

NOTIFICATION OF ADDENDUM

ADDENDUM NO. 1

DATED 7/30/2014

Control	0086-14-046, ETC.
Project	CBI 2013(281), ETC.
Highway	SL 20
County	WEBB

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an addendum notification which details the changes and the respective proposal pages which were added and/or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS
PROJECT: CBI 2013(281) CONTROL: 0086-14-046
COUNTY: WEBB
LETTING: 08/05/2014
REFERENCE NO: 0730

PROPOSAL ADDENDUMS

X PROPOSAL COVER
X BID INSERTS (SH. NO.: ALL)
X GENERAL NOTES (SH. NO.: ALL)

X SPEC LIST (SH. NO.: 5 OF 5)
_ SPECIAL PROVISIONS:
_ ADDED:

DELETED:

X SPECIAL SPECIFICATIONS:
ADDED: 2307, 2309

DELETED: 2300

X OTHER: PLAN SHEETS AND OTHER CHANGES

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

***** PROPOSAL COVER *****

REVISED CONTRACT TO 535 WORKING DAYS

***** BID INSERTS *****

ALL BID INSERTS PROPOSAL SHEETS AND E&Q PLAN SHEETS 22, 23, 23A-23F ARE
REPLACED AS PART OF THIS ADDENDUM:

REVISED QUANTITIES FOR ITEMS: 400-2005, 402-2001, 403-2001, 462-2010,
462-2014, 462-2019, 464-2005, 465-4015, 465-4017, 496-2002, 618-2018,
618-2024, 621-2002, 662-2004, 662-2012, 662-2032, 662-2064, 666-2003,
666-2006, 682-2001, 682-2022, 682-2023, 682-2024, 682-2025, 682-2027,
684-2007, 684-2009, 684-2010, 684-2012

ADDED BID ITEMS: 545-2003, 662-2079, 668-2050, 682-2003, 686-2035,
2307-2001, 2309-2001

DELETED BID ITEMS: 462-2128, 618-2035, 618-2041, 682-2002, 682-2026,
686-2037, 2300-2001

DESCRIPTION OF ABOVE CHANGES (CONTINUED)
(INCLUDING PLANS SHEET CHANGES)

***** GENERAL NOTES *****

ALL GENERAL NOTES PROPOSAL SHEETS AND PLAN SHEETS 20, 21, 21A-21J ARE REPLACED AS PART OF THIS ADDENDUM:

SHEET F: ITEM 8 ADDED NOTES

SHEET H: ITEM 105 REVISED NOTE

SHEET J: ITEM 247 REVISED NOTE; ITEM 305 REVISED NOTE

SHEET K: ITEM 346 REVISED & DELETED NOTES

SHEET L: ITEM 423 REVISED, ADDED & DELETED NOTES

SHEET P: ITEM 502 ADDED NOTES

SHEET Q: ITEM 512 REVISED NOTES.

ADDED NEW GENERAL NOTES FOR ITEM 170, ITEM 354, ITEM 427, ITEM 530 & ITEM 740; NOTES SHIFTED FROM PAGE TO PAGE DUE TO THESE REVISIONS.

***** SPECIFICATION LIST *****

SHEET 5 OF 5 - ADDED SPECIAL SPECS 2307 & 2309; DELETED SPECIAL SPEC 2300

***** VOLUME 1 PLAN SHEETS *****

SHEETS 2-5 (INDEX OF SHEETS): ADDED NEW SHEETS 21I, 21J, 167A, 346, 347, 348, 375, 524A, 529A, 540A, 686A; SHEET 542 NOW SHOWN AS OMITTED; UPDATED LMA STANDARDS FOR SHEETS 544, 545, 546, AND ADDED 546A.

SHEETS 20, 21, 21A-21J (GENERAL NOTES): REFER TO GENERAL NOTES CHANGES AS NOTED ABOVE; ADDED SHEETS 21I AND 21J DUE TO ADDITION OF NEW NOTES.

SHEETS 22, 23, 23A-23F (ESTIMATE & QUANTITY): REFER TO BID INSERTS CHANGES AS NOTED ABOVE.

SHEETS 24-25 (SUMMARY OF TRAFFIC CONTROL QUANTITIES): ADDED NEW ITEM AND REVISED QUANTITIES

SHEET 26 (SUMMARY OF REMOVAL QUANTITIES): UPDATED INLET REMOVAL QUANTITY

SHEETS 29, 31-38 (SUMMARY OF STORM SEWER DRAINAGE QUANTITIES): UPDATED QUANTITIES FOR MAINLANE INLETS, INLET AT SPUR 400, AND LATERAL CHANGES

SHEET 39 (SUMMARY OF CULVERTS AND BRIDGE CLASS CULVERTS QUANTITIES): UPDATED QUANTITIES FOR CULVERT 6 BASED ON JUNCTION BOX SIZE CHANGE

SHEET 41 (SUMMARY OF TRAFFIC SIGNAL QUANTITIES): QUANTITY REVISIONS FOR

TXDOT COMMENTS
DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

SHEETS 44-45 (SUMMARY OF PAVEMENT MARKING QUANTITIES): UPDATED QUANTITIES PER HIGH CONTRAST PAVEMENT MARKING ADDITION

SHEET 52 (TRAFFIC CONTROL PLAN CONSTRUCTION NOTES): UPDATED NOTES AND DETAIL

SHEETS 62 & 64 (TRAFFIC CONTROL PLAN): ADDED TEMP SPL SHORING NOTE

SHEET 80 (TRAFFIC CONTROL PLAN): ADDED STOP BAR AND NOTE

SHEETS 85-86 (TEMPORARY SIGNAL LAYOUT, PHASE 1, STAGE 2 & 3): REVISED DESIGN

SHEETS 97, 105, 107, 113, 118 (TRAFFIC CONTROL PLAN): ADDED NOTES FOR STOP BAR AND TEMP SPL SHORING AS SHOWN

SHEETS 119-122 (TEMPORARY SIGNAL LAYOUT, PHASE 2, STAGE 1, 2, 3, 3A): REVISED DESIGN

SHEET 132 (TRAFFIC CONTROL PLAN): ADDED TEMP SPL SHORING NOTE AND STOP BAR

SHEETS 138-139 (TRAFFIC CONTROL PLAN): MODIFIED NBFR STRIPING

SHEET 140 (TRAFFIC CONTROL PLAN): MODIFIED NBFR STRIPING AND STOP BAR

SHEETS 145-146 (TEMPORARY SIGNAL LAYOUT, PHASE 3, STAGE 1 & 2): REVISED DESIGN

SHEET 167A (TCP(2-4)-12): NEW SHEET

SHEET 215-216 (REMOVAL LAYOUT): REVISED DESIGN

SHEETS 333-336 (INDEX): ADDED NEW SHEETS 21I, 21J, 167A, 346, 347, 348, 375, 524A, 529A, 540A, 686A; SHEET 542 NOW SHOWN AS OMITTED; UPDATED LMA STANDARDS FOR SHEETS 544, 545, 546, AND ADDED 546A.

SHEET 337 (OVERALL DRAINAGE AREA MAP): LATERAL CONNECTIONS SHIFTED, DRAINAGE AREAS UPDATED ACCORDINGLY

SHEETS 340-341 (INTERIOR DRAINAGE AREA MAP): UPDATED DRAINAGE AREA FOR ADDED AD INLET AT SPUR 400

SHEET 346 (HYDRAULIC DATA SHEET (BRIDGE CLASS)) - NEW SHEET

SHEET 347 (HYDRAULIC DATA SHEET (NON-BRIDGE CLASS)) - NEW SHEET

SHEET 348 (HYDRAULIC DATA SHEET FOR PARALLEL CULVERTS) - NEW SHEET

SHEETS 349-374 (STORM SEWER COMPUTATIONS): ADDED HYDRAULIC CALCULATIONS

SHEET 375 (TRUNKLINE HYDRAULIC COMPUTATIONS) - NEW SHEET

SHEET 376 (MAINLANES STORM SEWER PLAN & PROFILE): ADDED MAINLANE INLETS,
DESCRIPTION OF ABOVE CHANGES (CONTINUED)
(INCLUDING PLANS SHEET CHANGES)

ADDED CALLOUT, REMOVED NOTE

SHEETS 377-378 (MAINLANES STORM SEWER PLAN & PROFILE): ADDED TRENCH
EXCAVATION PROTECTION, MAINLANE INLETS, REMOVED NOTE

SHEET 379 (MAINLANES STORM SEWER PLAN & PROFILE): ADDED TRENCH EXCAVATION
PROTECTION, MAINLANE INLETS, REMOVED NOTE, REROUTED STORM SEWER

SHEETS 380-383 (MAINLANES STORM SEWER PLAN & PROFILE): ADDED TRENCH
EXCAVATION PROTECTION, MAINLANE INLETS, REMOVED NOTE

SHEETS 384-385 (NORTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE):
ADDED TRENCH EXCAVATION PROTECTION

SHEET 386 (NORTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
TRENCH EXCAVATION PROTECTION, ADDED INLET AND LATERAL

SHEET 387 (NORTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
TRENCH EXCAVATION PROTECTION

SHEET 388 (NORTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
TRENCH EXCAVATION PROTECTION AND ADDED A CALLOUT

SHEET 389 (NORTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
TRENCH EXCAVATION PROTECTION AND UPDATED JUNCTION BOX R-23

SHEET 392 (SOUTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
TRENCH EXCAVATION PROTECTION AND MOVED MANHOLE MY-Y-2

SHEET 393 (SOUTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
TRENCH EXCAVATION PROTECTION, ADDED AD INLET TX-1, ADDED LATERAL

SHEET 394 (SOUTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
TRENCH EXCAVATION PROTECTION AND REVISED CALLOUT

SHEET 395 (SOUTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADJUSTED
FLOWLINE CALLOUT

SHEET 396 (SOUTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
TRENCH EXCAVATION PROTECTION AND UPDATED JUNCTION BOX R-23

SHEET 397 (SOUTHBOUND FRONTAGE ROAD STORM SEWER PLAN & PROFILE): ADDED
STRUCTURE LABEL IN CALLOUT

SHEET 398 (STORM SEWER LATERAL PROFILES): ADDED TRENCH EXCAVATION
PROTECTION

SHEET 399 (STORM SEWER LATERAL PROFILES): ADDED TRENCH EXCAVATION PROTECTION, REVISED LATERAL

SHEET 400 (STORM SEWER LATERAL PROFILES): ADDED TRENCH EXCAVATION PROTECTION

SHEET 401 (STORM SEWER LATERAL PROFILES): ADDED TRENCH EXCAVATION DESCRIPTION OF ABOVE CHANGES (CONTINUED)
(INCLUDING PLANS SHEET CHANGES)

PROTECTION, REVISED LATERAL, REMOVED LATERAL

SHEETS 402-406 (STORM SEWER LATERAL PROFILES): ADDED TRENCH EXCAVATION PROTECTION

SHEET 409 (CULVERT LAYOUT, CULVERT 1): UPDATED HW AND TW BASED ON UPDATED HYDRAULICS; REMOVED 24" RCP LATERAL

SHEETS 410-413 (CULVERT LAYOUT, CULVERTS 2-5): UPDATED HW AND TW BASED ON UPDATED HYDRAULICS

SHEET 414 (CULVERT LAYOUT, CULVERT 6): UPDATED HW AND TW BASED ON UPDATED HYDRAULICS, JUNCTION BOX ENLARGED, ADDT'L TEMP SHORING

SHEETS 415-416 (CULVERT LAYOUT, CULVERTS 7-8): UPDATED HW AND TW BASED ON UPDATED HYDRAULICS.

