prefabricated unit with geotextile fabric, posts, supports, and wire mesh meeting the minimum specifications in this Item may be used in lieu of a constructed inlet protection barrier.

Fiber roll material for inlet protection barrier alternative design shall be as approved by the Engineer.

719.3

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.

Inlet protection barriers shall be installed at the locations shown on the construction drawings and in accordance with the Standard Civil Drawing or as directed by the Engineer. Inlet protection 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. Inlet protection 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 inches above the ground. Posts shall be placed with a maximum spacing of 4 feet. Horizontal support beams shall be securely attached from post to post and no higher than the top of the filtering material.

Trenches shall be dug along the upstream side of the barrier to anchor at least 8 inches of the geotextile 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 mid-section. 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 rings, the geotextile fabric shall be attached to the net reinforced fence. The fabric shall be attached at the top and mid-section. The horizontal spacing of the attachment shall be every 24 inches, or less. Additional ties, 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 entrenched and attached to the posts so as a minimum of 18 inches of the fabric is above the ground.

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.

After the geotextile fabric has been securely attached, the trench shall be backfilled and hand tamped as approved by the Engineer.

For inlet protection barriers with reinforced filter fabric, if the immediately adjacent surface is a hard packed surface, the geotextile fabric shall extend outward away from the inlet protection barrier and upstream along the hard packed surface for at least 12 inches and be weighed down continuously along the perimeter of the structure with at least 4 inches of clean gravel or nylon gravel filled bags

The Contractor shall inspect the inlet protection 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. (Note: Maintenance for Item 719 is paid for under Item 751 "SWPPP Inspection and Maintenance")

The Contractor is responsible for removal and proper disposal of sediment and debris from the inlet protection 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 inlet protection 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 compliance with current local, State and Federal 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.

- 719.4 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 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.
- 719.5 Measurement. When paid for separately as a pay item, measurement shall be by the unit, for each inlet protection barrier, complete in place.
- 719.6 Payment. Payment for each unit of an inlet protection barrier 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 percent of the total unit cost shall be for the furnishing and installing all material. Thus, 40 percent of the total unit cost shall be for the removal of erosion protection and sediment control systems: inlet protection barriers, after final stabilization, at the end of the project.

There are line code(s), description(s), and unit(s) for this Item.

NOTE: This Item requires a Standard Civil Drawing that shall be incorporated into the contract documents.

NOTE: This Item requires other Standard Specifications

Item 751 "SWPPP Inspection and Maintenance"

END OF ITEM 719

ITEM 741

INLET PROTECTION BARRIER
(FOR STAGE II INLETS, GRAVEL BAGS)

- 741.1 Description: This Item shall govern for furnishing, installing, and removing temporary erosion protection and sediment control gravel bag inlet protection barrier for a stage II inlet in accordance with these Standard Specifications and construction drawings, and as directed by the Engineer. Gravel bag inlet protection barriers for stage II inlets are geotextile fabric bags filled with clean gravel and placed around a stage II inlet, such as a curb inlet. This work shall be performed during construction operations and prior to final stabilization to control erosion and sedimentation.
- 741.2 Materials: Bags shall consist of geotextile fabric (filter fabric) made of long-chain synthetic polymers composed of at least 95 percent by weight of polyolefins in a woven fabric. The geotextile fabric shall meet or exceed the following specifications shown in Table 1:

TABLE 1

SILT FENCE GEOTEXTILE FABRIC PROPERTIES			REQUIREMENTS UNSUPPORTED SILT FENCE	
	Units	Supported Silt Fence	Geotextile Elongation $\geq 50\%$	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 (Max. 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
<p>NOTES:</p> <p>1. Table 1 adapted from AASHTO M 288 <i>Geotextile Specification for Highway Applications</i> Table 6. Temporary Silt Fence Property Requirements.</p> <p>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.</p>				

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.

