

CITY OF CORPUS CHRISTI CONTRACTS AND PROCUREMENT DEPARTMENT

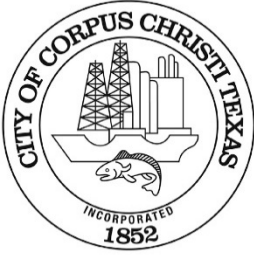


LAGUNA SHORES RD – MEDITERRANEAN
TO WYNDALE - PROJ. NO. 18025A

CONTRACT NO. 3129

Project Specifications and Drawings
available at:

Y:\00 LEGISTAR CONST PLANS SPECS\Item No 20 0938
Laguna Mediterranean to Wyndale



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 – Mediterrean to Wyndale (Bond 2018)
Project Number 18025A

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 **390** 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 **420** 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 \$ 6,734,988.95

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

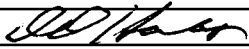
EMail

END OF SECTION

Project Name:	Laguna Shores Road - Mediterranean to Wyndale (Bond 2018)
Project Number:	18025A
Owner:	City of Corpus Christi
Bidder:	Haas-Anderson Construction Ltd.
OAR:	
Designer:	LJA Engineering, Inc

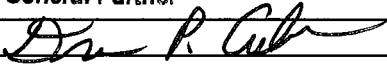
By its signature below, Bidder accepts all of the terms and conditions of the Bid Acknowledgement, acknowledges receipt of all Addenda to the Bid and agrees, if this Bid is accepted, to enter into a Contract with the Owner and complete the Work in accordance with the Contract Documents for the Bid price.

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

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

Name: D. A. 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: 853 2535 Email: dhaas@haas-anderson.com

Basis of Bid

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
Base Bid No. 1 - HMAC Pavement					
Part 1A - General (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)					
1A1	Mobilization (Max. 5% of Part 1A)	LS	1	\$ 8,000.00	\$ 8,000.00
1A2	Bonds & Insurance (Base Bid 1)	AL	1	\$ 42,000.00	\$ 42,000.00
1A3	Traffic Control Mobilization/Adjustments	LS	1	\$ 150,000.00	\$ 150,000.00
1A4	Traffic Control Items (Signs, Barricades, Channelizing Devices, LPCB, etc.)	MO	13	\$ 5,000.00	\$ 65,000.00
1A5	Ozone Advisory Day	DAYS	3	\$ 1.00	\$ 3.00
1A6	Storm Water Pollution Prevention Plan	LS	1	\$ 50,000.00	\$ 50,000.00
1A7	Rock Filter Dam	EA	3	\$ 2,250.00	\$ 6,750.00
1A8	Silt Fence	LF	1,158	\$ 5.05	\$ 5,847.90
1A9	Revegetation (Hydromulch)	SY	14,652	\$ 1.55	\$ 22,710.60
1A10	Contingency Allowance for Unanticipated Disposal of Contaminated Groundwater	AL	1	\$ 5,000.00	\$ 5,000.00
SUBTOTAL PART 1A - GENERAL (Items 1A1 thru A10)					\$ 355,311.50