SHEET 418 (DRIVEWAY CULVERT STAKING DATA): LENGTH UPDATED

SHEET 419 (SPECIAL JUNCTION BOX R-23 STA 96+58.44): JUNCTION BOX SIZE INCREASED TO SPAN 3-8'X4' RCB

SHEETS 460-461 (BENT NO. 2 & 3, SS 400 OVERPASS): ADDED FINISHED GRADE ELEVATIONS TABLE

SHEET 500-503 (AESTHETIC DETAILS RETAINING WALLS) - REVISED NOTES

SHEET 504 (CACTUS CONCEPT DETAILS) - REVISED NOTES

SHEET 506 (AESTHETIC BRIDGE RAIL) - REVISED NOTES

SHEET 509 (AESTHETIC DETAILS ROADRUNNER/CACTUS) - REVISED NOTES

SHEET 514 (SIGNAL QUANTITIES SUMMARY): UPDATED QUANTITIES

SHEETS 517-518 (PROPOSED SIGNAL LAYOUT): UPDATED SIGNAL HEAD AND SIGNS ON POLE MAST ARMS

SHEET 519 (CONDUIT AND CONDUCTOR SCHEDULES): UPDATED TABLES, SIGNAL HEAD LEGEND

SHEETS 520-521 (WIRING DIAGRAM NORTHBOUND FRONTAGE ROAD): UPDATED WIRING DIAGRAM DUE TO SIGNAL HEAD CHANGES

SHEET 523 (LONG MAST ARM ASSEMBLY PARTS LIST): UPDATED TO INCLUDE MORE RECENT STANDARD

SHEET 524A CONTROLLER FOUNDATION DETAIL - NEW SHEET

SHEET 529A (ED (06)-03) - NEW SHEET

SHEET 540A (LUM-A-12) - NEW SHEET

SHEET 542 (TS-CF-04): OMITTED
DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

SHEETS 544-546: UPDATED STANDARDS LMA (1)-12, LMA (2)-12, LMA (3)-12

SHEET 546A (LMA (4)-12) - NEW SHEET

SHEETS 614 & 621 (SGN & PM PLAN: NB & SB FRONTAGE ROAD): CHANGED LANE LINES ON CONCRETE PAVEMENT TO HIGH CONTRAST PM

SHEET 626 (SGN & PM PLAN: SPUR 400): CHANGED LANE LINES AND CAT TRACKS ON CONCRETE PAVEMENT TO HIGH CONTRAST PM

SHEET 627 (SGN & PM PLAN: SPUR 401): CHANGED LANE LINES ON CONCRETE PAVEMENT TO HIGH CONTRAST PM

SHEET 686A (CPM(1)-14) - NEW SHEET

***** VOLUME 2 PLAN SHEETS *****

SHEET 709 (INDEX OF SHEETS VOLUME 2) - UPDATED AND REVISIONS

SHEETS 831A & 831B (IRRIGATION DETAILS) - NEW SHEETS

***** VOLUME 3 PLAN SHEETS *****

SHEET 838 & 841 (QUANTITY SUMMARY) - UPDATED AND REVISIONS

SHEET 921 (UNDERGROUND DETENTION FILL DETAIL) - UPDATED AND REVISIONS

Control	0086-14-046, ETC.
Project	CBI 2013(281), ETC.
Highway	SL 20
County	WEBB

PROPOSAL TO THE TEXAS TRANSPORTATION COMMISSION

2004 SPECIFICATIONS

WORK CONSISTING OF GRAD, WID STRS, BASE AND PAV WEBB COUNTY, TEXAS

The quantities in the proposal are approximate. The quantities of work and materials may be increased or decreased as considered necessary to complete the work as planned and contemplated.

This project is to be completed in 535 working days and will be accepted when fully completed and finished to the satisfaction of the Executive Director or designee.

Provide a proposal guaranty in the form of a Cashier's Check, Teller's Check (including an Official Check) or Bank Money Order on a State or National Bank or Savings and Loan Association, or State or Federally chartered Credit Union made payable to the Texas Transportation Commission in the following amount:

ONE HUNDRED THOUSAND (Dollars) (\$100,000)

A bid bond may be used as the required proposal guaranty. The bond form may be detached from the proposal for completion. The proposal may not be disassembled to remove the bond form. The bond must be in accordance with Item 2 of the specifications.

Any addenda issued amending this proposal and/or the plans that have been acknowledged by the bidder, become part of this proposal.

By signing the proposal the bidder certifies:

1. the only persons or parties interested in this proposal are those named and the bidder has not directly or indirectly participated in collusion, entered into an agreement or otherwise taken any action in restraint of free competitive bidding in connection with the above captioned project.
2. in the event of the award of a contract, the organization represented will secure bonds for the full amount of the contract.
3. the signatory represents and warrants that they are an authorized signatory for the organization for which the bid is submitted and they have full and complete authority to submit this bid on behalf of their firm.
4. that the certifications and representations contained in the proposal are true and accurate and the bidder intends the proposal to be taken as a genuine government record.

• **Signed: ****

(1) _____ (2) _____ (3) _____

Print Name:

(1) _____ (2) _____ (3) _____

Title:

(1) _____ (2) _____ (3) _____

Company:

(1) _____ (2) _____ (3) _____

- Signatures to comply with Item 2 of the specifications.

**Note: Complete (1) for single venture, through (2) for joint venture and through (3) for triple venture.

*** When the working days field contains an asterisk (*) refer to the Special Provisions and General Notes.**

NOTICE TO CONTRACTORS

ANY CONTRACTORS INTENDING TO BID ON ANY WORK TO BE AWARDED BY THIS DEPARTMENT MUST SUBMIT A SATISFACTORY “AUDITED FINANCIAL STATEMENT” AND “EXPERIENCE QUESTIONNAIRE” AT LEAST TEN DAYS PRIOR TO THE LETTING DATE.

UNIT PRICES MUST BE SUBMITTED IN ACCORDANCE WITH ITEM 2 OF THE STANDARD SPECIFICATIONS OR SPECIAL PROVISION TO ITEM 2 FOR EACH ITEM LISTED IN THIS PROPOSAL.

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	2001	002	PREPARING ROW DOLLARS and CENTS	AC	4.250	1
	100	2002	002	PREPARING ROW DOLLARS and CENTS	STA	75.590	2
	100	2008	002	PREPARING ROW (TREE) (0" TO 6" DIA) DOLLARS and CENTS	EA	19.000	3
	100	2009	002	PREPARING ROW (TREE) (6" TO 24" DIA) DOLLARS and CENTS	EA	14.000	4
	104	2001		REMOVING CONC (PAV) DOLLARS and CENTS	SY	4,132.000	5
	104	2009		REMOVING CONC (RIPRAP) DOLLARS and CENTS	SY	6,027.000	6
	104	2011		REMOVING CONC (MEDIANS) DOLLARS and CENTS	SY	240.000	7
	104	2013		REMOVING CONC (FOUNDATIONS) DOLLARS and CENTS	SY	32.000	8
	104	2015		REMOVING CONC (SIDEWALKS) DOLLARS and CENTS	SY	5,005.000	9
	104	2017		REMOVING CONC (DRIVEWAYS) DOLLARS and CENTS	SY	5,237.000	10
	104	2021		REMOVING CONC (CURB) DOLLARS and CENTS	LF	13,732.000	11

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	104	2022		REMOVING CONC (CURB AND GUTTER) DOLLARS and CENTS	LF	20,914.000	12
	104	2024		REMOVING CONC (RETAINING WALLS) DOLLARS and CENTS	SY	235.000	13
	104	2032		REMOVING CONC (WHEELCHAIR RAMP) DOLLARS and CENTS	SY	239.000	14
	104	2037		REMOVE CONC (RAIL) DOLLARS and CENTS	LF	85.000	15
	104	2040		REMOVING CONC (PAVERS) DOLLARS and CENTS	SY	4,686.000	16
	104	2044		REMOVING CONC (FLUME) DOLLARS and CENTS	SY	712.000	17
	105	2034		REMOVING STAB BASE AND ASPH PAV(1"-9") DOLLARS and CENTS	SY	7,014.000	18
	105	2094		REMOVING STAB BASE & ASPH PAV(12"-27") DOLLARS and CENTS	SY	70,536.000	19
	110	2001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	46,531.000	20
	110	2003		EXCAVATION (SPECIAL) DOLLARS and CENTS	CY	4,485.000	21
	132	2004		EMBANKMENT (FINAL)(DENS CONT)(TY B) DOLLARS and CENTS	CY	178,857.000	22

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	132	2006		EMBANKMENT (FINAL)(DENS CONT)(TY C) DOLLARS and CENTS	CY	3,163.000	23
	150	2002		BLADING DOLLARS and CENTS	HR	208.000	24
	160	2005		FURNISHING AND PLACING TOPSOIL DOLLARS and CENTS	CY	3,990.000	25
	162	2002		BLOCK SODDING DOLLARS and CENTS	SY	12,422.000	26
	162	2003		STRAW OR HAY MULCH DOLLARS and CENTS	SY	50,418.000	27
	164	2026	002	CELL FBR MLCH SEED(PERM)(URBAN)(SANDY) DOLLARS and CENTS	AC	3.500	28
	164	2030	002	CELL FBR MLCH SEED(TEMP)(WARM) DOLLARS and CENTS	AC	1.750	29
	164	2032	002	CELL FBR MLCH SEED(TEMP)(COOL) DOLLARS and CENTS	AC	1.750	30
	164	2041	002	DRILL SEEDING (TEMP) (WARM) DOLLARS and CENTS	SY	25,209.000	31
	164	2043	002	DRILL SEEDING (TEMP) (COOL) DOLLARS and CENTS	SY	25,209.000	32

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	166	2001	001	FERTILIZER DOLLARS and CENTS	AC	10.420	33
	168	2001		VEGETATIVE WATERING DOLLARS and CENTS	MG	6,278.700	34
	169	2002	002	SOIL RETENTION BLANKETS (CL 1) (TY B) DOLLARS and CENTS	SY	33,813.000	35
	169	2004	002	SOIL RETENTION BLANKETS (CL 1) (TY D) DOLLARS and CENTS	SY	871.000	36
	169	2007	002	SOIL RETENTION BLANKETS (CL 2) (TY G) DOLLARS and CENTS	SY	5,577.000	37
	170	2001		IRRIGATION SYSTEM DOLLARS and CENTS	LS	1.000	38
	192	2001		PLANT MATERIAL (4" CNTR) DOLLARS and CENTS	EA	200.000	39
	192	2006		PLANT MATERIAL (30-GAL) DOLLARS and CENTS	EA	50.000	40
	192	2026		PLANT MATERIAL (65 GAL) (TREE) DOLLARS and CENTS	EA	27.000	41
	216	2001		PROOF ROLLING DOLLARS and CENTS	HR	21.000	42
	247	2042	033	FL BS (CMP IN PLC)(TY A GR 2)(FNAL POS) DOLLARS and CENTS	CY	26,813.000	43

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	247	2054	033	FL BS (CMP IN PLC)(TY D GR 2)(FNAL POS) DOLLARS and CENTS	CY	816.000	44
	310	2001		PRIME COAT (MC-30) DOLLARS and CENTS	GAL	1,190.000	45
	316	2015	016	ASPH (RC-250) DOLLARS and CENTS	GAL	19,899.000	46
	316	2076	016	AGGR(TY-B GR-4 SAC-A) DOLLARS and CENTS	CY	77.000	47
	316	2250	016	AGGR(TY-PE GR-5 SAC-B) DOLLARS and CENTS	CY	830.000	48
	354	2021		PLANE ASPH CONC PAV(0" TO 2") DOLLARS and CENTS	SY	1,214.000	49
	354	2045		PLANE ASPH CONC PAV (2") DOLLARS and CENTS	SY	36,659.000	50
	360	2001	013	CONC PVMT (CONT REINF-CRCP)(8") DOLLARS and CENTS	SY	3,215.000	51
	360	2005	013	CONC PVMT (CONT REINF-CRCP)(12") DOLLARS and CENTS	SY	12,092.000	52
	360	2067	013	SAWCUT (CONCRETE) DOLLARS and CENTS	LF	2,139.000	53
	400	2005		CEM STABIL BKFL DOLLARS and CENTS	CY	14,441.000	54

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	402	2001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	7,973.000	55
	403	2001		TEMPORARY SPL SHORING DOLLARS and CENTS	SF	12,426.000	56
	416	2002		DRILL SHAFT (24 IN) DOLLARS and CENTS	LF	86.000	57
	416	2003		DRILL SHAFT (30 IN) DOLLARS and CENTS	LF	12.000	58
	416	2004		DRILL SHAFT (36 IN) DOLLARS and CENTS	LF	960.000	59
	416	2007		DRILL SHAFT (54 IN) DOLLARS and CENTS	LF	305.000	60
	416	2018		DRILL SHAFT (SIGN MTS)(24 IN) DOLLARS and CENTS	LF	12.600	61
	416	2020		DRILL SHAFT (SIGN MTS)(36 IN) DOLLARS and CENTS	LF	86.000	62
	416	2021		DRILL SHAFT (SIGN MTS)(42 IN) DOLLARS and CENTS	LF	19.000	63
	416	2023		DRILL SHAFT (SIGN MTS)(54 IN) DOLLARS and CENTS	LF	52.000	64
	416	2029		DRILL SHAFT (RDWY ILL POLE) (30 IN) DOLLARS and CENTS	LF	440.000	65

