

# CITY OF CORPUS CHRISTI CONTRACTS AND PROCUREMENT DEPARTMENT

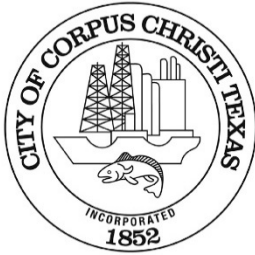


LAGUNA SHORES RD – CARIBBEAN TO  
HUSTLIN' HORNET - PROJ. NO. 18024A

CONTRACT NO. 3128

Project Specifications and Drawings  
available at:

Y:\00 LEGISTAR CONST PLANS SPECS\Item No 20 0938 Laguna  
Caribbean to Hornet



## **00 52 23      AGREEMENT**

This Agreement is between the City of Corpus Christi (Owner) and **Haas-Anderson Construction, Ltd** (Contractor).

Owner and Contractor agree as follows:

### **ARTICLE 1 – WORK**

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as:

**Laguna Shores Road – Caribbean to Hustlin’ Hornet (Bond 2018)**  
**Project Number 18024A**

### **ARTICLE 2 – DESIGNER AND OWNER’S AUTHORIZED REPRESENTATIVE**

- 2.01 The Project has been designed by:

**LJA Engineering, Inc. – Jeff Coym, PE – Vice President**  
**5350 South Staples Street, Suite 425**  
**Corpus Christi, Texas 78411**  
**jcoym@lja.com**

- 2.02 The Owner’s Authorized Representative for this Project is:

**Brett Van Hazel, PM – Asst. Director of Construction**  
**City of Corpus Christi - Engineering Services**  
**4917 Holly Rd, Bldg #5**  
**Corpus Christi, TX 78411**

### **ARTICLE 3 – CONTRACT TIMES**

- 3.01 Contract Times

- A. The Work is required to be substantially completed within **480** days after the date when the Contract Times commence to run as provided in the Notice to Proceed and is to be completed and ready for final payment in accordance with Paragraph 17.16 of the General Conditions within **510** days after the date when the Contract Times commence to run.

- B. Performance of the Work is required as shown in Paragraph 7.02 of the General Conditions.
- C. Milestones, and the dates for completion of each, are as defined in Section 01 35 00 SPECIAL PROCEDURES.

### 3.02 Liquidated Damages

- A. Owner and Contractor recognize that time limits for specified Milestones, Substantial Completion, and completion and readiness for Final Payment as stated in the Contract Documents are of the essence of the Contract. Owner and Contractor recognize that the Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 3.01 and as adjusted in accordance with Paragraph 11.05 of the General Conditions. Owner and Contractor also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
  - 1. Substantial Completion: Contractor shall pay Owner **\$1,400** for each day that expires after the time specified in Paragraph 3.01 for Substantial Completion until the Work is substantially complete.
  - 2. Completion of the Remaining Work: Contractor agrees to pay Owner **\$1,400** for each day that expires after the time specified in Paragraph 3.01 for completion and readiness for final payment until the Work is completed and ready for final payment in accordance with Paragraph 17.16 of the General Conditions.
  - 3. Liquidated damages for failing to timely attain Substantial Completion and Final Completion are not additive and will not be imposed concurrently.
  - 4. Milestones: Contractor agrees to pay Owner liquidated damages as stipulated in SECTION 01 35 00 SPECIAL PROCEDURES for failure to meet Milestone completions.
  - 5. The Owner will determine whether the Work has been completed within the Contract Times.
- B. Owner is not required to only assess liquidated damages, and Owner may elect to pursue its actual damages resulting from the failure of Contractor to complete the Work in accordance with the requirements of the Contract Documents.

## ARTICLE 4 – CONTRACT PRICE

- 4.01 Owner will pay Contractor for completion of the Work in accordance with the Contract Documents at the unit prices shown in the attached BID FORM. Unit prices have been computed in accordance with Paragraph 15.03 of the General Conditions. Contractor acknowledges that estimated quantities are not guaranteed, and were solely for the purpose of comparing Bids, and final payment for all unit price items will be based on actual quantities, determined as provided in the Contract Documents.