The bag size shall be as follows:

Length:	18 to 24 inches
Width:	12 to 18 inches
Thickness:	6 to 8 inches

The bag shall be filled with open-graded gravel and weigh 50 to 75 pounds. The gravel shall be free from adherent coatings, salt, alkali, dirt, clay, or organic and injurious matter.

Nylon rope shall be used to secure the closure of the gravel filled bag.

741.3

Construction Methods: Gravel bag inlet protection barrier for a stage II inlet shall be installed at the locations shown on the construction drawings and in accordance with the Standard Civil Drawing or as directed by the Engineer. Inlet protection barrier for a stage II inlet 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. Inlet protection barrier for a stage II inlet shall be installed so as surface runoff will percolate through the system and allow sediment to be retained and accumulated.

Gravel bags for the inlet protection barrier shall be placed so as the gravel bags are placed on each side of the curb inlet along the gutter line and continuously along the back of the curb inlet. Gravel bags shall not be placed so as the throat of the inlet is blocked. Gravel bags shall be placed in a row with ends tightly abutting the adjacent bag.

The Contractor shall inspect the gravel bag inlet protection barrier 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. (Note: Maintenance for Item 741 is paid for under Item 751 "SWPPP Inspection and Maintenance")

The Contractor is responsible for removal and proper disposal of sediment and debris from the inlet protection barrier system and as directed by the Engineer. 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 gravel bags.

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 compliance with current local, State, and Federal 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.

- 741.4 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 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.
- 741.5 Measurement. Inlet protection barrier for a stage II inlet shall be measured as "each", complete in place all necessary gravel bags to protect against erosion and control sediment.
- 741.6 Payment. Payment for a gravel bag inlet protection barrier for a stage II inlet shall include and be full compensation for all labor, equipment, materials, supervision, and all incidental expenses for construction of this Item, where 60 percent of the total unit cost shall be for the furnishing and installing all materials. Thus, 40 percent of the total unit cost shall be for the removal and disposal of erosion protection and sediment control systems: inlet protection 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 Item requires a Standard Civil Drawing that shall be incorporated into the contract documents.

NOTE: This Item requires other Standard Specifications.

Item 751 "SWPPP Inspection and Maintenance"

END OF ITEM 741

ITEM 751

SWPPP INSPECTION AND MAINTENANCE

751.1 Description. This Item shall govern for 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 Harris County and the Contractor, prior to the Contract start date.

A Storm Water Pollution Prevention Plan (SWPPP) has been established 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, Rock Filter Dam, 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 "Harris County General Conditions".

751.3 Submittal. The Contractor shall be required to submit and fill out the SWPPP 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. 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 (SWPPP)" and required weekly inspections and Reports. All items noted in each weekly SWPPP 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, a prorated portion of the SWPPP Monthly Maintenance Fee 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 Item requires other Standard Specifications as designated in the Project Manual.

NOTE: This Item requires other Standard Specifications

Item 162 "Sodding For Erosion Control and Stabilization"

Item 165 "Hydro-Mulch Seeding (For Erosion Control and Stabilization)"

Item 713 "Reinforced Filter Fabric Barrier"

Item 719 "Inlet Protection Barriers"

Item 724 "Stabilized Construction Access"

Item 725 "General Source Controls (SWPPP)"

Item 730 "Concrete Truck Washout Structures"

Item 741 "Inlet Protection Barrier (For Stage II Inlets, Gravel Bags)"

END OF ITEM 751

Section 02505

HIGH DENSITY POLYETHYLENE (HDPE) SOLID AND PROFILE WALL PIPE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. High density polyethylene (HDPE) pipe for gravity sanitary sewers and drains, including fittings.
- B. High density polyethylene (HDPE) pipe for sanitary sewer force mains, including fittings.
- C. High density polyethylene (HDPE) pipe for gravity storm sewers and drains, including fittings.
- D. High density polyethylene (HDPE) pipe for storm sewers culverts.