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	416	2032		DRILL SHAFT (TRF SIG POLE) (36 IN) DOLLARS and CENTS	LF	65.000	66
	416	2034		DRILL SHAFT (TRF SIG POLE) (48 IN) DOLLARS and CENTS	LF	22.000	67
	420	2003	002	CL C CONC (ABUT) DOLLARS and CENTS	CY	94.700	68
	420	2006	002	CL C CONC (RAIL FOUNDATION) DOLLARS and CENTS	CY	237.000	69
	420	2019	002	CL C CONC (CAP) DOLLARS and CENTS	CY	243.800	70
	420	2033	002	CL S CONC (APPR SLAB) DOLLARS and CENTS	CY	144.600	71
	420	2039	002	CL D CONC (MISC) DOLLARS and CENTS	CY	2.900	72
	420	2051	002	CL C CONC (COLUMN) DOLLARS and CENTS	CY	74.700	73
	420	2064	002	CL A CONC (PLUG) DOLLARS and CENTS	EA	1.000	74
	422	2001		REINF CONC SLAB DOLLARS and CENTS	SF	36,348.000	75

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	423	2003		RETAINING WALL (MSE)(ASHLAR STONE FIN) DOLLARS and CENTS	SF	58,810.000	76
	423	2053		RETAINING WALL (EXISTING MSE)(FACIA) DOLLARS and CENTS	SF	2,053.000	77
	425	2068	001	PRESTR CONC GIRDER (TX54) DOLLARS and CENTS	LF	5,149.240	78
	432	2001		RIPRAP (CONC)(4 IN) DOLLARS and CENTS	CY	1,250.000	79
	432	2002		RIPRAP (CONC)(5 IN) DOLLARS and CENTS	CY	224.000	80
	432	2039		RIPRAP (MOW STRIP)(4 IN) DOLLARS and CENTS	CY	3.000	81
	432	2040		RIPRAP (MOW STRIP)(5 IN) DOLLARS and CENTS	CY	84.000	82
	442	2048	016	STRUCTURAL STEEL(MISC NON-BRIDGE) DOLLARS and CENTS	LB	862.000	83
	450	2013	001	RAIL (TY SSTR) DOLLARS and CENTS	LF	5,834.000	84
	450	2062	001	RAIL (TY SSCB) DOLLARS and CENTS	LF	434.000	85

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	450	2064	001	RAIL (TY C221) DOLLARS and CENTS	LF	1,768.000	86
	450	2072	001	RAIL (HANDRAIL)(TY A) DOLLARS and CENTS	LF	60.000	87
	450	2078	001	RAIL (HANDRAIL)(TY W) DOLLARS and CENTS	LF	110.000	88
	452	2004		REMOV RAIL (CONC PARAPET & MTL ELMNTS) DOLLARS and CENTS	LF	488.000	89
	452	2010		REMOV RAIL (PEDESTRIAN) DOLLARS and CENTS	LF	811.000	90
	454	2001	003	SEALED EXPANSION JOINT (4 IN)(SEJ-A) DOLLARS and CENTS	LF	182.000	91
	462	2001	015	CONC BOX CULV (3 FT X 2 FT) DOLLARS and CENTS	LF	164.000	92
	462	2006	015	CONC BOX CULV (5 FT X 2 FT) DOLLARS and CENTS	LF	70.000	93
	462	2010	015	CONC BOX CULV (6 FT X 3 FT) DOLLARS and CENTS	LF	1,568.000	94
	462	2014	015	CONC BOX CULV (7 FT X 3 FT) DOLLARS and CENTS	LF	656.000	95

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	462	2019	015	CONC BOX CULV (8 FT X 4 FT) and DOLLARS CENTS	LF	2,545.000	96
	464	2003	006	RC PIPE (CL III)(18 IN) and DOLLARS CENTS	LF	127.000	97
	464	2005	006	RC PIPE (CL III)(24 IN) and DOLLARS CENTS	LF	13,070.000	98
	464	2007	006	RC PIPE (CL III)(30 IN) and DOLLARS CENTS	LF	1,210.000	99
	464	2009	006	RC PIPE (CL III)(36 IN) and DOLLARS CENTS	LF	639.000	100
	464	2010	006	RC PIPE (CL III)(42 IN) and DOLLARS CENTS	LF	389.000	101
	464	2011	006	RC PIPE (CL III)(48 IN) and DOLLARS CENTS	LF	1,016.000	102
	464	2012	006	RC PIPE (CL III)(54 IN) and DOLLARS CENTS	LF	327.000	103
	465	2010	002	INLET (COMPL)(TY AAD) and DOLLARS CENTS	EA	14.000	104
	465	2011	002	INLET (COMPL)(TY AD) and DOLLARS CENTS	EA	12.000	105
	465	2053	002	INLET (COMPL)(CURB)(TY 2)(5') and DOLLARS CENTS	EA	1.000	106

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	465	2092	002	MANH (COMPL)(TY 1) and DOLLARS CENTS	EA	15.000	107
	465	2104	002	INLET EXT and DOLLARS CENTS	EA	56.000	108
	465	2190	002	INLET (COMPL)(DROP)(TY W-1) and DOLLARS CENTS	EA	1.000	109
	465	2193	002	MANH (COMPL)(TY 2) and DOLLARS CENTS	EA	1.000	110
	465	2194	002	MANH (COMPL)(TY 4) and DOLLARS CENTS	EA	1.000	111
	465	2289	002	MANH (COMPL)(TY 3) and DOLLARS CENTS	EA	3.000	112
	465	2479	002	MANH (COMPL)(TY 5) and DOLLARS CENTS	EA	5.000	113
	465	2733	002	JUNCTION BOX (SPL) and DOLLARS CENTS	EA	1.000	114
	465	4004	002	INLET (COMPL)(PCO)(3FTX5FT) and DOLLARS CENTS	EA	38.000	115
	465	4005	002	INLET (COMPL)(PCO)(4FTX5FT) and DOLLARS CENTS	EA	5.000	116
	465	4007	002	INLET (COMPL)(PCO)(5FTX6FT) and DOLLARS CENTS	EA	9.000	117

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	465	4008	002	INLET (COMPL)(PCU)(3FTX5FT) DOLLARS and CENTS	EA	12.000	118
	465	4015	002	INLET (COMPL)(POD)(3FTX3FT) DOLLARS and CENTS	EA	58.000	119
	465	4017	002	INLET (COMPL)(POD)(3FTX5FT) DOLLARS and CENTS	EA	20.000	120
	466	2050		WINGWALL (PW)(HW=6 FT) DOLLARS and CENTS	EA	2.000	121
	466	2051		WINGWALL (PW)(HW=7 FT) DOLLARS and CENTS	EA	2.000	122
	466	2052		WINGWALL (PW)(HW=8 FT) DOLLARS and CENTS	EA	3.000	123
	466	2053		WINGWALL (PW)(HW=9 FT) DOLLARS and CENTS	EA	2.000	124
	466	2125		HEADWALL (CH-PW-0)(DIA= 24 IN) DOLLARS and CENTS	EA	2.000	125
	466	2127		HEADWALL (CH-PW-0)(DIA= 30 IN) DOLLARS and CENTS	EA	2.000	126
	466	2129		HEADWALL (CH-PW-0)(DIA= 36 IN) DOLLARS and CENTS	EA	2.000	127
	466	2140		HEADWALL (CH-PW-S)(DIA= 24 IN) DOLLARS and CENTS	EA	1.000	128

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	467	2182		SET (TY I)(S= 5 FT)(HW= 3 FT)(6:1)(P) DOLLARS and CENTS	EA	2.000	129
	467	2188		SET (TY I)(S= 6 FT)(HW= 4 FT)(6:1)(P) DOLLARS and CENTS	EA	4.000	130
	467	2209		SET (TY II)(18 IN)(RCP)(3:1)(C) DOLLARS and CENTS	EA	1.000	131
	467	2211		SET (TY II)(24 IN)(RCP)(3:1)(C) DOLLARS and CENTS	EA	2.000	132
	467	2236		SET (TY II)(24 IN)(RCP)(6:1)(C) DOLLARS and CENTS	EA	16.000	133
	467	2240		SET (TY II)(36 IN)(RCP)(6:1)(C) DOLLARS and CENTS	EA	2.000	134
	467	2251		SET (TY II)(30 IN)(CMP)(3:1)(C) DOLLARS and CENTS	EA	1.000	135
	479	2011		ADJ MANHS (ELECTRIC BOX) DOLLARS and CENTS	EA	1.000	136
	480	2001		CLEAN EXIST CULVS DOLLARS and CENTS	EA	27.000	137
	481	2003		PVC PIPE (SDR-35)(8 IN) DOLLARS and CENTS	LF	31.000	138
	481	2027		PVC PIPE (SCH 80)(4 IN) DOLLARS and CENTS	LF	510.000	139

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	496	2002		REMOV STR (INLET) and DOLLARS CENTS	EA	53.000	140
	496	2003		REMOV STR (MANHOLE) and DOLLARS CENTS	EA	2.000	141
	496	2004		REMOV STR (SET) and DOLLARS CENTS	EA	37.000	142
	496	2005		REMOV STR (WINGWALL) and DOLLARS CENTS	EA	9.000	143
	496	2006		REMOV STR (HEADWALL) and DOLLARS CENTS	EA	9.000	144
	496	2007		REMOV STR (PIPE) and DOLLARS CENTS	LF	3,171.000	145
	496	2008		REMOV STR (BOX CULVERT) and DOLLARS CENTS	LF	881.000	146
	496	2041		REMOV STR (LARGE) and DOLLARS CENTS	EA	2.000	147
	496	2043		REMOV STR (SMALL FENCE) and DOLLARS CENTS	LF	5,383.000	148
	496	2295		REMOV STR (MASONARY) and DOLLARS CENTS	LF	300.000	149
	500	2001	011	MOBILIZATION and DOLLARS CENTS	LS	1.000	150

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	502	2001	033	BARRICADES, SIGNS AND TRAFFIC HAN- DLING DOLLARS CENTS and	MO	30.000	151
	508	2002		CONSTRUCTING DETOURS DOLLARS CENTS and	SY	7,947.000	152
	512	2001	002	PORT CTB (FUR & INST)(SAFETY SH)(TY 1) DOLLARS CENTS and	LF	1,050.000	153
	512	2004	002	PORT CTB (FUR & INST)(SNGL SLP)(TY 1) DOLLARS CENTS and	LF	312.000	154
	512	2008	002	PORT CTB (FUR & INST)(LOW PROF)(TY 1) DOLLARS CENTS and	LF	280.000	155
	512	2009	002	PORT CTB (FUR & INST)(LOW PROF)(TY 2) DOLLARS CENTS and	LF	160.000	156
	512	2013	002	PORT CTB (DES SOURCE)(SNGL SLP)(TY 1) DOLLARS CENTS and	LF	13,560.000	157
	512	2022	002	PORT CTB (MOVE)(SNGL SLP) (TY 1) DOLLARS CENTS and	LF	24,900.000	158
	512	2031	002	PORT CTB (STKPL)(SNGL SLP) (TY 1) DOLLARS CENTS and	LF	13,560.000	159
	512	2044	002	PORT CTB (REMOVE)(LOW PROF)(TY 1) DOLLARS CENTS and	LF	280.000	160

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	512	2045	002	PORT CTB (REMOVE)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	160.000	161
	514	2004	002	PERM CONC TRF BARR (SGL SLP)(TY 1)(42") DOLLARS and CENTS	LF	8,376.000	162
	528	2004		LANDSCAPE PAVERS DOLLARS and CENTS	SY	688.000	163
	529	2002		CONC CURB (TY II) DOLLARS and CENTS	LF	110.000	164
	529	2003		CONC CURB & GUTTER (TY I) DOLLARS and CENTS	LF	810.000	165
	529	2004		CONC CURB & GUTTER (TY II) DOLLARS and CENTS	LF	28,790.000	166
	529	2006		CONC CURB (MONO) (TY II) DOLLARS and CENTS	LF	3,214.000	167
	529	2009		CONCRETE CURB (SPECIAL) DOLLARS and CENTS	LF	96.000	168
	530	2010	006	DRIVEWAYS (CONC) DOLLARS and CENTS	SY	4,804.000	169
	531	2005		CURB RAMPS (TY 1) DOLLARS and CENTS	EA	16.000	170
	531	2006		CURB RAMPS (TY 2) DOLLARS and CENTS	EA	18.000	171

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	531	2014		CURB RAMPS (TY 22) and DOLLARS CENTS	EA	2.000	172
	531	2015		CONC SIDEWALKS (4") and DOLLARS CENTS	SY	7,799.000	173
	531	2017		CURB RAMPS (TY 21) and DOLLARS CENTS	EA	1.000	174
	531	2041		CURB RAMPS (TY 10) and DOLLARS CENTS	EA	18.000	175
	531	2083		CURB RAMPS (SPECIAL-1) and DOLLARS CENTS	EA	3.000	176
	540	2001	031	MTL W-BEAM GD FEN (TIM POST) and DOLLARS CENTS	LF	437.500	177
	540	2011	031	MTL BEAM GD FEN TRANS (THRIE-BEAM) and DOLLARS CENTS	EA	1.000	178
	542	2001		REMOVING METAL BEAM GUARD FENCE and DOLLARS CENTS	LF	445.000	179
	544	2001		GUARDRAIL END TREATMENT (INSTALL) and DOLLARS CENTS	EA	1.000	180
	545	2003		CRASH CUSH ATTEN (REMOVE) and DOLLARS CENTS	EA	9.000	181
	545	2022		CRASH CUSH ATTEN (INSTL)(REACT)(N) and DOLLARS CENTS	EA	2.000	182