Total Base Bid No. 1                      \$ 6,263,934.90

## **ARTICLE 5 – PAYMENT PROCEDURES**

- 5.01 Submit Applications for Payment in accordance with Article 17 of the General Conditions. Applications for Payment will be processed by the OAR as provided in the General Conditions.
- 5.02 Progress Payments; Retainage:
- A. The Owner will make progress payments on or about the 25th day of each month during performance of the Work. Payment is based on Work completed in accordance with the Schedule of Values established as provided in the General Conditions.
  - B. Progress payments equal to the full amount of the total earned value to date for completed Work minus the retainage listed below and properly stored materials will be made prior to Substantial Completion.
    - 1. The standard retainage is 5 percent.
  - C. Payment will be made for the amount determined per Paragraph 5.02.B, less the total of payments previously made and less set-offs determined in accordance with Paragraph 17.01 of the General Conditions.
  - D. At the Owner's option, retainage may be increased to a higher percentage rate, not to exceed ten percent, if progress on the Project is considered to be unsatisfactory. If retainage in excess of the amount described above is held prior to Substantial Completion, the Owner will place the additional amount in an interest bearing account. Interest will be paid in accordance with Paragraph 6.01.
  - E. At the Owner's option, Owner may pay Contractor 100 percent of the Work completed, less amounts withheld in accordance with Paragraph 17.01 of the General Conditions and less 200 percent of OAR's estimate of the value of Work to be completed or corrected to reach Substantial Completion. Owner may, at its sole discretion, elect to hold retainage in the amounts set forth above for progress payments prior to Substantial Completion if Owner has concerns with the ability of the Contractor to complete the remaining Work in accordance with the Contract Documents or within the time frame established by this Agreement. Release or reduction in retainage is contingent upon and consent of surety to the reduction in retainage.
- 5.03 Owner will pay the remainder of the Contract Price as recommended by OAR in accordance with Paragraph 17.16 of the General Conditions upon Final Completion and acceptance of the Work.

## **ARTICLE 6 – INTEREST ON OVERDUE PAYMENTS AND RETAINAGE**

- 6.01 The Owner is not obligated to pay interest on overdue payments except as required by Texas Government Code Chapter 2251. Invoices must comply with Article 17 of the General Conditions.
- 6.02 Except as specified in Article 5, the Owner is not obligated to pay interest on moneys not paid except as provided in Texas Government Code Chapter 2252.

## ARTICLE 7 – CONTRACTOR’S REPRESENTATIONS

7.01 The Contractor makes the following representations:

- A. The Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
- B. The Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. The Contractor is familiar with Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. The Contractor has carefully studied the following Site-related reports and drawings as identified in the Supplementary Conditions:
  - 1. Geotechnical Data Reports regarding subsurface conditions at or adjacent to the Site;
  - 2. Drawings of physical conditions relating to existing surface or subsurface structures at the Site;
  - 3. Underground Facilities referenced in reports and drawings;
  - 4. Reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site; and
  - 5. Technical Data related to each of these reports and drawings.
- E. The Contractor has considered the:
  - 1. Information known to Contractor;
  - 2. Information commonly known to contractors doing business in the locality of the Site;
  - 3. Information and observations obtained from visits to the Site; and
  - 4. The Contract Documents.
- F. The Contractor has considered the items identified in Paragraphs 7.01.D and 7.01.E with respect to the effect of such information, observations, and documents on:
  - 1. The cost, progress, and performance of the Work;
  - 2. The means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and
  - 3. Contractor’s safety precautions and programs.
- G. Based on the information and observations referred to in the preceding paragraphs, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- H. The Contractor is aware of the general nature of Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- I. The Contractor has correlated the information known to the Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract

Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

- J. The Contractor has given the OAR written notice of all conflicts, errors, ambiguities, or discrepancies that the Contractor has discovered in the Contract Documents, and the written resolution provided by the OAR is acceptable to the Contractor.
- K. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- L. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.
- M. **CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER'S INDEMNITEES IN ACCORDANCE WITH PARAGRAPH 7.14 OF THE GENERAL CONDITIONS AND THE SUPPLEMENTARY CONDITIONS.**

## **ARTICLE 8 – ACCOUNTING RECORDS**

- 8.01 Accounting Record Availability: The Contractor shall keep such full and detailed accounts of materials incorporated and labor and equipment utilized for the Work consistent with the requirements of Paragraph 15.01 of the General Conditions and as may be necessary for proper financial management under this Agreement. Subject to prior written notice, the Owner shall be afforded reasonable access during normal business hours to all of the Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and the Contractor's fee. The Contractor shall preserve all such documents for a period of 3 years after the final payment by the Owner.

## **ARTICLE 9 – CONTRACT DOCUMENTS**

- 9.01 Contents:

- A. The Contract Documents consist of the following:
  - 1. Exhibits to this Agreement:
    - a. Contractor's Bid Form.
    - b. **List as necessary.**
  - 2. Specifications, forms, and documents listed in SECTION 00 01 00 TABLE OF CONTENTS.
  - 3. Drawings listed in the Sheet Index.
  - 4. Solicitation documents and Contractor's response, which are incorporated by reference.
  - 5. Addenda, which are incorporated by reference.
  - 6. Documentation required by the Contract Documents and submitted by Contractor prior to Notice of Award, which is incorporated by reference.
- B. There are no Contract Documents other than those listed above in this Article.
- C. The Contract Documents may only be amended, modified, or supplemented as provided in Article 11 of the General Conditions.

**ARTICLE 10 – CONTRACT DOCUMENT SIGNATURES**

**ATTEST**

**CITY OF CORPUS CHRISTI**

\_\_\_\_\_  
Rebecca Huerta  
City Secretary

\_\_\_\_\_  
Michael Rodriguez  
Chief of Staff

\_\_\_\_\_ AUTHORIZED

**APPROVED AS TO LEGAL FORM:**

BY COUNCIL \_\_\_\_\_

\_\_\_\_\_  
Assistant City Attorney

**ATTEST (IF CORPORATION)**

**CONTRACTOR**

\_\_\_\_\_  
(Seal Below)

*Note: Attach copy of authorization to sign if  
person signing for CONTRACTOR is not President,  
Vice President, Chief Executive Officer, or Chief  
Financial Officer*

\_\_\_\_\_  
Haas-Anderson Construction, Ltd.

By: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
1402 Holly Rd.

Address

\_\_\_\_\_  
Corpus Christi, TX 78417

City

State

Zip

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Fax

\_\_\_\_\_  
dhaas@haas-anderson.com


\_\_\_\_\_  
EMail

**END OF SECTION**

Project Name:	<b>Laguna Shores Road - Caribbean to Hustlin' Hornet (Bond 2018)</b>
Project Number:	18024A
Owner:	City of Corpus Christi
Bidder:	<b>Haas-Anderson Construction Ltd.</b>
OAR:	
Designer:	LJA Engineering, Inc

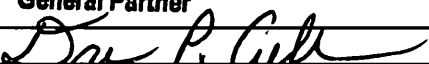
By its signature below, Bidder accepts all of the terms and conditions of the Bid Acknowledgement, acknowledges receipt of all Addenda to the Bid and agrees, if this Bid is accepted, to enter into a Contract with the Owner and complete the Work in accordance with the Contract Documents for the Bid price.