Part 1B - STREET IMPROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)					
1B1	Mobilization (Max. 5% of Part 1B)	LS	1	\$ 102,000.00	\$ 102,000.00
1B2	Removal of Sign and Sign Support Assembly	EA	18	\$ 55.00	\$ 990.00
1B3	Remove Existing Metal Beam Guard Rail	LF	38	\$ 2.50	\$ 95.00
1B4	Pulverize & Recompact Existing Roadway Pavement	SY	1,208	\$ 1.00	\$ 1,208.00
1B5	Street Excavation (1' Beyond E.O.P.)	SY	21,234	\$ 7.00	\$ 148,638.00
1B6	Subgrade Preparation (1' Beyond E.O.P.)	SY	22,442	\$ 2.40	\$ 53,860.80
1B7	TX-5 Geogrid (1' Beyond E.O.P.)	SY	22,442	\$ 3.55	\$ 79,669.10
1B8	8" Type A, Grade 1-2 Crushed, Limestone Base per TxDOT Std. Spec. Item No. 247 (1' Beyond E.O.P.)	SY	22,442	\$ 18.00	\$ 403,956.00
1B9	One Course Surface Treatment Underseal	SY	22,442	\$ 2.05	\$ 46,006.10
1B10	3" Type 'D' HMAC	SY	21,195	\$ 19.00	\$ 402,705.00
1B11	Level Up Mill (0"-1") & 1 1/2" HMAC Type D Overlay	SY	11,350	\$ 16.00	\$ 181,600.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1B12	Full Depth Pavement Repair	SY	1,035	\$ 94.00	\$ 97,290.00
1B13	Concrete Driveway (Incl. Existing Driveway Removal)	SF	12,821	\$ 11.00	\$ 141,031.00
1B14	Pavement Markings (24" Wide, White, Type C Hear Applied, 125 mil, Preformed Thermoplastic "Stop Bar" Marking Lines)	LF	321	\$ 14.00	\$ 4,494.00
1B15	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – Yellow 4" Solid	LF	2,459	\$ 0.55	\$ 1,352.45
1B16	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – Yellow 4" Broken	LF	940	\$ 1.45	\$ 1,363.00
1B17	Pavement Marking, Reflectorized Thermoplastic, Type I, 90 mil thickness – White 4" Solid	LF	9,479	\$ 0.50	\$ 4,739.50
1B18	TYII-A-A Raised Pavement Marker (Reflectorized)	EA	80	\$ 5.75	\$ 460.00
1B19	TYII-B-B Raised Pavement Market (Reflectorized)	EA	15	\$ 14.00	\$ 210.00
1B20	Type 2 Object Marker with Flexible Post (OM-2Z) (FLX)	EA	6	\$ 98.00	\$ 588.00
1B21	Combo Stop Sign (R1-1) (30"x30") / Street Name Sign (Incl. Metal Pole and Foundation)	EA	25	\$ 721.00	\$ 18,025.00
1B22	Stop Sign (R1-1) (30"x30") (Incl. Metal Pole and Foundation)	EA	4	\$ 588.00	\$ 2,352.00
1B23	All Way (R1-3P) (18"x6") (Incl. Metal Pole and Foundation)	EA	3	\$ 375.00	\$ 1,125.00
1B24	Dead End (W14-1aR(L)) (36"x8") (Incl. Metal Pole and Foundation)	EA	5	\$ 404.00	\$ 2,020.00
1B25	Stop Ahead (W3-1) (30"x30") (Incl. Metal Pole and Foundation)	EA	4	\$ 490.00	\$ 1,960.00
1B26	Speed Limit Sign (R2-1) (24"x30") (Incl. Metal Pole and Foundation)	EA	4	\$ 461.00	\$ 1,844.00
1B27	Curve (W1-2R) (30"x30") (Incl. Metal Pole and Foundation)	EA	1	\$ 490.00	\$ 490.00
1B28	Curve (W1-2L) (30"x30") (Incl. Metal Pole and Foundation)	EA	1	\$ 490.00	\$ 490.00
1B29	Two Direction Large Arrow (W1-7T) (96"x36") (Incl. Metal Pole and Foundation)	EA	3	\$ 1,100.00	\$ 3,300.00
1B30	Road Ends (W14-1T) (30"x30") (Incl. Metal Pole and Foundation)	EA	1	\$ 490.00	\$ 490.00
1B31	Dead End Barricade (Type 3)	LF	20	\$ 55.00	\$ 1,100.00
1B32	Traffic Rail - Type 631LS	LF	261	\$ 64.00	\$ 16,704.00
1B33	Guardrail Terminal	EA	3	\$ 3,410.00	\$ 10,230.00
1B34	Erosion Control Matting (TRM)	SY	15,214	\$ 19.00	\$ 289,066.00
1B35	Select Fill Embankment	CY	1,594	\$ 30.00	\$ 47,820.00
1B36	Articulated Concrete Block Matting (Revetment)	SY	386	\$ 138.00	\$ 53,268.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1B37	Allowance for Unanticipated Street Improvements	AL	1	\$ 25,000.00	\$ 25,000.00
SUBTOTAL PART 1B - STREET IMPROVEMENTS (Items 1B1 thru 1B37)					\$ 2,147,539.95

Part 1C - RTA IMPROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)

1C1	Mobilization (Max. 5% of Part 1C)	LS	1	\$ 3,000.00	\$ 3,000.00
1C2	Remove & Salvage Existing RTA Bench	EA	1	\$ 165.00	\$ 165.00
1C3	Concrete Bus Pad	SY	320	\$ 212.00	\$ 67,840.00
1C4	Concrete Landing Pad	SF	240	\$ 20.00	\$ 4,800.00
SUBTOTAL PART 1C - RTA IMPROVEMENTS (1C1 THRU 1C4)					\$ 75,805.00