1.02 MEASUREMENT AND PAYMENT

- A. Unit Prices.
 - 1. No separate payment will be made for HDPE pipe under this Section. Include cost in unit prices for work, as specified in following sections:
 - a. Section 02531 - Gravity Sanitary Sewers.
 - b. Section 02532 - Sanitary Sewer Force Mains.
 - c. Section 02550 - Sliplining Sanitary Sewers.
 - d. Section 02571 - Pipe Bursting/Crushing Sanitary Sewers.
 - e. Section 02631 - Storm Sewers.
 - 2. Refer to Section 01270 - Measurement and Payment for unit price procedures.
- B. Stipulated Price (Lump Sum). If Contract is Stipulated Price Contract, payment for work in this Section is included in total Stipulated Price.

1.03 REFERENCES

- A. ASTM D 618 - Standard Practice for Conditioning Plastics for Testing.
- B. ASTM D 1248 - Standard Specification for Polyethylene Plastics Extrusion Materials for

Wire and Cable

- C. ASTM D 2321 - Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
- D. ASTM D 2657 - Standard Practice for Heat Fusion Joining Polyolefin Pipe and Fittings.
- E. ASTM D 2774 - Standard Practice for Underground Installation of Thermoplastic Pressure Piping
- F. ASTM D 2837 - Standard Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products.
- G. ASTM D 3035 - Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter.
- H. ASTM D 3212 - Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
- I. ASTM D 3350 - Standard Specification for Polyethylene Plastics Pipe and Fittings Materials.
- J. ASTM F 477 - Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
- K. ASTM F 714 - Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter.
- L. ASTM F 894 - Standard Specification for Polyethylene (PE) Large-Diameter Profile Wall Sewer and Drain Pipe.
- M. ASTM F 2306 – Standard Specification for 12 to 60 in. [300 to 1500 mm] Annular Corrugated Profile-Wall Polyethylene (PE) Pipe and Fittings for Gravity-Flow Storm Sewer and Subsurface Drainage Applications.
- N. ASTM F 2487 – Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Corrugated High Density Polyethylene and Polypropylene Pipelines 1,2.
- O. ASTM F 2510 – Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures and Corrugated Dual- and Triple-Wall Polyethylene and Polypropylene Pipes.
- P. AWWA C 906 - Polyethylene (PE) Pressure Pipe and Fittings, 4 In. Through 65 In. (100 mm Through 1,650 mm), for Waterworks

1.04 SUBMITTALS

- A. Conform to requirements of Section 01330 - Submittal Procedures.

- B. Submit shop drawings showing design of pipe and fittings indicating alignment and grade, pipe length, laying dimensions, fabrication, fittings, flanges, gasket material, and special details.
- C. Submit detailed calculations for pipe design per AASHTO LRFD Bridge Design Specifications.
- D. Submit details of Pipe Joints and jointing procedure for HDPE pipe.

1.05 QUALITY CONTROL

- A. Provide manufacturer's certificate of conformance to Specifications.
- B. Furnish pipe and fittings that are homogeneous throughout and free from visible cracks, holes, foreign inclusions, or other injurious defects. Provide pipe as uniform as commercially practical in color, opacity, density, and other physical properties.
- C. Project Manager reserves right to inspect pipes or witness pipe manufacturing. Inspection shall in no way relieve manufacturer of responsibilities to provide products that comply with applicable standards and these Specifications.
 - 1. Manufacturer's Notification: Should Project Manager wish to witness manufacture of specific pipes, manufacturer shall provide Project Manager with minimum three weeks notice of when and where production of those specific pipes will take place.
 - 2. Failure to Inspect. Approval of products or tests is not implied by Project Manager's decision not to inspect manufacturing, testing, or finished pipes.
- D. Pipe manufacturer to provide services of experienced, competent, and authorized representative to visit site to advise and consult Contractor during jointing and installation of pipe.

1.06 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with documented experience of minimum 5 years of pipe installations that have been in successful, continuous service for same type of service as proposed Work.

PART 2 PRODUCTS

2.01 GENERAL

- A. Provide products manufactured by companies listed on the City of Houston Standard Product List.
- B. Furnish solid wall pipe with plain end construction for heat joining (butt fusion) conforming to ASTM D 2657. Utilize controlled temperatures and pressures for joining to produce fused

leak-free joint.