Bidder: **Haas-Anderson Construction Ltd.** (full legal name of Bidder)

Signature:  (signature of person with authority to bind the Bidder)

Name: P. O. Haas (printed name of person signing Bid Form)

Title: **President, Haas-Anderson Management L.C.,**  
**General Partner** (title of person signing Bid Form)

Attest:  (signature)

State of Residency: Texas

Federal Tx ID No. 74-2212956

Address for Notices: **Haas-Anderson Construction Ltd**  
1402 Holly Rd.  
Corpus Christi, Tx, 78417

Phone: 8532535 Email: dhaas@haas-anderson.com



**Basis of Bid**

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
<b>Base Bid No. 1 - HMAc Pavement</b>					
<b>Part 1A - General (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)</b>					
1A1	Mobilization (Max. 5% of Part 1A)	LS	1	\$ 15,000.00	\$ 15,000.00
1A2	Bonds & Insurance (Base Bid 1)	AL	1	\$ 41,000.00	\$ 41,000.00
1A3	Traffic Control Mobilization/Adjustments	LS	1	\$ 100,000.00	\$ 100,000.00
1A4	Traffic Control Items (Signs, Barricades, Channelizing Devices, LPCB, etc.)	MO	16	\$ 2,500.00	\$ 40,000.00
1A5	Message Boards for Traffic Control	EA	2	\$ 15,000.00	\$ 30,000.00
1A6	Ozone Advisory Day	DAYS	3	\$ 1.10	\$ 3.30
1A7	Storm Water Pollution Prevention Plan	LS	1	\$ 50,000.00	\$ 50,000.00
1A8	Inlet Protection	EA	1	\$ 288.00	\$ 288.00
1A9	Rock Filter Dam	EA	17	\$ 749.00	\$ 12,733.00
1A10	Silt Fence	LF	3,777	\$ 5.05	\$ 19,073.85
1A11	Revegetation (Hydromulch)	SY	7,937	\$ 1.55	\$ 12,302.35
1A12	Contingency Allowance for Unanticipated Disposal of Contaminated Groundwater	AL	1	\$ 5,000.00	\$ 5,000.00
<b>SUBTOTAL PART - GENERAL (Items 1A1 thru A12)</b>					<b>\$ 325,400.50</b>