Part 1D - DRAINAGE IMPROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)

1D1	Mobilization (Max. 5% of Part 1D)	LS	1	\$ 92,000.00	\$ 92,000.00
1D2	Remove 12" RCP	LF	865	\$ 5.15	\$ 4,454.75
1D3	Remove 15" RCP	LF	1,089	\$ 7.30	\$ 7,949.70
1D4	Remove 18" RCP	LF	492	\$ 8.85	\$ 4,354.20
1D5	Remove 24" RCP	LF	259	\$ 15.00	\$ 3,885.00
1D6	Remove Existing Concrete Junction Box	EA	3	\$ 474.00	\$ 1,422.00
1D7	Ditch Excavation and Regrading/Reshaping	LF	8,334	\$ 6.40	\$ 53,337.60
1D8	18" Class III RCP	LF	502	\$ 85.00	\$ 42,670.00
1D9	24" Class III RCP	LF	79	\$ 102.00	\$ 8,058.00
1D10	13.5"x22" Class III Reinforced Concrete Arch Pipe	LF	1,113	\$ 154.00	\$ 171,402.00
1D11	18"x28.5" Class III Reinforced Concrete Arch Pipe	LF	94	\$ 170.00	\$ 15,980.00
1D12	18" Class IV RCP	LF	533	\$ 94.00	\$ 50,102.00
1D13	24" Class IV RCP	LF	103	\$ 117.00	\$ 12,051.00
1D14	13.5"x22" Class IV Reinforced Concrete Arch Pipe	LF	118	\$ 187.00	\$ 22,066.00
1D15	18.5"x28.5" Class IV Reinforced Concrete Arch Pipe	LF	1,292	\$ 171.00	\$ 220,932.00
1D16	22.5"x36.25" Class IV Reinforced Concrete Arch Pipe	LF	369	\$ 212.00	\$ 78,228.00
1D17	26.625"x43.75" Class IV Reinforced Concrete Arch Pipe	LF	134	\$ 288.00	\$ 38,592.00
1D18	5'x2' Reinforced Concrete Box Culvert	LF	69	\$ 397.00	\$ 27,393.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1D19	5'x3' Reinforced Concrete Box Culvert	LF	27	\$ 509.00	\$ 13,743.00
1D20	6'x2' Reinforced Concrete Box Culvert	LF	496	\$ 440.00	\$ 218,240.00
1D21	10'x3' Reinforced Concrete Box Culvert	LF	107	\$ 1,100.00	\$ 117,700.00
1D22	Pipe Trench Safety	LF	5,036	\$ 1.10	\$ 5,539.60
1D23	Well Pointing	LF	5,036	\$ 39.00	\$ 196,404.00
1D24	3'-6"x3' Type B Manhole	EA	1	\$ 5,530.00	\$ 5,530.00
1D25	4'x4' Type B Manhole	EA	2	\$ 5,450.00	\$ 10,900.00
1D26	4'-6"x4' Junction Box with Grate/Frame Unit	EA	1	\$ 5,790.00	\$ 5,790.00
1D27	4'x8'-2" Junction Box	EA	3	\$ 11,600.00	\$ 34,800.00
1D28	4'x8'-4" Junction Box	EA	1	\$ 10,000.00	\$ 10,000.00
1D29	4'x10' Junction Box	EA	1	\$ 12,100.00	\$ 12,100.00
1D30	5'x8' Junction Box	EA	1	\$ 12,300.00	\$ 12,300.00
1D31	5'-6"x8' Junction Box	EA	1	\$ 11,400.00	\$ 11,400.00
1D32	7'x4' Junction Box	EA	1	\$ 12,200.00	\$ 12,200.00
1D33	7'x7' Junction Box	EA	1	\$ 12,500.00	\$ 12,500.00
1D34	7'x8'-2" Junction Box	EA	1	\$ 14,100.00	\$ 14,100.00
1D35	7'x10' Junction Box	EA	1	\$ 16,200.00	\$ 16,200.00
1D36	10'x8' Junction Box	EA	1	\$ 20,000.00	\$ 20,000.00
1D37	City Standard Grate Inlet	EA	2	\$ 2,290.00	\$ 4,580.00
1D38	Manhole/Junction Box/Grate Inlet Trench Safety	EA	18	\$ 77.00	\$ 1,386.00
1D39	Headwall/Wingwalls for Yorktown Channel	EA	2	\$ 28,200.00	\$ 56,400.00
1D40	Headwall for 24" RCP	EA	2	\$ 4,470.00	\$ 8,940.00
1D41	5" Concrete Rip Rap for Yorktown Ditch	SF	938	\$ 16.00	\$ 15,008.00
1D42	Safety End Treatment (Type II) (3:1) (18")	EA	2	\$ 1,290.00	\$ 2,580.00
1D43	Safety End Treatment (Type II) (6:1) (18")	EA	29	\$ 1,440.00	\$ 41,760.00
1D44	Safety End Treatment (Type II) (3:1) (24")	EA	5	\$ 1,530.00	\$ 7,650.00
1D45	Safety End Treatment (Type II) (6:1) (24")	EA	1	\$ 2,060.00	\$ 2,060.00
1D46	Safety End Treatment (Type II) (3:1) (13.5"x22")	EA	23	\$ 1,460.00	\$ 33,580.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1D47	Safety End Treatment (Type II) (6:1) (13.5"x22")	EA	29	\$ 1,800.00	\$ 52,200.00
1D48	Safety End Treatment (Type II) (6:1) (18"x28.5")	EA	6	\$ 2,400.00	\$ 14,400.00
1D49	Safety End Treatment (Type II) (6:1) (26.625"x43.75")	EA	6	\$ 7,280.00	\$ 43,680.00
1D50	4" Concrete Slope Protection	SF	228	\$ 14.00	\$ 3,192.00
1D51	Clean Out Existing 5'x3' Box Culvert	LF	720	\$ 100.00	\$ 72,000.00
1D52	Connect Existing 18" CPP to Proposed Manhole	EA	1	\$ 1,650.00	\$ 1,650.00
1D53	Temporary Cofferdam	EA	1	\$ 60,000.00	\$ 60,000.00
1D54	Allowance for Unanticipated Drainage Improvements	AL	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL PART 1D - DRAINAGE IMPROVEMENTS (1D1 THRU 1D54)					\$ 2,015,389.85