- C. Furnish profile-wall gravity sanitary sewer pipe with bell-and-spigot end construction conforming to ASTM D 3212. Joining will be accomplished with elastomeric gasket in accordance with manufacturer's recommendations. Use integral bell-and-spigot gasketed joint designed so that when assembled, elastomeric gasket, contained in machined groove on pipe spigot, is compressed radially in pipe bell to form positive seal. Design joint to avoid displacement of gasket when installed in accordance with manufacturer's recommendations.
- D. Furnish solid wall pipe for sanitary sewer force mains with minimum working pressure rating of 150 psi, and with inside diameter equal to or greater than nominal pipe size indicated on Drawings.
- E. Furnish corrugated profile-wall polyethylene (CPP) pipe for gravity storm sewer and storm sewer culvert pipe. Joints shall be installed such that connection of pipe sections will form continuous line free from irregularities in flow line. Suitable joints are:
 - 1. Integral Bell and Spigot. Bell shall overlap minimum of two corrugations of spigot end when fully engaged.
 - 2. Exterior Bell and Spigot. Bell shall be fully welded to exterior of pipe and overlap spigot end so that flow lines and ends match when fully engaged.
- F. Jointing:
 - 1. Gaskets:
 - a. Meet requirements of ASTM F 477. Use gasket molded into circular form or extruded to proper section and then spliced into circular form. When no contaminant is identified, use gaskets of properly cured, high-grade elastomeric compound. Basic polymer shall be natural rubber, synthetic elastomer, or blend of both.
 - b. HDPE Pipes are Not allowed to be installed in potentially contaminated areas, unless approved by City Engineer.

CONTAMINANT	GASKET MATERIAL REQUIRED
Petroleum (diesel, gasoline)	Nitrile Rubber
Other Contaminants	As recommended by pipe manufacturer

- 2. Lubricant. Use lubricant for assembly of gasketed joints which has no detrimental effect on gasket or on pipe, in accordance with manufacturer's recommendations.

2.02 MATERIALS FOR SANITARY SEWER

- A. Pipe and Fittings: High density, high molecular weight polyethylene pipe material meeting requirements of Type III, Class C, Category 5, Grade P34, as defined in ASTM D 1248. Material meeting requirements of cell classification 345434D or E, in accordance with ASTM D 3350, are also suitable for making pipe products under these specifications. Inner wall of pipe shall be of light color for television inspection purposes.
- B. Other Pipe Materials: Materials other than those specified in Paragraph 2.02A, Pipe and Fittings, may be used as part of profile construction, e.g., as core tube to support shape of profile during processing, provided that these materials are compatible with base polyethylene material and are completely encapsulated in finished product and in no way compromise performance of pipe products in intended use. Examples of suitable material include polyethylene and polypropylene.

2.03 MATERIALS FOR GRAVITY STORM SEWERS AND STORM SEWER CULVERTS

- A. Pipe and Fittings: High density, high molecular weight polyethylene HDPE virgin compound material meeting requirements of cell class outlined in ASTM D 3350. Manufacturing shall meet requirements of ASTM F 2306.

2.04 TEST METHODS FOR SANITARY SEWER

- A. Conditioning. Conditioning of samples prior to and during tests is subject to approval by Project Manager. When referee tests are required, condition specimens in accordance with Procedure A in ASTM D 618 at 73.4 degrees F plus or minus 3.6 degrees F and 50 percent relative humidity plus or minus 5 percent relative humidity for not less than 40 hours prior to test. Conduct tests under same conditions of temperature and humidity unless otherwise specified.
- B. Flattening. Flatten three specimens of pipe, prepared in accordance with Paragraph 2.05A, in suitable press until internal diameter has been reduced to 40 percent of original inside diameter of pipe. Rate of loading shall be uniform and at 2 inches per minute. Test specimens, when examined under normal light and with unaided eye, shall show no evidence of splitting, cracking, breaking, or separation of pipe walls or bracing profiles.
- C. Joint Tightness. Test for joint tightness in accordance with ASTM D 3212, except replace shear load transfer bars and supports with 6-inch-wide support blocks that can be either flat or contoured to conform to pipe's outer contour.
- D. Purpose of Tests. Flattening and joint tightness tests are not intended to be routine quality control tests, but rather to qualify pipe to a specified level of performance.