<b>Part 1B - STREET IMPROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)</b>					
1B1	Mobilization (Max. 5% of Part 1B)	LS	1	\$ 95,000.00	\$ 95,000.00
1B2	Removal of Sign and Sign Support Assembly	EA	6	\$ 55.00	\$ 330.00
1B3	Remove Existing Metal Beam Guard Rail	LF	101	\$ 2.40	\$ 242.40
1B4	Pulverize & Recompact Existing Roadway Pavement	SY	8,143	\$ 1.95	\$ 15,878.85
1B5	Street Excavation (1' Beyond E.O.P.)	SY	11,276	\$ 3.00	\$ 33,828.00
1B6	Subgrade Preparation (1' Beyond E.O.P.)	SY	19,419	\$ 3.00	\$ 58,257.00
1B7	TX-5 Geogrid (1' Beyond E.O.P.)	SY	19,419	\$ 4.00	\$ 77,676.00
1B8	11" Type A, Grade 1-2 Crushed, Limestone Base per TxDOT Std. Spec. Item No. 247 (1' Beyond E.O.P.)	SY	19,419	\$ 24.00	\$ 466,056.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1B9	One Course Surface Treatment Underseal	SY	19,419	\$ 2.20	\$ 42,721.80
1B10	3" Type 'D' HMAc	SY	18,295	\$ 18.00	\$ 329,310.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1B11	Concrete Driveway (Incl. Existing Driveway Removal)	SF	9,753	\$ 12.00	\$ 117,036.00
1B12	Pavement Markings (24" Wide, White, Type C Heat Applied, 125 mil, Preformed Thermoplastic "Stop Bar")	LF	84	\$ 18.00	\$ 1,512.00
1B13	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – Yellow 4" Solid	LF	6,968	\$ 0.45	\$ 3,135.60
1B14	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – Yellow 4" Broken	LF	340	\$ 1.15	\$ 391.00
1B15	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – White 4" Solid	LF	9,849	\$ 0.45	\$ 4,432.05
1B16	TYII-A-A Raised Pavement Marker (Reflectorized)	EA	107	\$ 5.75	\$ 615.25
1B17	TYII-B-B Raised Pavement Market (Reflectorized)	EA	18	\$ 12.00	\$ 216.00
1B18	Type 2 Object Marker with Flexible Post (OM-2Z) (FLX)	EA	8	\$ 110.00	\$ 880.00
1B19	Combo Stop Sign (R1-1) (30"x30") / Street Name Sign (Incl. Metal Pole and Foundation)	EA	3	\$ 836.00	\$ 2,508.00
1B20	Stop Sign (R1-1) (30"x30") (Incl. Metal Pole and Foundation)	EA	1	\$ 577.00	\$ 577.00
1B21	All Way (R1-3P) (18"x6') (Incl. Metal Pole and Foundation)	EA	3	\$ 432.00	\$ 1,296.00
1B22	Stop Ahead (W3-1) (30"x30") (Incl. Metal Pole and Foundation)	EA	4	\$ 548.00	\$ 2,192.00
1B23	Speed Limit Sign (R2-1) (24"x30") (Incl. Metal Pole and Foundation)	EA	4	\$ 548.00	\$ 2,192.00
1B24	Reverse Curve (W1-4L) (30"x30") (Incl. Metal Pole and Foundation)	EA	2	\$ 588.00	\$ 1,176.00
1B25	Two Direction Large Arrow (W1-7T) (96"x36") (Incl. Metal Pole and Foundation)	EA	1	\$ 1,100.00	\$ 1,100.00
1B26	Stop Ahead (W3-1) (30"x30") with Amber AI-500-070 School Beacon Timer Switch and Cellular Modem (Incl. Metal Pole and Foundation)	EA	1	\$ 10,100.00	\$ 10,100.00
1B27	Stop Sign (R1-1) (30"x30") with Red AI-500-070 School Beacon Timer Switch and Cellular Modem (Incl. Metal Pole and Foundation)	EA	3	\$ 10,100.00	\$ 30,300.00
1B28	Traffic Rail - Type 631LS	LF	1,249	\$ 61.00	\$ 76,189.00
1B29	Guardrail Terminal	EA	8	\$ 3,250.00	\$ 26,000.00
1B30	Erosion Control Matting (TRM)	SY	12,276	\$ 19.00	\$ 233,244.00
1B31	Select Fill Embankment	CY	4,610	\$ 27.00	\$ 124,470.00
1B32	Articulated Concrete Block Matting (Revetment)	SY	2,457	\$ 110.00	\$ 270,270.00
1B33	Allowance for Unanticipated Street Improvements	AL	1	\$ 25,000.00	\$ 25,000.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
SUBTOTAL PART 1B - STREET IMPROVEMENTS (Items 1B1 thru 1B33)					\$ 2,054,131.95



Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
<b>Part 1C - DRAINAGE IMPROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)</b>					
1C1	Mobilization (Max. 5% of Part 1C)	LS	1	\$ 68,000.00	\$ 68,000.00
1C2	Remove 12" RCP	LF	145	\$ 5.20	\$ 754.00
1C3	Remove 15" RCP	LF	584	\$ 7.35	\$ 4,292.40
1C4	Remove 18" RCP	LF	58	\$ 8.95	\$ 519.10
1C5	Remove 24" RCP	LF	74	\$ 15.00	\$ 1,110.00
1C6	Remove 7.5'x3.5' Reinforced Concrete Box Culvert	LF	114	\$ 191.00	\$ 21,774.00
1C7	Remove 8'x4' Reinforced Concrete Box Culvert	LF	180	\$ 208.00	\$ 37,440.00
1C8	Remove Existing Grate Inlet	EA	1	\$ 476.00	\$ 476.00
1C9	Remove Existing Headwall/Wingwall (Van Galen)	EA	2	\$ 2,340.00	\$ 4,680.00
1C10	Remove Existing Headwall/Wingwall (24" RCP)	EA	1	\$ 476.00	\$ 476.00
1C11	Remove Concrete Channel	SY	336	\$ 33.00	\$ 11,088.00
1C12	Remove Abandoned Line at Van Galen Channel	LF	61	\$ 17.00	\$ 1,037.00
1C13	Ditch Excavation and Regrading/Reshaping	LF	7,096	\$ 7.35	\$ 52,155.60
1C14	18" Class III RCP	LF	419	\$ 84.00	\$ 35,196.00
1C15	24" Class III RCP	LF	40	\$ 101.00	\$ 4,040.00
1C16	13.5"x22" Class III Reinforced Concrete Arch Pipe	LF	312	\$ 154.00	\$ 48,048.00
1C17	18"x28.5" Class III Reinforced Concrete Arch Pipe	LF	119	\$ 182.00	\$ 21,658.00
1C18	24" Class IV RCP	LF	95	\$ 120.00	\$ 11,400.00
1C19	18"x28.5" Class IV Reinforced Concrete Arch Pipe	LF	112	\$ 204.00	\$ 22,848.00
1C20	22"x36.25" Class IV Reinforced Concrete Arch Pipe	LF	47	\$ 255.00	\$ 11,985.00
1C21	9'x4' Reinforced Concrete Box Culvert	LF	300	\$ 891.00	\$ 267,300.00
1C22	10'x5' Reinforced Concrete Box Culvert	LF	252	\$ 1,140.00	\$ 287,280.00
1C23	Pipe Trench Safety	LF	1,696	\$ 0.50	\$ 848.00
1C24	Well Pointing	LF	1,696	\$ 68.00	\$ 115,328.00
1C25	4'x3'-6" Junction Box/Manhole	EA	1	\$ 5,440.00	\$ 5,440.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1C26	Junction Box Trench Safety	EA	1	\$ 0.50	\$ 0.50
1C27	Headwall/Wingwalls for Van Galen Channel	EA	2	\$ 37,000.00	\$ 74,000.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1C28	Headwall/Wingwalls for Beasley Channel	EA	2	\$ 44,900.00	\$ 89,800.00
1C29	5" Concrete Rip Rap for Van Galen Channel	SF	4,368	\$ 12.00	\$ 52,416.00
1C30	Safety End Treatment (Type II) (3:1) (18")	EA	1	\$ 1,300.00	\$ 1,300.00
1C31	Safety End Treatment (Type II) (6:1) (18")	EA	17	\$ 1,420.00	\$ 24,140.00
1C32	Safety End Treatment (Type II) (3:1) (24")	EA	6	\$ 1,410.00	\$ 8,460.00
1C33	Safety End Treatment (Type II) (6:1) (13.5"x22")	EA	14	\$ 1,700.00	\$ 23,800.00
1C34	Safety End Treatment (Type II) (3:1) (18"x28.5")	EA	2	\$ 2,000.00	\$ 4,000.00
1C35	Safety End Treatment (Type II) (6:1) (18"x28.5")	EA	8	\$ 2,410.00	\$ 19,280.00
1C36	Safety End Treatment (Type II) (3:1) (22.5"x36.25")	EA	2	\$ 2,700.00	\$ 5,400.00
1C37	Channel Excavation at Beasley Channel	CY	416	\$ 25.00	\$ 10,400.00
1C38	Pipe Support	EA	16	\$ 1,580.00	\$ 25,280.00
1C39	Temporary Cofferdam	EA	4	\$ 30,000.00	\$ 120,000.00
1C40	Allowance for Unanticipated Drainage Improvements	AL	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL PART 1C - DRAINAGE IMPROVEMENTS (1C1 THRU 1C40)					\$ 1,503,449.60