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	545	2023		CRASH CUSH ATTEN (MOVE&RESET)(REACT)(N) DOLLARS CENTS and	EA	1.000	183
	545	2037		CRASH CUSH ATTEN (INSTAL)(BEAT-SSCC) DOLLARS CENTS and	EA	1.000	184
	545	2049		CRASH CUSH ATTEN (INSTL)(WORK ZONE) DOLLARS CENTS and	EA	9.000	185
	545	2050		CRASH CUSH ATTEN(MOV&RESET)(WORK ZONE) DOLLARS CENTS and	EA	19.000	186
	550	2001		CHAIN LINK FENCE (INSTALL) (6') DOLLARS CENTS and	LF	375.000	187
	550	2003		CHAIN LINK FENCE (REMOVE) DOLLARS CENTS and	LF	130.000	188
	550	2006		GATE (REMOVE) DOLLARS CENTS and	EA	2.000	189
	550	2035		GATE (INSTALL) (DOUBLE) (6' X 28') DOLLARS CENTS and	EA	1.000	190
	550	2057		GATE (INSTALL)(DOUBLE)(4' X 20.5') DOLLARS CENTS and	EA	1.000	191
	610	2022	015	INS RD IL AM (TY SA) 40S-8 (.25 KW)S DOLLARS CENTS and	EA	19.000	192

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	610	2025	015	INS RD IL AM (TY SA) 40T-8 (.25 KW)S DOLLARS and CENTS	EA	31.000	193
	610	2026	015	INS RD IL AM (TY SA) 40T-8-8 (.25 KW)S DOLLARS and CENTS	EA	3.000	194
	610	2061	015	INS RD IL AM (U/P) (TY 2) (.15KW)S DOLLARS and CENTS	EA	8.000	195
	610	2072	015	REMOVE RDWY ILL ASSEM DOLLARS and CENTS	EA	24.000	196
	610	2116	015	SITE LIGHT PLE(30FT) W/FIXTURE DOLLARS and CENTS	EA	9.000	197
	610	2117	015	SIGN LIGHT FIXTURE DOLLARS and CENTS	EA	3.000	198
	618	2012		CONDT (PVC) (SCHD 40) (1") DOLLARS and CENTS	LF	836.000	199
	618	2016		CONDT (PVC) (SCHD 40) (1 1/2") DOLLARS and CENTS	LF	183.000	200
	618	2018		CONDT (PVC) (SCHD 40) (2") DOLLARS and CENTS	LF	13,236.000	201
	618	2019		CONDT (PVC) (SCHD 40) (2") (BORE) DOLLARS and CENTS	LF	293.000	202
	618	2024		CONDT (PVC) (SCHD 40) (4") DOLLARS and CENTS	LF	905.000	203

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	618	2044		CONDT (RM) (3/4") and DOLLARS CENTS	LF	612.000	204
	618	2052		CONDT (RM) (2") and DOLLARS CENTS	LF	40.000	205
	620	2009	001	ELEC CONDR (NO. 6) BARE and DOLLARS CENTS	LF	2,096.000	206
	620	2010	001	ELEC CONDR (NO. 6) INSULATED and DOLLARS CENTS	LF	2,134.000	207
	620	2011	001	ELEC CONDR (NO. 8) BARE and DOLLARS CENTS	LF	12,346.000	208
	620	2012	001	ELEC CONDR (NO. 8) INSULATED and DOLLARS CENTS	LF	31,705.000	209
	620	2013	001	ELEC CONDR (NO.10) BARE and DOLLARS CENTS	LF	836.000	210
	620	2015	001	ELEC CONDR (NO.12) BARE and DOLLARS CENTS	LF	795.000	211
	620	2016	001	ELEC CONDR (NO.12) INSULATED and DOLLARS CENTS	LF	1,590.000	212
	621	2002		TRAY CABLE (3 CONDR) (12 AWG) and DOLLARS CENTS	LF	975.000	213
	624	2008	014	GROUND BOX TY A (122311) W/APRON and DOLLARS CENTS	EA	16.000	214

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	624	2012	014	GROUND BOX TY C (162911) W/APRON DOLLARS and CENTS	EA	11.000	215
	624	2025	014	GROUND BOX TY 2 (484860) W/APRON DOLLARS and CENTS	EA	12.000	216
	624	2027	014	GROUND BOX TY 1 (364860) W/APRON DOLLARS and CENTS	EA	4.000	217
	624	2034	014	REMOVE EXISTING GROUND BOXES DOLLARS and CENTS	EA	8.000	218
	627	2001		TIMBER POLE (CL 2) 40 FT DOLLARS and CENTS	EA	3.000	219
	628	2005	003	ELC SRV TY A 120/240 060 (NS)SS(E)SP(O) DOLLARS and CENTS	EA	4.000	220
	628	2017	003	ELC SRV TY A 240/480 060 (NS)SS(E)SP(O) DOLLARS and CENTS	EA	2.000	221
	628	2063	003	ELC SRV TY D 120/240 060 (NS)GS(N)SP(O) DOLLARS and CENTS	EA	2.000	222
	628	2158	003	REMOVE ELECTRICAL SERVICES DOLLARS and CENTS	EA	1.000	223
	628	2166	003	ELC SRV TY T 120/240 000 (NS)SS(E)SP(O) DOLLARS and CENTS	EA	1.000	224
	636	2001	014	ALUMINUM SIGNS (TY A) DOLLARS and CENTS	SF	68.000	225

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	636	2002	014	ALUMINUM SIGNS (TY G) DOLLARS and CENTS	SF	142.000	226
	636	2003	014	ALUMINUM SIGNS (TY O) DOLLARS and CENTS	SF	1,350.000	227
	644	2001		IN SM RD SN SUP&AM TY10BWG(1)SA(P) DOLLARS and CENTS	EA	48.000	228
	644	2002		IN SM RD SN SUP&AM TY10BWG(1)SA(P-BM) DOLLARS and CENTS	EA	5.000	229
	644	2004		IN SM RD SN SUP&AM TY10BWG(1)SA(T) DOLLARS and CENTS	EA	57.000	230
	644	2006		IN SM RD SN SUP&AM TY10BWG(1)SA(U) DOLLARS and CENTS	EA	2.000	231
	644	2025		IN SM RD SN SUP&AM TYS80(1)SA(T) DOLLARS and CENTS	EA	6.000	232
	644	2027		IN SM RD SN SUP&AM TYS80(1)SA(U) DOLLARS and CENTS	EA	7.000	233
	644	2029		IN SM RD SN SUP&AM TYS80(1)SA(U-2EXT) DOLLARS and CENTS	EA	2.000	234
	644	2060		REMOVE SM RD SN SUP & AM DOLLARS and CENTS	EA	62.000	235
	644	2063		INS SM RD SN SUP&AM (RAIL MOUNT) DOLLARS and CENTS	EA	2.000	236

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	644	2077		REMOVE SM RD SN SUP & AM (SIGN ONLY) DOLLARS and CENTS	EA	13.000	237
	647	2001		INSTALL LRSS (STRUCT STEEL) DOLLARS and CENTS	LB	564.000	238
	647	2003		REMOVE LRSA DOLLARS and CENTS	EA	4.000	239
	650	2022		INS OH SN SUP(25 FT CANT) DOLLARS and CENTS	EA	1.000	240
	650	2040		INS OH SN SUP(40 FT CANT) DOLLARS and CENTS	EA	2.000	241
	650	2103		INS OH SN SUP(100 FT BRDG) DOLLARS and CENTS	EA	1.000	242
	650	2128		INS OH SN SUP(125 FT BRDG) DOLLARS and CENTS	EA	1.000	243
	658	2237		INSTL DEL ASSM (D-SW)SZ 1(FLX)SRF DOLLARS and CENTS	EA	5.000	244
	658	2240		INSTL DEL ASSM (D-SW)SZ 1(FLX)GF2 DOLLARS and CENTS	EA	5.000	245
	658	2258		INSTL DEL ASSM (D-SW)SZ (TYC)CTB DOLLARS and CENTS	EA	83.000	246
	658	2278		INSTL DEL ASSM (D-SY)SZ (TYC)CTB(BI) DOLLARS and CENTS	EA	52.000	247

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	658	2292		INSTL DEL ASSM (D-DW)SZ 1(FLX)GND DOLLARS and CENTS	EA	28.000	248
	658	2294		INSTL DEL ASSM (D-DW)SZ 1(FLX)SRF DOLLARS and CENTS	EA	9.000	249
	658	2303		INSTL DEL ASSM (D-DY)SZ 1(FLX)SRF DOLLARS and CENTS	EA	66.000	250
	658	2316		INSTL OM ASSM (OM-2Z)(FLX)GND DOLLARS and CENTS	EA	67.000	251
	658	2328		REMOVE DELIN & OBJECT MARKERS ASSMS DOLLARS and CENTS	EA	260.000	252
	658	2329		INSTL DEL ASSM (D-SW)SZ 1(FLX)GND DOLLARS and CENTS	EA	21.000	253
	662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	3,425.000	254
	662	2012		WK ZN PAV MRK NON-REMOV (W) 8" (SLD) DOLLARS and CENTS	LF	1,814.000	255
	662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	10,883.000	256
	662	2064		WK ZN PAV MRK REMOV (W) 4" (BRK) DOLLARS and CENTS	LF	10,275.000	257
	662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	53,716.000	258

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	2079		WK ZN PAV MRK REMOV (W) 24" (SLD) DOLLARS and CENTS	LF	418.000	259
	662	2084		WK ZN PAV MRK REMOV (W) (ARROW) DOLLARS and CENTS	EA	18.000	260
	662	2094		WK ZN PAV MRK REMOV (W) (WORD) DOLLARS and CENTS	EA	13.000	261
	662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	47,971.000	262
	666	2003		REFL PAV MRK TY I (W) 4" (BRK)(100MIL) DOLLARS and CENTS	LF	7,795.000	263
	666	2006		REFL PAV MRK TY I (W) 4" (DOT)(100MIL) DOLLARS and CENTS	LF	243.000	264
	666	2012		REFL PAV MRK TY I (W) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	26,929.000	265
	666	2030		REFL PAV MRK TY I (W) 8" (DOT)(100MIL) DOLLARS and CENTS	LF	461.000	266
	666	2036		REFL PAV MRK TY I (W) 8" (SLD)(100MIL) DOLLARS and CENTS	LF	11,933.000	267
	666	2039		REFL PAV MRK TY I (W) 12"(LNDP)(100MIL) DOLLARS and CENTS	LF	465.000	268
	666	2042		REFL PAV MRK TY I (W) 12"(SLD)(100MIL) DOLLARS and CENTS	LF	700.000	269

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	2048		REFL PAV MRK TY I (W) 24"(SLD)(100MIL) DOLLARS and CENTS	LF	1,855.000	270
	666	2054		REFL PAV MRK TY I (W) (ARROW) (100MIL) DOLLARS and CENTS	EA	36.000	271
	666	2057		REFL PAV MRK TY I (W)(BIKE ARW)(100MIL) DOLLARS and CENTS	EA	9.000	272
	666	2063		REFL PAV MRK TY I(W)(BIKE SYML)(100MIL) DOLLARS and CENTS	EA	10.000	273
	666	2066		REFL PAV MRK TY I(W)(BIKE WORD)(100MIL) DOLLARS and CENTS	EA	1.000	274
	666	2069		REFL PAV MRK TY I(W)(DBL ARROW)(100MIL) DOLLARS and CENTS	EA	12.000	275
	666	2093		REFL PAV MRK TY I(W)(UTURN ARW)(100MIL) DOLLARS and CENTS	EA	5.000	276
	666	2096		REFL PAV MRK TY I (W) (WORD) (100MIL) DOLLARS and CENTS	EA	39.000	277
	666	2099		REF PAV MRK TY I(W)18"(YLD TRI)(100MIL) DOLLARS and CENTS	EA	107.000	278
	666	2111		REFL PAV MRK TY I (Y) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	27,318.000	279