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

1E1	Mobilization (Max. 5% of Part 1E)	LS	1	\$ 21,000.00	\$ 21,000.00
1E2	Remove and Salvage Existing Fire Hydrant	EA	5	\$ 1,560.00	\$ 7,800.00
1E3	Remove 4" CIP Waterline	LF	80	\$ 40.00	\$ 3,200.00
1E4	Remove 6" CIP Waterline	LF	93	\$ 44.00	\$ 4,092.00
1E5	Remove 12" PVC Waterline	LF	29	\$ 48.00	\$ 1,392.00
1E6	Remove 12" DIP Waterline	LF	71	\$ 55.00	\$ 3,905.00
1E7	4" C900 PVC Waterline	LF	80	\$ 98.00	\$ 7,840.00
1E8	6" C900 PVC Waterline	LF	93	\$ 107.00	\$ 9,951.00
1E9	12" C900 PVC Waterline	LF	29	\$ 148.00	\$ 4,292.00
1E10	12" DIP Waterline (Class 350)	LF	71	\$ 225.00	\$ 15,975.00
1E11	Pipe Trench Safety	LF	273	\$ 1.15	\$ 313.95
1E12	6"x4" Tee	EA	1	\$ 853.00	\$ 853.00
1E13	4" Gate Valve & Box	EA	2	\$ 1,250.00	\$ 2,500.00
1E14	6" Gate Valve & Box	EA	1	\$ 1,420.00	\$ 1,420.00
1E15	Adjust 6" Waterline (Includes 60 LF DIP Waterline and All Req'd Fittings)	EA	4	\$ 12,700.00	\$ 50,800.00
1E16	Adjust 8" Waterline (Includes 60 LF DIP Waterline and All Req'd Fittings)	EA	1	\$ 13,600.00	\$ 13,600.00
1E17	Adjust 12" Waterline (Includes 60 LF DIP Waterline and All Req'd Fittings)	EA	12	\$ 16,400.00	\$ 196,800.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1E18	Connect to Existing 4" CIP WL (Incl. All Required Fittings) with Omni Coupling System	EA	2	\$ 5,580.00	\$ 11,160.00
1E19	Connect to Existing 6" CIP WL (Incl. All Required Fittings) with Omni Coupling System	EA	2	\$ 4,860.00	\$ 9,720.00
1E20	Connect to Existing 8" PVC WL (Incl. All Required Fittings) with Omni Coupling System	EA	1	\$ 4,980.00	\$ 4,980.00
1E21	Connect to Existing 12" PVC WL (Incl. All Required Fittings) with Omni Coupling System	EA	4	\$ 5,340.00	\$ 21,360.00
1E22	Fire Hydrant Assembly	EA	5	\$ 8,360.00	\$ 41,800.00
1E23	Allowance for Unanticipated Water Improvements	LS	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL PART 1E - WATER IMPROVEMENTS (1E1 THRU 1E21)					\$ 444,753.95