Part 1D - WATER IMROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)					
1D1	Mobilization (Max. 5% of Part 1D)	LS	1	\$ 57,000.00	\$ 57,000.00
1D2	Remove and Salvage Existing Fire Hydrant	EA	3	\$ 1,560.00	\$ 4,680.00
1D3	Remove Existing 2" PVC Waterline	LF	9	\$ 27.00	\$ 243.00
1D4	Remove Existing 6" ACP Waterline	LF	30	\$ 36.00	\$ 1,080.00
1D5	Grout Fill & Abandon Existing 12" ACP Waterline	LF	5,023	\$ 22.00	\$ 110,506.00
1D6	Remove Water Service	LF	860	\$ 23.00	\$ 19,780.00
1D7	Remove Water Meter	EA	21	\$ 519.00	\$ 10,899.00
1D8	6" C900 PVC Waterline	LF	42	\$ 57.00	\$ 2,394.00
1D9	12" C900 PVC Waterline	LF	4,868	\$ 77.00	\$ 374,836.00
1D10	12" DIP Waterline (Class 350)	LF	206	\$ 352.00	\$ 72,512.00
1D11	Pipe Trench Safety	LF	5,116	\$ 1.15	\$ 5,883.40

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1D12	Well Pointing	LF	5,116	\$ 35.00	\$ 179,060.00
1D13	12" DI 45° Bend	EA	9	\$ 1,060.00	\$ 9,540.00



Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1D14	12" DI 90° Bend	EA	8	\$ 1,220.00	\$ 9,760.00
1D15	2" Gate Valve & Box	EA	1	\$ 778.00	\$ 778.00
1D16	6" Gate Valve & Box	EA	1	\$ 1,370.00	\$ 1,370.00
1D17	12" Gate Valve & Box	EA	9	\$ 3,170.00	\$ 28,530.00
1D18	12"x6" Tee	EA	1	\$ 1,150.00	\$ 1,150.00
1D19	Adjust 12" Waterline (Includes 60 LF DIP Waterline and All Req'd Fittings)	EA	6	\$ 15,500.00	\$ 93,000.00
1D20	Connect to Existing 6" ACP WL (Incl. All Required Fittings) with Omni Coupling System	EA	1	\$ 3,310.00	\$ 3,310.00
1D21	Connect to Existing 12" ACP WL (Incl. All Required Fittings) with Omni Coupling System	EA	2	\$ 5,160.00	\$ 10,320.00
1D22	Fire Hydrant Assembly	EA	17	\$ 7,260.00	\$ 123,420.00
1D23	1" PE Water Service (Incl. Service Saddle, Corp Stop, PE, and Reconnection)	LF	756	\$ 70.00	\$ 52,920.00
1D24	2" PE Water Service (Incl. Service Saddle, Corp Stop, PE, and Reconnection)	LF	65	\$ 95.00	\$ 6,175.00
1D25	Allowance for Unanticipated Water Improvements	AL	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL PART 1D - WATER IMPROVEMENTS (1D1 THRU D25)					\$ 1,189,146.40