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	2132		REFL PAV MRK TY I (Y) 24"(SLD)(100MIL) DOLLARS and CENTS	LF	353.000	280
	666	2141		REFL PAV MRK TY I (Y)(MED NOSE)(100MIL) DOLLARS and CENTS	EA	2.000	281
	668	2002		PREFAB PAV MRK (ACC PRK)(BLU & WHT)LRG DOLLARS and CENTS	EA	5.000	282
	668	2050		PREFAB PAV MRK TY B (W)(4")(BRK) CNTST DOLLARS and CENTS	LF	311.000	283
	672	2012	034	REFL PAV MRKR TY I-C DOLLARS and CENTS	EA	52.000	284
	672	2015	034	REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	127.000	285
	672	2017	034	REFL PAV MRKR TY II-C-R DOLLARS and CENTS	EA	1,224.000	286
	677	2001		ELIM EXT PAV MRK & MRKS (4") DOLLARS and CENTS	LF	23,949.000	287
	677	2003		ELIM EXT PAV MRK & MRKS (8") DOLLARS and CENTS	LF	2,340.000	288
	677	2005		ELIM EXT PAV MRK & MRKS (12") DOLLARS and CENTS	LF	1,810.000	289

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	677	2007		ELIM EXT PAV MRK & MRKS (24") DOLLARS and CENTS	LF	783.000	290
	677	2008		ELIM EXT PAV MRK & MRKS (ARROW) DOLLARS and CENTS	EA	7.000	291
	677	2018		ELIM EXT PAV MRK & MRKS (WORD) DOLLARS and CENTS	EA	7.000	292
	680	2002		INSTALL HWY TRF SIG (ISOLATED) DOLLARS and CENTS	EA	1.000	293
	681	2001	002	TEMP TRAF SIGNALS DOLLARS and CENTS	EA	1.000	294
	682	2001	003	BACK PLATE (12 IN) (3 SEC) DOLLARS and CENTS	EA	19.000	295
	682	2003	003	BACK PLATE (12 IN) (5 SEC) DOLLARS and CENTS	EA	2.000	296
	682	2022	003	VEH SIG SEC (12 IN) LED (GRN ARW) DOLLARS and CENTS	EA	2.000	297
	682	2023	003	VEH SIG SEC (12 IN) LED (GRN) DOLLARS and CENTS	EA	21.000	298
	682	2024	003	VEH SIG SEC (12 IN) LED (YEL ARW) DOLLARS and CENTS	EA	2.000	299
	682	2025	003	VEH SIG SEC (12 IN) LED (YEL) DOLLARS and CENTS	EA	21.000	300

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	ITEM NO	DESC CODE	S.P. NO.				
	682	2027	003	VEH SIG SEC (12 IN) LED (RED) DOLLARS and CENTS	EA	21.000	301
	682	2066	003	PED SIG SEC (12 IN) LED (COUNTDOWN) DOLLARS and CENTS	EA	12.000	302
	684	2007		TRF SIG CBL (TY A) (12 AWG) (2 CONDR) DOLLARS and CENTS	LF	1,735.000	303
	684	2009		TRF SIG CBL (TY A) (12 AWG) (4 CONDR) DOLLARS and CENTS	LF	1,795.000	304
	684	2010		TRF SIG CBL (TY A) (12 AWG) (5 CONDR) DOLLARS and CENTS	LF	1,260.000	305
	684	2012		TRF SIG CBL (TY A) (12 AWG) (7 CONDR) DOLLARS and CENTS	LF	135.000	306
	684	2014		TRF SIG CBL (TY A) (12 AWG) (9 CONDR) DOLLARS and CENTS	LF	1,280.000	307
	684	2049		TRF SIG CBL (TY A) (16 AWG) (3 CONDR) DOLLARS and CENTS	LF	1,680.000	308
	686	2035		INS TRF SIG PL AM(S) 1 ARM (36') DOLLARS and CENTS	EA	2.000	309
	686	2045		INS TRF SIG PL AM(S) 1 ARM (44') LUM DOLLARS and CENTS	EA	1.000	310
	686	2049		INS TRF SIG PL AM(S) 1 ARM (48') LUM DOLLARS and CENTS	EA	2.000	311

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	686	2057		INS TRF SIG PL AM(S) 1 ARM (55') LUM DOLLARS and CENTS	EA	1.000	312
	686	2315		VERTICAL CLEARANCE STRUCTURE (16') DOLLARS and CENTS	EA	1.000	313
	687	2001	005	PED POLE ASSEMBLY DOLLARS and CENTS	EA	6.000	314
	690	2006		REMOVAL OF GROUND BOXES DOLLARS and CENTS	EA	1.000	315
	690	2051		REMOVAL OF SIGNAL POLE ASSM DOLLARS and CENTS	EA	3.000	316
	690	2128		REMOVE PED POLE ASSM DOLLARS and CENTS	EA	2.000	317
	1003	2001		LANDSCAPE BOULDERS DOLLARS and CENTS	EA	1.000	318
	1018	2003		TREE PROTECTION DOLLARS and CENTS	LF	320.000	319
	1122	2001	001	ROCK FILTER DAMS (INSTALL) (TY 1) DOLLARS and CENTS	LF	459.000	320
	1122	2002	001	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	1,268.000	321
	1122	2009	001	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	1,268.000	322

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	1122	2016	001	CONSTRUCTION EXITS (INSTALL) (TY 1) DOLLARS and CENTS	SY	655.000	323
	1122	2019	001	CONSTRUCTION EXITS (REMOVE) DOLLARS and CENTS	SY	655.000	324
	1122	2037	001	TEMPORARY SEDIMENT CONTROL FENCE INSTLL DOLLARS and CENTS	LF	12,402.000	325
	1122	2038	001	TEMP SDMT CONT FENCE (INLET PROTEC- TION) DOLLARS and CENTS	LF	5,335.000	326
	1122	2047	001	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL DOLLARS and CENTS	LF	1,038.000	327
	1122	2048	001	BIOGRD EROSN CONT LOGS (12" DIA)INSTALL DOLLARS and CENTS	LF	2,980.000	328
	1122	2056	001	BIODEGRADBLE EROSION CONTROL LOGS REMOV DOLLARS and CENTS	LF	4,018.000	329
	1122	2057	001	TEMPORARY SEDIMENT CONTROL FENCE REMOVE DOLLARS and CENTS	LF	17,512.000	330
	1150	2001		LANDSCAPE MAINTENANCE DOLLARS and CENTS	MO	12.000	331

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	2280	2001		MULTI-DUCT CONDUIT DOLLARS and CENTS	LF	4,946.000	332
	2282	2001		DECORATIVE METALWORK LED BACK- LIGHTING DOLLARS and CENTS	LS	1.000	333
	2284	2001		FIB OPTIC CBL(SELF-SUPPORT)(SM)(12 FIB) DOLLARS and CENTS	LF	7,999.000	334
	2285	2001		ITS SYSTEM SUPPORT EQUIPMENT DOLLARS and CENTS	EA	1.000	335
	2286	2001		REMOV & RELOCATE CAMERA POLE STRUCTURE DOLLARS and CENTS	EA	1.000	336
	2289	2001		REMOVE STR (PIPE) (SANITARY) DOLLARS and CENTS	LF	1,014.000	337
	2289	2002		REMOVE STR (MANHOLE)(SANITARY) DOLLARS and CENTS	EA	1.000	338
	2289	2003		SANITARY SEWER MANHOLE DOLLARS and CENTS	EA	1.000	339
	2299	2001		RELOCATE FLAGPOLE DOLLARS and CENTS	EA	2.000	340
	2301	2001		REMOVE GROUND LIGHTS DOLLARS and CENTS	EA	2.000	341

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	2301	2002		REMOVE IRRIGATION SYSTEM AND WIRING DOLLARS and CENTS	EA	2.000	342
	2307	2001		MONUMENT SIGN DOLLARS and CENTS	EA	2.000	343
	2309	2001		CHAMBER DETENTION SYSTEM DOLLARS and CENTS	LS	1.000	344
	3267	2120		D-GR HMA(SQ) TY-D SAC-B PG70-22 DOLLARS and CENTS	TON	821.000	345
	3268	2010		D-GR HMA TY-B PG70-22 DOLLARS and CENTS	TON	40,780.000	346
	3270	2164		SUPERPAVE MIXTURES SP-B SAC-B PG 76-22 DOLLARS and CENTS	TON	9,576.000	347
	3271	2045		STONE-MTRX-ASPH SMA-D PG76-22 DOLLARS and CENTS	TON	15,787.000	348
	5434	2001		WHEEL STOPS DOLLARS and CENTS	EA	52.000	349
	5445	2001		DEAD END ROADWAY BARRICADE DOLLARS and CENTS	LF	32.000	350
	6006	2001		SPREAD SPECTRUM RADIO DOLLARS and CENTS	EA	1.000	351
	6006	2002		COAXIAL CABLE DOLLARS and CENTS	LF	205.000	352

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	6006	2005		ANTENNA (UNI-DIRECTIONAL) DOLLARS and CENTS	EA	1.000	353
	6007	2001		REMOVING TRAFFIC SIGNALS DOLLARS and CENTS	EA	1.000	354
	6014	2010	041	FIBER OPTIC CBL (SNGLE-MODE)(6 FIBER) DOLLARS and CENTS	LF	448.000	355
	6014	2015	041	FIBER OPTIC CBL (SNGLE-MODE)(72 FIBER) DOLLARS and CENTS	LF	6,519.000	356
	6014	2020	041	FIBER OPTIC SPLICE ENCLOSURE DOLLARS and CENTS	EA	2.000	357
	6014	2024	041	FIBER OPTIC CABLE ROAD MARKER DOLLARS and CENTS	EA	2.000	358
	6014	2035	041	FIBER OPTIC PATCH PANEL (72 POSITION) DOLLARS and CENTS	EA	1.000	359
	6014	2037	041	FIBER OPTIC CABLE ROAD MARKER DOLLARS and CENTS	EA	20.000	360
	6014	2043	041	FIBER OPTIC PATCH PANEL (6 POSITION) DOLLARS and CENTS	EA	3.000	361
	6025	2001		CCTV FIELD EQUIPMENT DOLLARS and CENTS	EA	3.000	362
	6266	2001	017	VIVDS PROCESSOR SYSTEM DOLLARS and CENTS	EA	2.000	363

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	ITEM NO	DESC CODE	S.P. NO.				
	6266	2002	017	VIVDS CAMERA ASSEMBLY DOLLARS and CENTS	EA	6.000	364
	6266	2003	017	VIVDS SET-UP SYSTEM DOLLARS and CENTS	EA	1.000	365
	6266	2005	017	VIVDS COMMUNICATION CABLE (COAXIAL) DOLLARS and CENTS	LF	1,680.000	366
	6834	2002	002	PORTABLE CHANGEABLE MESSAGE SIGN DOLLARS and CENTS	EA	8.000	367
	8368	2003		CONDUIT (PREPARE) DOLLARS and CENTS	LF	2,015.000	368
	8835	2001		ACCESSIBLE PEDESTRIAN SIGNAL UNITS DOLLARS and CENTS	EA	12.000	369
	8859	2001		CAMERA POLE STRUCTURE W/CABINET DOLLARS and CENTS	EA	1.000	370
	8961	2001		REMOVE EXISTING CCTV FIELD EQUIP- MENT DOLLARS and CENTS	EA	2.000	371

GENERAL NOTES:

Item 4 - Scope of Work

Sawcut lines as shown in the plans are subsidiary to the various bid items.

ITS General Notes

The intelligent transportation systems (ITS) portion of this contract consists of the installation of a 72-strand single mode fiber optic cable and closed circuit television (CCTV) cameras. Provide all necessary equipment for full compatibility with the Laredo District Traffic Management Center (S.T.R.A.T.I.S.).

Furnish and install all incidentals not expressly called for in the general notes, specifications, or not shown in the plans.

Furnish and install all necessary shelves, terminal panels, electric breakers, wiring, cables, connectors, hardware, etc., where equipment is to be installed in the proposed cabinets.

Item 5 - Control of the Work

The Contractor shall maintain and preserve the integrity of all "existing survey markers" by avoiding the disturbance of such markers; which include all control points (horizontal and/or vertical), stakes, marks, and right-of-way markers. The Department will repair all Contractor disturbed control points, stakes, marks, and right-of-way markers. The cost for any and all repairs to the "existing survey markers" will be deducted from money due or to become due to the Contractor.

Prior to contract letting, bidders may obtain a free computer diskette or a computerized transfer of files (from the Engineer's office) that contains the earthwork information. If copies of the actual cross-sections in addition to, or instead of, the diskette are requested, they will be available at the Engineers office for borrowing by copying companies for the purpose of making copies for the bidder at the bidder's expense.

Contact the Laredo District Signal Section (956-712-7770) for coordination with TxDOT underground lines and/or facilities.

Place temporary asphalt around the manholes and/or valves to provide a minimum of 50:1 taper when manholes and/or valves are exposed to traffic.

The cost of the elevation adjustment and asphalt tapers will not be paid for directly, but will be subsidiary to the price bid for other manhole and/or valve work.

Item 7 - Legal Relations and Responsibilities

For all pits or quarries, comply with the "Texas Aggregate Quarry and Pit Safety Act."