Part 1F -WASTEWATER IMROVEMENTS (per SECTION 01 29 01 MEASUREMENT AND BASIS FOR PAYMENT)					
1F1	Mobilization (Max. 5% of Part 1F)	LS	1	\$ 81,000.00	\$ 81,000.00
1F2	Rehab 8" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (0'-10')	LF	2,069	\$ 144.00	\$ 297,936.00
1F3	Rehab 8" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (10'-18')	LF	246	\$ 202.00	\$ 49,692.00
1F4	Rehab 10" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (0'-10')	LF	644	\$ 205.00	\$ 132,020.00
1F5	Rehab 10" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (10'-18')	LF	178	\$ 270.00	\$ 48,060.00
1F6	Rehab 15" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (0'-10')	LF	93	\$ 329.00	\$ 30,597.00
1F7	Rehab 18" Wastewater Line (Static Pipe Bursting w/ IPS DR 17) (10'-18')	LF	83	\$ 405.00	\$ 33,615.00
1F8	Remove Existing 8" VCP Wastewater	LF	9	\$ 75.00	\$ 675.00
1F9	Remove Wastewater Service	LF	250	\$ 52.00	\$ 13,000.00
1F10	8" C900 (DR-18) PVC (0-6')	LF	36	\$ 294.00	\$ 10,584.00
1F11	8" C900 (DR-18) PVC (6'-8')	LF	40	\$ 309.00	\$ 12,360.00
1F12	8" SDR 26 PVC (8'-10')	LF	53	\$ 295.00	\$ 15,635.00
1F13	Pipe Trench Safety	LF	129	\$ 2.30	\$ 296.70
1F14	Well Pointing	LF	129	\$ 46.00	\$ 5,934.00
1F15	4' Diameter Manhole	EA	22	\$ 14,800.00	\$ 325,600.00
1F16	Manhole Extra Depth (> 6')	VF	40	\$ 1,440.00	\$ 57,600.00
1F17	Manhole Trench Safety	EA	22	\$ 577.00	\$ 12,694.00
1F18	New Wastewater Service Lateral (with C/O) (Incl. Well Pointing and Trench Safety, as Needed)	EA	12	\$ 4,440.00	\$ 53,280.00

Item	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED AMOUNT
1F19	Rehabilitate Existing Manhole with F/G Liner and New 24" Ring and Cover	EA	14	\$ 13,100.00	\$ 183,400.00
1F20	Adjust 8" Force Main (Includes 60 LF DIP Force Main and All Req'd Fittings)	EA	3	\$ 19,800.00	\$ 59,400.00
1F21	Adjust 12" Force Main (Includes 60 LF DIP Force Main and All Req'd Fittings)	EA	3	\$ 23,300.00	\$ 69,900.00
1F22	Adjust Existing Wastewater Manhole	EA	12	\$ 4,570.00	\$ 54,840.00
1F23	Connect to Existing Wastewater Manhole	EA	6	\$ 3,720.00	\$ 22,320.00
1F24	Connect Existing Wastewater Line to Proposed Manhole	EA	21	\$ 4,550.00	\$ 95,550.00
1F25	Reconnect Existing Wastewater Service	EA	2	\$ 2,600.00	\$ 5,200.00
1F26	Allowance for Unanticipated Wastewater Improvements	LS	1	\$ 25,000.00	\$ 25,000.00
SUBTOTAL PART 1F - WASTEWATER IMPROVEMENTS (1F1 THRU 1F26)					\$ 1,696,188.70
TOTAL PROJECT BASE BID NO. 1 (PARTS 1A THRU 1F)				\$	6,734,988.95