2.05 TEST METHODS FOR GRAVITY STORM SEWERS AND STORM SEWER CULVERTS

- A. All testing and material requirements shall be in accordance with ASTM F 2306.

- B. MANDREL TESTING: use a mandrel to test flexible pipe for deflection. Refer to Section 02533 – Acceptance Testing for Sanitary Sewers for a mandrel and test requirements.

2.06 MARKING

- A. Mark each standard and random length of pipe in compliance with these Specifications with following information:
 - 1. Pipe size.
 - 2. Pipe class.
 - 3. Production code.
 - 4. Material designation.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Conform to requirements of following Sections:
 - 1. Section 02550 - Sliplining Sanitary Sewers.
 - 2. Section 02531 - Gravity Sanitary Sewers.
 - 3. Section 02532 - Sanitary Sewer Force Mains.
 - 4. Section 02533 - Acceptance Testing for Sanitary Sewers.
 - 5. Section 02571 - Pipe Bursting/Crushing Sanitary Sewers.
 - 6. Section 02631 - Storm Sewers
- B. Install pipe in accordance with the manufacturers recommended installation procedures and ASTM D 2774 for pressure pipe and ASTM D 2321 for gravity flow pipe.
- C. HDPE pipe is not approved in applications requiring augering of pipe.
- D. Bedding and backfill: Conform to requirements of Section 02317 - Excavation and Backfill for Utilities.
- E. Use only workmen trained in the installation of HDPE Pipe.
- F. Do not store pipe uncovered direct in direct sunlight. Allow pipe temperature to approach ground temperature before each individual pipe section is terminally connected.

- G. Joints: Join sections of HDPE pipe into continuous lengths above ground by thermal butt fusion method in accordance with AWWA C 906 and pipe manufacturer's recommendations for specified service. Fusion joints: meeting minimum requirements of manufacturer for cool down time and other fusing requirements. Socket fusion and extrusion welding or hot gas welding will not be accepted.

- H. Cutting pipe: Comply with pipe manufacturer's recommendations. After cutting, leave end pipe in accordance with manufacturer's recommendations.

END OF SECTION

SPECIAL PROVISION TO ITEM 1

"DEFINITION OF TERMS"

For this project, Item 1 of the Harris County General Conditions is hereby amended with respect to the clauses cited below and no other clauses or requirements of this Item are waived or changed hereby:

THE TERM "DEPARTMENT," "HARRIS COUNTY," "HARRIS COUNTY ENGINEERING DEPARTMENT", SHALL, IN THE USE OF THE STANDARD SPECIFICATIONS FOR ALL WORK IN CONNECTION WITH THIS PROJECT, BE DEEMED TO MEAN GALVESTON COUNTY, PARTY OF THE FIRST PART IN ACCOMPANYING CONTRACT OR CONTRACTS. ANY REFERENCE IN THE HARRIS COUNTY STANDARD SPECIFICATIONS TO THE HARRIS COUNTY, ITS OFFICIALS, EMPLOYEES, OR AGENTS SHALL BE DEEMED TO MEAN GALVESTON COUNTY, ITS OFFICIALS, EMPLOYEES, OR AGENTS.

Article 1.19, "ENGINEER", is revised to read in its entirety as follows:

1.19 ENGINEER. Galveston County Engineer or his authorized representatives. If a representative is authorized to function as the ENGINEER'S representative with respect to certain ENGINEER'S activities that representative's responsibilities and obligations shall be limited as provided in Article 1.36.