Upon completion of all work provided in the contract for any individual project, the Engineer will make an inspection. If it is found to be satisfactory, the Contractor will be released from further maintenance on that individual project. Such partial acceptance will be made in writing and will in no way void or alter any terms of the contract.

If an abandoned-in-place natural gas pipeline is encountered and has to be removed, wrapped steel gas pipelines will be assumed to contain asbestos, unless analytical testing of the wrap material determines that the wrap material contains less than 1% asbestos, as determined using the Polarized Light Microscopy (PLM) Method. Observe and comply with all federal, state and local laws, ordinances and regulations regarding the management of asbestos containing materials. At a minimum, the following procedure will be used whenever an existing wrapped steel gas pipe has to be removed (for whatever reason) during construction operations.

1. Notify the Engineer.
2. As soon as the pipe is removed, cover and secure the ends of the pipe with a double layer of 6 mil plastic, then move it to a secure temporary storage site (approved by the Engineer) within the project limits. Care will be taken to avoid damage to the plastic and if damaged, replace before further handling of the pipe. If the wrapping of the pipe is damaged, the entire pipe will be covered with plastic.
3. The Engineer will determine the owner (utility company) of the gas line to coordinate removal of the pipe from the project. If the owner of the gas pipe cannot be determined, the Engineer will make arrangements to transport the pipe off the project. The Contractor will not be responsible for removing the pipe from the project.
4. The removal of the steel gas pipe from the trench is subsidiary to the work that created the need to remove the pipe (structural excavation, roadway excavation, removal and replacement of the pipe, etc.). The work performed in handling the pipe after it has been removed (covering with plastic, hauling to a

secure storage within the project, and loading onto the transportation vehicle for removal from the project) will be paid for through the extra work order process.

If an existing asbestos Cement (AC) pipe is encountered and has to be removed, observe and comply with all federal, state and local laws, ordinances and regulations regarding the management of asbestos containing materials. At the minimum, work involving AC pipe should be overseen by a person who has received asbestos training and is familiar with the National Emissions Standards for Hazardous Air Pollutants (NESHAP). If greater than 260 linear feet of pipe is to be removed, written notification to the Texas Department of State Health Services (DSHS) 10 days prior commencing with the removal of AC pipe is required. At each location shown in the plans and/or identified during construction to involve AC pipe, remove the necessary amount of AC pipe without creating any friable material. For tie-ins remove whole sections of AC pipe at the nearest joint. Remove the AC pipe and store it in a secure (Engineer approved) location for pick up by the owner of the utility. Prior to performing this work, notify the Engineer and the owner of the utility of the work schedule 48 hours in advance of beginning the work.

Jurisdictional Waters of the United States and Project Specific Locations (PSL) Coordination - This project requires permit(s) with environmental resource agencies. There is a high probability that environmentally sensitive areas will be encountered on contractor designated project specific locations (PSLS) for the project (including but not limited to haul roads, equipment staging areas, parking areas, etc.).

Requirements for Work within Jurisdictional Waters of the United States: The department has been authorized to perform work within designated areas of the project under U.S. Army Corps of Engineers (USACE) nationwide permit (NWP) #14 and/or #3a and/or #3b.

The contractor will not initiate activities in a project specific location (PSL) associated with a U.S. Army Corps of Engineers (USACE) permit area (i.e. an area where the USACE has jurisdiction) that has not been previously evaluated by the USACE as part of the permitting for this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here includes materials delivered to or from the PSL. The permit area includes all waters of the U.S. and their associated wetlands affected by activities associated with this project. Special restrictions may be required for such work in these USACE jurisdictional areas. The contractor will be responsible for any and all consultations with the USACE regarding activities, including PSLs, which have not been previously evaluated by the USACE. The

Contractor will provide the department with a copy of all consultation(s) or approval(s) from the USACE prior to initiating activities.

The contractor may proceed with activities in PSLs that do not affect a USACE permit area if a self determination has been made that the PSL is non-jurisdictional or proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. The contractor is solely responsible for documenting any determination(s) that their activities do not affect a USACE permit area. The contractor will maintain copies of their determination(s) for review by the department and/or any regulatory agency.

The disturbed area for all project locations in the Contract, and the Contractor project specific locations (PSLs) within 1 mile of the project limits for the Contract, will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, the Contractor shall provide a copy of the Contractor Notice of Intent (NOI) for the PSLs to the Engineer and to the local government operating a municipal separate storm sewer system (MS4) if applicable. If the total area of project disturbed areas and PSLs total between 1-acre but less than 5-acres, the Contractor shall post the appropriate Contractor Construction Site Notice for all Contractor PSLs to be in compliance with TCEQ storm water regulations.

In order to expedite the approval process for PSLs or to eliminate or minimize potential impacts to project progress, initiate coordination efforts with the U.S.A.C.E. within 30 days from the date of "authorization to begin work" for all PSLs that are in areas where the USACE has jurisdiction (i.e. USACE permit areas). If this is not done, the contractor waives the right to request any contract time considerations if project progress is impacted and PSL'S approval is still pending.

Requests submitted to the area engineer will be evaluated on this basis, and will require documentation showing substantial early coordination efforts to expedite the approval process as herein stated. The request will include a detailed chronological summary status with dates of coordination activities with the resource agencies, including those occurring after the initial coordination, to be reviewed and confirmed by the district's environmental section.

For PSLs that fall within USACE permit areas, the Contractor must document and coordinate with the USACE, if required, before any excavation hauled from or embankment hauled into a USACE permit area by either (1) or (2) below.

1. Restricted Use of Materials for Previously Evaluated Permit Areas. The Contractor will document both the project specific location (PSL) and their authorization and the Contractor will maintain copies for review by the Department and/or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project, then:
 - a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in Item 110 is used for permanent or temporary fill (Item 132, Embankment) within a USACE permit area may be restricted;
 - b. Suitable embankment (Item 132) from within the USACE permit area is used as fill within a USACE evaluated area may be restricted; and,
 - c. Unsuitable excavation or excess excavation ["Waste"] (Item 110) that is disposed of at an approved location within a USACE evaluated area may be restricted.

2. Contractor Materials from Areas Other than Previously Evaluated Areas. The Contractor will provide the Department with a copy of all USACE coordination or approvals before initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right-of-way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites, including:
 - a. Item 132, Embankment, used for temporary or permanent fill within a USACE permit area; and,
 - b. Unsuitable excavation or excess excavation ["Waste"] (Item 110, Excavation) that is disposed of outside a USACE evaluated area.

Storm Water Regulations Requirements:

The Contractor shall be responsible for (off ROW) PSLs applicable to the TCEQ Construction General Permit (CGP) requirements and will notify the Engineer of the disturbed acreage within one (1) mile of the project limits. The Contractor shall obtain any required authorization from the TCEQ for any Contractor PSLs for construction support activities on or off ROW.

The total area disturbed for this project is 45.2 acres. The disturbed area in this project, all project locations in the Contract, and the Contractor project specific locations (PSLs), within 1 mile of the project limits, for the Contract will further establish the authorization requirements for storm water discharges. The

Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, the Contractor shall provide a copy of the Contractor NOI for PSLs on the ROW to the Engineer and to the local government that operates a municipal separate storm sewer system (MS4), if applicable.

Item 8 - Prosecution and Progress

No closures will be allowed on the weekends which include the following holidays: January 1, the last Monday in May, July 4, the first Monday in September, the fourth Thursday in November, December 25 and Easter weekend.

Working days will be computed and charged in accordance with Article 8.3.A.4. Standard Workweek.

Work that interferes with traffic is required to be performed during off-peak hours, 7 pm until 6 am. Setting and moving of concrete barriers to performed at night or as directed by the Engineer.

Work related to Volume 2:

The contractor work activities must not interfere with DPS daily operations.

Ensure DPS employees and customers have adequate ingress/ egress to facilities at all times during business hours.

Nighttime and weekend work will be allowed to be performed, as approved and directed by the Engineer and DPS. Refer to the Sequence of Work, Traffic Control Plan, etc. shown in the plans, for other details.

Work that interferes with DPS business operations is required to be performed during off-peak hours, **7:00 P.M. until 6:00 A.M.** Weekend work may begin at 7:00 P.M. on Friday and must be completed by 6:00 A.M. on Monday.

When work that interferes with DPS business operations is required, perform work at night, with traffic control set up no earlier than **7:00 P.M.** and all work

County: Webb

Control: 0086-14-046, etc.

Highway: SL 20, etc.

completed and traffic control removed by **6:00 A.M.** Traffic control set up for weekend work can begin **no earlier than 7:00 P.M. on Friday** and all work completed and traffic control removed **by 6:00 A.M. on Monday.**

Equipment and material may be pre-staged at approved locations.

The contractor must notify the TxDOT Area Engineer and DPS representative in writing a minimum of three (3) weeks prior to any of the proposed construction activities that will impact DPS business operations including, but not limited to, closure of parking, changes in traffic control plan and sequence, closure of commercial driver license test area, driveway closure, temporary closures and any night/weekend operations.

James "Eddie" King, DPS representative
Office 512.424.2219
Fax 512.424.2224
James.King@dps.texas.gov

Carlos G. Rodriguez, P.E., TxDOT Area Engineer
Office (956) 712-7701
Carlos.G.Rodriguez@txdot.gov

Item 9 - Measurement and Payment

Coordinate and provide off-duty law enforcement officers with officially marked vehicles (if patrol cruisers are available from the enforcement agency involved) during the following operations: transitioning to a new sequence of construction, traffic signal upgrades, and lane closures. For payment through TxDOT state force account method, complete the weekly tracking forms provided by the department and submit invoices that agree with the tracking form for payment at the end of each month approved services were provided.

Submit Material on hand (MOH) payment requests at least 5 working days prior to the end of the month for payment on that month's estimate. For out of town MOH submit requests at least 10 working days prior to the end of the month.

Item 100 - Preparing Right of Way

Burning of brush will not be permitted.
Do not begin any clearing operations until the trees and areas of vegetation that should not be removed or disturbed by construction activities have been

identified. To ensure that these areas are not disturbed, place protection fencing as shown in the plans or as directed/approved by the Engineer.

All right of way clearing operations will be coordinated with the project's SW3P and as directed/approved by the Engineer.

Item 105 - Removing Stabilized Base and Asphalt Concrete

Asphalt pavement and Base material to be removed under this item will remain the property of the Contractor.

Item 132 - Embankment

Field compact to 95% dry density.

For fill sections from embankment finished grade line and below, to a depth of 4 feet, Plasticity Index (PI) limit is: $4 \leq PI \leq 15$.

For all other fill sections, Plasticity Index (PI) limit is less than or equal to 30.

Item 160 - Topsoil

Place 5 inches of Topsoil to designated areas.

Item 166 - Fertilizer

Fertilize all areas of project to be seeded or sodded.

Item 168 - Vegetative Watering

Water all areas of project to be seeded or sodded at a rate of 6788.6 gallons/acre/cycle.

Maintain the seed bed in a condition favorable for the growth of grass. Watering can be postponed immediately after a rainfall on the site of ½ in. or greater, but will be resumed before the soil dries out. Watering will continue until final acceptance.

Obtain water at a source that is metered or furnish the manufacturer's specifications showing the tank capacity for each truck used. Notify the Engineer before watering so meter readings or truck counts may be verified.

Establish 70% uniform vegetative coverage during this period in order to comply with stabilization requirements. Operate and meter water equipment under pumping pressure in order to deliver the required quantities of water necessary. During periods of adequate moisture, as determined by the Engineer, mechanical watering may not be required. In addition to metering the water equipment, provide a log book showing daily water usage and receipts of water applied upon request of the Engineer.

Upon establishment of 70% vegetative coverage as determined by the Engineer, the Engineer has the option to require the Contractor to continue watering as specified for a period not to exceed 30 days.

Item 170 – Irrigation System

The final layout of the irrigation system will be provided to the contractor. The following preliminary items and quantities are provided for the contractor’s information only:

DESCRIPTION	UNIT	TOTAL QUANTITY
WATER METER (IRRIGATION)(1.5")	EA	1
BACKFLOW PREVENTER (1.5")	EA	1
4" PVC (SLEEVING)(CL 200)	LF	750
2" PVC (MAINLINE)(CL 200)	LF	1,600
3/4" PVC (LATERAL)(CL 200)	LF	1,250
1" PVC (LATERAL)(CL 200)	LF	1,250
1.25" PVC (LATERAL)(CL 200)	LF	1,250
1.5" PVC (LATERAL)(CL 200)	LF	2,500
DRIP TUBING	LF	350
DRIP ZONE CONTROL KIT	EA	1
CONTROL VALVE W/BOX (1.5")(IRRIGATION)	EA	22
ADJUSTABLE SPRAY HEAD SPRINKLER (17')	EA	85
ADJUSTABLE SPRAY HEAD SPRINKLER (15')	EA	10
ADJUSTABLE SPRAY HEAD SPRINKLER (12')	EA	55
ADJUSTABLE SPRAY HEAD SPRINKLER (10')	EA	10
ADJUSTABLE SPRAY HEAD SPRINKLER (8')	EA	12
ADJUSTABLE SPRAY HEAD SPRINKLER (6')	EA	27
ADJUSTABLE SPRAY HEAD SPRINKLER (4')	EA	22
ADJUSTABLE ROTARY HEAD SPRINKLER (25')	EA	55

ADJUSTABLE ROTOR HEAD SPRINKLER (35')	EA	18
WIRING	LF	13,000

The lump sum price bid for this item includes all boring, trenching, fittings, backfill, and all other materials, tools, equipment, labor, and incidentals as necessary to install the irrigation system to make the system operational and perform satisfactorily.