## Part 1E - WASTEWATER IMPROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)

1E1	Mobilization (Max. 5% of Part 1E)	LS	1	\$ 57,000.00	\$ 57,000.00
1E2	Rehab 8" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (0'-10')	LF	57	\$ 208.00	\$ 11,856.00
1E3	Rehab 15" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (0'-10')	LF	33	\$ 263.00	\$ 8,679.00
1E4	Rehab 18" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (0'-10')	LF	798	\$ 255.00	\$ 203,490.00
1E5	Remove Existing 18" VCP Wastewater	LF	645	\$ 86.00	\$ 55,470.00
1E6	Remove Existing 10" CIP Force Main	LF	108	\$ 71.00	\$ 7,668.00
1E7	Remove Existing 12" PVC Force Main	LF	40	\$ 83.00	\$ 3,320.00
1E8	Remove Existing 12" DI Force Main	LF	130	\$ 70.00	\$ 9,100.00
1E9	Remove Existing 16" PVC Force Main	LF	108	\$ 83.00	\$ 8,964.00
1E10	Remove Wastewater Service	LF	127	\$ 40.00	\$ 5,080.00
1E11	Remove Existing 4' Manhole	EA	1	\$ 4,520.00	\$ 4,520.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1E12	18" SDR 26 PVC (8'-10')	LF	518	\$ 254.00	\$ 131,572.00
1E13	18" SDR 26 PVC (10'-12')	LF	135	\$ 255.00	\$ 34,425.00
1E14	10" DI Force Main	LF	115	\$ 340.00	\$ 39,100.00
1E15	12" DI Force Main	LF	155	\$ 282.00	\$ 43,710.00
1E16	16" DI Force Main	LF	98	\$ 444.00	\$ 43,512.00
1E17	Pipe Trench Safety	LF	1,021	\$ 3.45	\$ 3,522.45
1E18	Well Pointing	LF	1,021	\$ 44.00	\$ 44,924.00
1E19	16" Dia. 3/8" Steel Casing (Welded)	LF	85	\$ 208.00	\$ 17,680.00
1E20	18" Dia. 3/8" Steel Casing (Welded)	LF	55	\$ 284.00	\$ 15,620.00
1E21	24" Dia. 3/8" Steel Casing (Welded)	LF	85	\$ 254.00	\$ 21,590.00
1E22	10" 45° Bend	EA	2	\$ 1,260.00	\$ 2,520.00
1E23	10" 90° Bend	EA	4	\$ 1,560.00	\$ 6,240.00
1E24	12" 45° Bend	EA	1	\$ 1,510.00	\$ 1,510.00
1E25	12" 90° Bend	EA	4	\$ 1,820.00	\$ 7,280.00
1E26	16" 45° Bend	EA	2	\$ 2,330.00	\$ 4,660.00
1E27	16" 90° Bend	EA	4	\$ 3,000.00	\$ 12,000.00
1E28	Air Release Valve	EA	3	\$ 7,320.00	\$ 21,960.00
1E29	4' Diameter Manhole	EA	2	\$ 17,500.00	\$ 35,000.00
1E30	Manhole Extra Depth (> 6')	VF	9	\$ 1,470.00	\$ 13,230.00
1E31	Manhole Trench Safety	EA	2	\$ 577.00	\$ 1,154.00
1E32	New Wastewater Service Lateral (with C/O) Incl. Well Pointing and Trench Safety, as Needed)	EA	3	\$ 8,650.00	\$ 25,950.00
1E33	Rehabilitate Existing Manhole with F/G Line and New 24" Ring and Cover	EA	2	\$ 15,900.00	\$ 31,800.00
1E34	Rework of Manhole Bench and Invert	EA	1	\$ 1,860.00	\$ 1,860.00
1E35	Adjust 10" Force Main (Includes 60 LF DIP Force Main and All Req'd Fittings)	EA	3	\$ 19,400.00	\$ 58,200.00
1E36	Adjust 12" Force Main (Includes 60 LF DIP Force Main and All Req'd Fittings)	EA	1	\$ 21,100.00	\$ 21,100.00
1E37	Adjust 16" Force Main (Includes 60 LF DIP Force Main and All Req'd Fittings)	EA	2	\$ 26,500.00	\$ 53,000.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1E38	Adjust Existing Wastewater Manhole	EA	5	\$ 4,540.00	\$ 22,700.00
1E39	Connect to Existing 10" CIP Force Main	EA	2	\$ 8,650.00	\$ 17,300.00
1E40	Connect to Existing 12" PVC Force Main	EA	2	\$ 9,620.00	\$ 19,240.00
1E41	Connect to Existing 16" PVC Force Main	EA	2	\$ 9,960.00	\$ 19,920.00
1E42	Connect to Existing Wastewater Manhole	EA	2	\$ 5,250.00	\$ 10,500.00
1E43	Connect Existing Wastewater Line to Proposed Manhole	EA	2	\$ 4,440.00	\$ 8,880.00
1E44	Allowance for Unanticipated Wastewater Improvements	AL	1	\$ 25,000.00	\$ 25,000.00
SUBTOTAL PART 1E - WASTEWATER IMPROVEMENTS (1E1 THRU 1E44)					\$ 1,191,806.45
TOTAL PROJECT BASE BID NO. 1 (PARTS 1A THRU 1E)				\$	6,263,934.90