Article 1.20, "INSPECTOR," is revised to read in its entirety as follows:

1.20 INSPECTOR. The representative of the ENGINEER assigned and authorized to observe or inspect any or all parts of the work and the material to be used therein. A representative is authorized to function as the ENGINEER'S representative with respect to certain activities, and that representative's responsibilities and obligations shall be limited as provided in Article 1.36.

Special Provisions to Item 1

"DEFINITION OF TERMS"

ADDITIONAL ARTICLES ARE ADDED AS FOLLOWS:

1.36 CONSULTING ENGINEER. Independent engineering firms contracting with Galveston County for the providing of professional engineering services. The engineering firms are the representatives of Galveston County only to the extent provided in the Contract documents and in such special instances where they are specifically authorized by Galveston County so to act. All powers and rights assigned by Galveston County to the engineering firms with respect to the work are solely and exclusively for the benefit of Galveston County and not for the CONTRACTOR. In carrying out of its powers and rights assigned by Galveston County the engineering firms shall function as a representative of Galveston County and shall act by and for Galveston County. Irrespective of what authority may be assigned by Galveston County to the engineering firms, CONTRACTOR remains fully and solely responsible and liable for its obligations to perform the work in accordance with the requirements of the plans and specifications; to insure against failures in safety precautions; to carry out his work pursuant to safe methods of construction; to select and fulfill the proper manner, means, and methods in performing the work in order to meet the plans and specifications; and to complete the work in accordance with the contract documents.

SPECIAL PROVISION TO ITEM 01270

MEASUREMENT AND PAYMENT

For this project, Item 01270 of the City of Houston Standard Specifications is hereby amended with respect to the clauses cited below and no other clauses or requirements of this Item are waived or changed hereby.

ARTICLE 1.03 "UNIT QUANTITIES SPECIFIED" is hereby deleted in its entirety.

ARTICLE 1.04 "MEASUREMENT OF QUANTITIES" is hereby revised to read as follows: Plans quantities may not represent the exact quantity of work performed or material moved, handled, or placed during the execution of the Contract. The estimated bid quantities are designated as final payment quantities.

ARTICLE 1.05B is hereby revised to read as follows:

Total compensation for required Unit Price work shall be included in Unit Price bid in Document Bid Proposal Form. Claims for payment as Unit Price work, but not specifically covered in the list of Unit Prices contained in Document Bid Proposal, will not be accepted.

ARTICLE 1.05C is hereby deleted in its entirety.

ARTICLE 1.06 "NONCONFORMANCE ASSESSMENT" hereby revised to read as follows:

A. Remove and replace work, or portions of the Work, not conforming to the Contract documents.

B. When not practical to remove and replace work, County Engineer will direct one of the following remedies:

1. Nonconforming work will remain as is, but Unit Price will be adjusted lower at discretion of County Engineer.

2. Nonconforming work will be modified as authorized by County Engineer, and the Unit Price will be adjusted lower at the discretion of County Engineer, when modified work is deemed less suitable than specified.

C. Specification sections may modify the above remedies or may identify a specific formula or percentage price reduction.

D. Authority of County Engineer to assess nonconforming work and identify payment adjustment is final.



SMALL CONSTRUCTION SITE NOTICE

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Stormwater Program
TPDES GENERAL PERMIT TXR150000

The following information is posted in compliance with **Part II.E.2.** of the TCEQ General Permit Number TXR150000 for discharges of stormwater runoff from small construction sites. Additional information regarding the TCEQ stormwater permit program may be found on the internet at:

<https://www.tceq.texas.gov/permitting/stormwater/construction>

Operator Name:	
Contact Name and Phone Number:	
Project Description: <i>Physical address or description of the site's location, estimated start date and projected end date, or date that disturbed soils will be stabilized</i>	
Location of Stormwater Pollution Prevention Plan:	

For Small Construction Activities Authorized Under Part II.E.2. (Obtaining Authorization to Discharge) the following certification must be completed:

I _____ (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.2. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A stormwater pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title _____ Date _____

_____ Date Notice Removed

_____ MS4 operator notified per Part II.F.3.