Item 247 - Flexible Base

A pre-placement meeting must be conducted at least 48 hrs. prior to flex base placing operations.

Flexible Base (Complete In Place)(TY A GR 2)(Final Position)(CY)
 This flexible base will need to be limestone aggregate material.

If the flexible base comes from a stockpile, test the stockpile before delivery to the project. The Contractor's attention is called to the fact that the preliminary test will require approximately 30 days and it is the Contractor's responsibility to advise the Engineer of the location of the flexible base source sufficiently in advance to avoid delays. Blade the side slopes to remove all grass from the area of construction before placing flexible base on that portion of the roadway to be widened, level-up, seal coat, or HMAC overlay. Blade the sod back onto the side slopes after the proposed items of work have been completed. Consider subsidiary to pertinent Items.

Item 302 - Aggregates for Surface Treatments

Previously tested aggregates delivered to the project, which are found to contain excessive quantities of dust (more than 0.5 percent passing the no. 40 sieve) during pre-coating, stockpiling or hauling operations, can be rejected by the Engineer. Use test method TEX-200-F, Part I for testing.

Item 305 - Removing Stabilized Base and Asphalt Concrete

Asphalt pavement and Base material to be removed under this item will remain the property of the Contractor.

Item 320 – Equipment for Hot Mix Asphalt Materials

For staged construction, all longitudinal ACP joints shall be constructed with a 3:1 to 6:1 taper. For placement of 2 inches or more, the device will provide a maximum ½ inch vertical edge. Outside edges (next to the grass/earth) will also have a taper or will be backfilled the same day.

Final Surface course: all longitudinal ACP joints for the final Hot Mix surface course shall be in widths equal to travel lane widths so that all final course ACP joints will match the proposed lane striping (pavement markings), unless otherwise directed by the engineer.

Item 344 - Performance-Designed Mixtures

Use aggregate that meets the SAC requirement of class B .

Design a rich bottom layer (RBL) mixture.

Design the mixture at number of gyrations $N_{des} =$ 50 .
The use of RAS will not be allowed on the final riding surface.

Item 346 - Stone Matrix Asphalt

Provide PG 76-22 binder.

Use aggregate that meets the SAC requirement of class A .

The use of RAS will not be allowed on the final riding surface.

Contractor retains ownership of planned materials.

Item 354 – Planing and Texturing Pavement

Salvaged material under this item will remain the property of the Contractor.

Item 416 - Drilled Shaft Foundations

Place the grounding rods for the traffic signal poles at the nearest ground box. The ground rod will be 5/8" x 10 feet. A continuous bare or green insulated

copper wire (no. 6) will be installed from the ground rod to the base of the traffic signal.

Item 420 - Concrete Structures

Sulfate resistant concrete shall be used in all situations for concrete structures in contact with the natural ground.

Check the sign plans for locations of clearance signs and brackets on structures which will require inserts in the pre-stressed beams. Forward such locations to the beam fabricator.

Item 421 - Hydraulic Cement Concrete

Sulfate resistant cement concrete shall be used in all situations for structural elements in contact with the natural ground. These includes, but is not limited to, all reinforced concrete pipe, concrete box culverts, drill shafts, bridge columns, bridge abutments, wingwalls, approach slabs, inlets, manholes, junction boxes, ground boxes and all concrete riprap.

Air entrainment is not required. If concrete is supplied with air entrainment, the concrete must adhere to the requirements of item 421.4.A.4.

Item 423 - Retaining Wall

For MSE walls, provide a system from one of the following approved suppliers:

Reinforced Earth Walls	The Reinforced Earth Company 1331 Airport Freeway, Suite 302 Eules, TX 76040-4150	(817) 283-5503
Reinforced Soil Embankment Walls	Texas Welded Wire, Inc. 645 W. Hurst Blvd. Hurst, TX 76053	(817) 282-4560
Retained Earth Walls	Foster Geotechnical 901 North Highway 77 Hillsboro, TX 76645	(254) 580-9100
Stabilized Earth Wall	Vist-A-Wall Systems, LLC 650 Justice Lane Mansfield, TX 76063	(817) 507-0200
Strengthened Soil Walls	Lewis Block & Supply Company P.O.	(816) 572-

	Box 480615 Kansas City, MO 64148	6710
Structural Embankment Systems, LLC	Structural Embankment, LLC P.O. Box 2200 Weatherford, TX 76086	(817) 599-5700
Tensar Retaining Wall System	Tensar Earth Technologies, Inc. 2500 Northwinds Parkway Suite 500 Alpharetta, GA 30009	(770) 344-2090
Tricon Retained Soil Walls	Tricon Precast, Ltd. 15055 Henry Road Houston, TX 77060	(281) 931-9832
VP Wall System	Valley Prestress Products, Inc. 1520 Calhoun Rd. P.O. Box 309 Eagle Lake, TX 77434	(956) 584-5701

The material used as select backfill for pre-cast retaining walls will be stockpiled and approved by the Engineer before placement unless otherwise directed/approved by the Engineer. Large stockpile(s) will be built in lifts not to exceed 2 feet and in a manner as to obtain a minimum working face of not less than 10 feet and a maximum working face of not more than 20 feet.

Instruct retaining wall fabricators of each drainage feature which will/may affect design and construction of retaining walls.

Unless otherwise shown in the plans, provide the following surface finish for walls:

- Wall 1 – Ashlar Stone Finish
- Wall 2 – Ashlar Stone Finish
- Wall 4 – Ashlar Stone Finish w/ Aesthetic Details
- Wall 5 – Ashlar Stone Finish
- Wall 6 – Ashlar Stone Finish w/ Aesthetic Details
- Wall 7 – Ashlar Stone Finish w/ Aesthetic Details
- Wall 8 – Ashlar Stone Finish
- Wall 9 – Ashlar Stone Finish w/ Aesthetic Details
- Wall 10 – Ashlar Stone Finish

Item 427 - Surface Finishes for Concrete

Apply surface finish to all areas listed in Surface Area I, including other exposed surfaces shown on the plans and the surfaces of the median barrier. The surface finish coating will be concrete paint. The surface areas will receive a rub surface finish prior to receiving surface finish coating.

The bridge bearing seats will receive no surface finish.

Spur 400 Overpass:

For Item 427 the surface areas below equal an approximate total of

- Inside, Outside and Top Faces of Outside Rail – 5,352 sf
- Side Faces and Top of Median Barrier – 3,385 sf
- Vertical Edge of Slab – 624 sf
- Underneath horizontal portion of slab overhang – 1,313 sf
- Outside and Bottom Faces of Exterior Beams – 6,716 sf
- Front faces, side faces, and bottom horizontal faces of bent caps – 2,415 sf
- Column faces above finish grade – 2,063 sf
- Front face of abutment cap above finish grade and front face of backwall beyond exterior girders – 190 sf

The retaining wall surface areas from top of finish grade to top of wall equal an approximate total of 52,492 sf. The total area of top and side faces of rail mounted on walls is 25,396 sf.

The total area of top and side faces of median barrier (excluding median barrier on bridge) is 62,783 sf.

This work will not be paid for directly but will be subsidiary to all pertinent bid items.

Item 496 - Removing Structures

The structure(s) to be removed have surface coatings which may contain hazardous materials. Provide for the safety and health of employees and abide by all OSHA Standards and Regulations.

Item 500 - Mobilization

"Materials-on-Hand" payments will not be considered in determining percentages used to compute mobilization payments.

Item 502 - Barricades, Signs, and Traffic Handling

The project is organized in three volumes. Volume 1 contains information regarding highway improvements to Loop 20. Volume 2 contains information regarding facility improvements to the Texas Department of Public Safety Office. Volume 3 contains information regarding facility improvements to the Texas Department of Transportation Offices (Laredo District Headquarters Office and Laredo Area/Maintenance Office).

Designate, as the Contractor Responsible Person (CRP), an English speaking employee on-call nights and weekends (or any other time that work is not in progress) with a local address and telephone number for maintenance of signs and barricades. This employee will be located within one (1) hour of traveling time to the project site. Notify the Engineer in writing of the name, address and telephone number of this employee. Furnish this information to local law enforcement officials.

The time frame for the Contractor to provide properly maintained traffic control devices before they are considered to be in non-compliance with this Item, is 48 hours regardless of the days of the week involved after notification is done in writing by the Engineer.

When advanced warning flashing arrow panel(s) is/are specified, maintain one standby unit in good condition at the job site ready for immediate use is required.

Place eight inches of both red and white stripes in an inverted "V" design on the back of all TMA's. Conform all sheeting to Departmental Material Specification D-9-8300, Type C.

Notify the Engineer (956-712-7701) at least two weeks prior to a proposed traffic pattern change(s) that will require a revision to traffic signals. This is required to provide the State/City time to perform a traffic study, determine the new signal timing and phasing settings that need to be implemented with the traffic change.

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Work related to Volume 2:

The contractor work activities must not interfere with DPS daily operations.

Ensure DPS employees and customers have adequate ingress/ egress to facilities all at all times during business hours.

Nighttime and weekend work will be allowed to be performed, as approved and directed by the Engineer and DPS. Refer to the Sequence of Work, Traffic Control Plan, etc. shown in the plans, for other details.

Work that interferes with DPS business operations is required to be performed during off-peak hours, **7:00 P.M. until 6:00 A.M.** Weekend work may begin at 7:00 P.M. on Friday and must be completed by 6:00 A.M. on Monday.

When work that interferes with DPS business operations is required, perform work at night, with traffic control set up no earlier than **7:00 P.M.** and all work completed and traffic control removed by **6:00 A.M.** Traffic control set up for weekend work can begin **no earlier than 7:00 P.M. on Friday** and all work completed and traffic control removed **by 6:00 A.M. on Monday.**

Equipment and material may be pre-staged at approved locations.

The contractor must notify the TxDOT Area Engineer and DPS representative in writing a minimum of three (3) weeks prior to any of the proposed construction activities that will impact DPS business operations including, but not limited to, closure of parking, changes in traffic control plan and sequence, closure of commercial driver license test area, driveway closure, temporary closures and any night/weekend operations.

James "Eddie" King, DPS representative
Office 512.424.2219
Fax 512.424.2224
James.King@dps.texas.gov

Carlos G. Rodriguez, P.E., TxDOT Area Engineer
Office (956) 712-7701
Carlos.G.Rodriguez@txdot.gov

Item 504 - Field Office and Laboratory

Provide a Type D Structure. Ensure the field lab has an office for TxDOT use along with a lockable file cabinet, desk, and chair. Contractor must have at least two designated parking spaces for TxDOT field lab personnel vehicles.

Contractor is responsible to transport to and from the field lab TxDOT owned testing equipment required for hotmix operations. Contractor will pick up, deliver, install, and set up TxDOT owned equipment required in the field lab. TxDOT owned equipment required in the field lab will be picked up at LRD DST LAB, or as determined by the LRD DST LAB supervisor.

Pick up and deliver TxDOT owned equipment under the supervision of a TxDOT lab technician. A TxDOT lab technician will verify the installation and set-up of the equipment at least 48 hrs. prior to beginning of hotmix operations (trial batch included).

All equipment will be returned by the contractor in the same manner and location as it was picked up. Contractor is responsible for any damages incurred to TxDOT equipment.

Item 512 - Portable Concrete Traffic Barrier

Do not use different types of Portable Concrete Traffic Barriers in a single continuous installation.

All Portable Concrete Traffic Barriers (PCTB), provided by the State, will remain the property of the State.

All PCTB, except low profile barrier, will be the single slope shape, unless indicated otherwise. Other shapes will not be allowed unless directed by the Engineer.

Approximately 16,000 LF of portable concrete traffic barrier (PCTB) will be provided by the State. Pick up these barriers at IH-35 South bound, North West of Ramp Exit 7, (Mile Marker 7).

Stockpile all contractor furnished/and TxDOT provided portable concrete traffic barrier (PCTB) to the storage site located at IH-35 South bound, North West of Ramp Exit 7, (Mile Marker 7) when no longer needed on the project.

Furnish connection hardware. The hardware will not be paid separately but will be subsidiary to this pay item.

All Portable Concrete Traffic Barriers will be pinned when work zones or opposing traffic lanes are within 4' of back of barrier or as directed by the Engineer.

Item 520 - Weighing and Measuring Equipment

The concrete producer is required to use an automated ticket that contains the same information as TxDOT's ticket. The producer's ticket shall be a computer printout submitted to TxDOT for approval prior to use.

Item 530 – Intersections, Driveways, and Turnouts

Driveway sideslopes shall be 6:1 unless indicated otherwise in the plans or directed by the Engineer.

Item 545 - Crash Cushion Attenuators

Foundations required for temporary or permanent Crash Cushion Attenuators will be subsidiary to this item.

All crash cushion attenuators will become the property of the State.

Stockpile all crash cushion attenuators to the storage site located at the TxDOT Laredo Area Office section yard located at 1817 Bob Bullock Loop when no longer needed on the project.

Item 585 - Ride Quality for Pavement Surfaces

Use pay adjustment schedule 1.

Item 618 - Conduit

If using the trenching method outside of existing pavement, place conduit on a 2-inch sand cushion and then backfill with a minimum of 6 inches of sand fill. Backfill the remainder of the trench with flexible base, soil, or two-sack concrete as directed.

Place conduit in an area not exceeding 2 feet in any direction from a straight line and the depth of the conduit will be 2 feet, except when crossing a roadway,

where the depth will not be more than 3 feet or less than 1 foot below the bottom of the base material in the roadway when placed by the jacking or boring method. Any evidence of damage to the roadway during the jacking or boring operation will be sufficient grounds to stop the method being used. Repair any roadway damage, due to daily operations in jacking or boring, at no additional cost to the State.

Item 620 - Electrical Conductors

Provide a sized, self-insulated, solderless terminal to ends of wires to be attached to terminal posts. Attach these terminals to wires with a ratchet type compression crimping tool properly sized to the wire. Place pre-numbered identification tags of plastic or tape around each wire adjacent to wire ends in the controller, signal heads, and signal pole terminal blocks.

Item 624 - Ground Boxes

Do not place ground boxes in driveways or wheelchair ramps. Alternate ground box locations will be as directed. Ground box aprons will have a 2% slope.

ITEM 628 - Electrical Services

All traffic signal electrical service pole(s) for this project will be as shown on the plans.

Consider any and all costs associated with the installation and connection of electrical services to the electrical utility company subsidiary to bid item 628 "Electrical Services." This includes conduit, conduit fittings, and electrical conductors.

Ground all electrical service poles in accordance with the latest edition of the National Electrical Code (NEC) and TXDOT Standards. Include the cost of such grounding in the unit price for this bid item.

Provide breakaway electrical connectors for breakaway poles. Use BUSSMAN HEBW, LITTLEFUSE LEB, FERRAZ-SHAWMUT FEB, or equal on ungrounded conductors. For grounded conductors, use BUSSMAN HET, LITTLEFUSE LET, FERRAZ-SHAWMUT FEBN, or equal. These breakaway connectors have a white colored marking and a permanently installed solid neutral. See the latest RID (2) standard for additional details.

Item 636 - Aluminum Signs

Salvage and deliver all aluminum sign faces to the local TxDOT maintenance office.

Item 644 - Small Roadside Sign Supports and Assemblies

Salvage and deliver all aluminum sign faces to the local TxDOT maintenance office.

Item 678 - Pavement Surface Preparation for Markings

Prior to placement of all raised pavement markers on concrete pavement, the surface will be blast-cleaned using an abrasive blasting medium. This work will not be paid for directly, but will be subsidiary to bid item 672 "Raised Pavement Markers."

Item 680 - Installations of Highway Traffic Signals

All workers installing electrical materials, including conduit in trenches, services poles and all others system electrical apparatus, will be directly supervised by persons who have completed a TxDOT approved course in electrical underground installations. Furnish evidence of satisfactory completion of the underground electrical installation for roadway illumination and signal control course for all personnel responsible for direct supervision of electrical installation work.

Unless otherwise shown on the plans, provide complete installations of highway traffic signals that consist of the following principal items for traffic signals and flashing beacons:

1. Furnish and install a complete controller cabinet compatible with the existing closed loop system when applicable, steel poles with mast arms, luminaires, photocells, signal cables, signal heads, LEDs, pedestrian signal heads, and pedestrian push buttons and signs that meet the "American with Disabilities Act" (ADA) standards and "Texas Accessibility Standards" (TAS), video imaging vehicle detection systems (VIVDS), ground boxes, conduit runs, striping, curb & gutter, and ADA and TAS compliant wheelchair ramps.
2. Furnish and install steel strain poles, luminaries, photocells, pole mounted flasher controller assembly, signal heads, LEDs, signal cables, conduits, span wires, and pavement markings.

3. Furnish and install all other items not listed above which are needed to provide for a complete traffic signal installation as shown in the plans; the items needed, can include, but are not limited to, the following: signs, ground rods, roadway lights, damping devices, and/or photoelectric cells.

Meters will be mounted at the specified height required by the respective utility company. Consider the cost of this work under bid item 628 "Electrical Services."

The signal installation will be wired to operate in accordance with the wiring diagram shown in the plans. The contractor will ensure that the timing and phasing are the same as shown in the plans. All timing and phasing will be approved and/or provided by the Transportation Operations Engineer prior to downloading to the controller.

On the terminal block, use the left side for the home runs and the right side for the signal heads. This pattern will be used in all signal installations. For grounding and bonding install a green insulated copper wire no. 6.

Item 682 - Vehicle and Pedestrian Signal Heads

All new signal heads will be covered with burlap from the time of installation until the signal is placed in operation. Provide signal heads made of polycarbonate material and yellow in color. All signal heads will have detachable visors. Position all vehicle signal section heads and pedestrian signal heads to provide the best view for motorists and pedestrians.

Item 684 - Traffic Signal Cables

For each traffic signal installation where signal cable is required, provide a minimum length of 5 feet for each conductor terminating in the controller.

Label all traffic signal cables, vehicle detector cables, and pedestrian signal cables terminating in the controller with marker ties and permanent markers.

Item 686 - Traffic Signal Pole Assemblies (Steel)

Traffic signal poles will be placed at a 10 feet desirable minimum distance from the roadway curb or edge of pavement or as approved.

Item 690 - Maintenance of Traffic Signals

Prior to construction, meet with the District Transportation Operations Section to determine salvageable traffic signal equipment. Dispose of all other equipment not deemed salvageable by the Engineer or his representative in a manner approved by the Engineer.

Item 740 – Graffiti Removal and Anti-Graffiti Coatings

The following painted surfaces shall receive an anti-graffiti coating:

Spur 400 Overpass:

- Inside, Outside and Top Faces of Outside Rail – 5,352 sf
- Side Faces and Top of Median Barrier – 3,385 sf
- Outside and bottom faces of exterior beams at 2 end spans only – 4,556 sf
- Column faces above finish grade – 2,063 sf
- Front face of abutment cap above finish grade and front face of backwall beyond exterior girders – 190 sf

Retaining wall face and coping above finish grade - 52,492 sf.

Top and side faces of rail mounted on walls - 25,396 sf.

Top and side faces of median barrier (excluding median barrier on bridge) is 62,783 sf.

Anti-graffiti coating material shall be Type III – Permanent, water cleanable. Payment for anti-graffiti coating is subsidiary to items receiving the coating.

Item 3268 - Dense-Graded Hot-Mix Asphalt

Contractor is allowed to use RAP. Excess RAP will be retained by the contractor.

HMACP TY	Application Rate	PG Binder	Lab Density
A*	120 #/SY/IN	70 -22	96.5%
B*	120 #/SY/IN	70 -22	96.5%
C*	115 #/SY/IN	70 -22	96.5%
D*	115 #/SY/IN	70 -22	96.5%

* If mix has RAP, RAS, or both, the required lab density will be 97%.

In addition to the tack coat materials specified in these standard specifications, MS-2 or MS-1 may be used.

Use the point of sampling for tests, test method TEX-217-F (part I and part II), for the coarse aggregate stockpile when the dryer-drum mixing plant is used. The point of sampling when the batch plant is used will be at the hot bins.

Refer to item 585 for ride quality requirements.

The use of RAS will not be allowed on the final riding surface.

Item 3270 - Superpave Mixtures

Contractor is allowed to use a maximum 15% RAP. Excess RAP will be retained by the contractor. The use of RAS will not be allowed on the final riding surface.

The tack coat material used shall be CRS-2P, unless otherwise approved by the engineer.

Refer to Item 585 for ride quality requirements.

Item 3271 - Stone-Matrix Asphalt

The use of RAS will not be allowed on the final riding surface.

Item 6266 – Video Imaging Vehicle Detection System

Place a 5-foot camera support plumb; this item and its installation will be considered subsidiary to this bid item.

Program and input the detection zones as shown on the plans. Adjust the focus and zoom the camera to achieve the best picture quality.

Detection accuracy must be a minimum of 95% on each lane.

ITEM 6834 - Portable Changeable Message Sign

Provide eight (8) electronic portable changeable message signs as required by the Engineer. Provide backups and keep operational and available on the jobsite at all times during traffic control operations. The electronic portable changeable message signs will be made available for utilization for the entire duration of the project, including all alternative locations.

CONTROL : 0086-14-046, ETC
PROJECT : CBI 2013(281), ETC
HIGHWAY : SL 20
COUNTY : WEBB

TEXAS DEPARTMENT OF TRANSPORTATION

GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

ALL SPECIFICATIONS AND SPECIAL PROVISIONS APPLICABLE TO THIS PROJECT ARE IDENTIFIED AS FOLLOWS:

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF
----- TRANSPORTATION JUNE 1, 2004.
STANDARD SPECIFICATIONS ARE INCORPORATED
INTO THE CONTRACT BY REFERENCE.

ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS
ITEM 100 PREPARING RIGHT OF WAY (103)
ITEM 104 REMOVING CONCRETE
ITEM 105 REMOVING STABILIZED BASE AND ASPHALT PAVEMENT
ITEM 110 EXCAVATION (132)
ITEM 132 EMBANKMENT (100)(204)(210)(216)(400)
ITEM 150 BLADING
ITEM 160 TOPSOIL
ITEM 162 SODDING FOR EROSION CONTROL (166)(168)
ITEM 164 SEEDING FOR EROSION CONTROL (162)(166)(168)
ITEM 166 FERTILIZER
ITEM 168 VEGETATIVE WATERING
ITEM 169 SOIL RETENTION BLANKETS
ITEM 170 IRRIGATION SYSTEM (402)(403)
ITEM 192 LANDSCAPE PLANTING (161)(166)
ITEM 216 PROOF ROLLING (210)
ITEM 247 FLEXIBLE BASE (105)(204)(210)(216)(520)
ITEM 310 PRIME COAT (300)(316)
ITEM 316 SURFACE TREATMENTS (210)(300)(302)(520)
ITEM 354 PLANING AND TEXTURING PAVEMENT
ITEM 360 CONCRETE PAVEMENT (300)(420)(421)(438)(440)(529)(585)
ITEM 400 EXCAVATION AND BACKFILL FOR STRUCTURES (132)(401)(420)
(421)
ITEM 402 TRENCH EXCAVATION PROTECTION
ITEM 403 TEMPORARY SPECIAL SHORING (423)
ITEM 416 DRILLED SHAFT FOUNDATIONS (420)(421)(440)(448)
ITEM 420 CONCRETE STRUCTURES (400)(421)(426)(427)(438)(440)(441)
(448)
ITEM 422 REINFORCED CONCRETE SLAB (420)(421)(424)(426)(430)(440)
ITEM 423 RETAINING WALLS (110)(132)(400)(420)(421)(424)(440)(445)

(458)(556)

ITEM 425 PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS (420)
(421)(424)(426)(427)(434)(440)(442)

ITEM 432 RIPRAP (420)(421)(427)(431)(440)

ITEM 442 METAL FOR STRUCTURES (441)(445)(446)(447)(448)(449)

ITEM 450 RAILING (420)(421)(424)(440)(441)(442)(445)(446)(448)
(540)

ITEM 452 REMOVING RAILING (420)

ITEM 454 BRIDGE EXPANSION JOINTS (442)

ITEM 462 CONCRETE BOX CULVERTS AND STORM DRAINS (400)(420)(421)
(424)(440)(464)

ITEM 464 REINFORCED CONCRETE PIPE (400)

ITEM 465 MANHOLES AND INLETS (400)(420)(421)(424)(440)(471)

ITEM 466 HEADWALLS AND WINGWALLS (400)(420)(421)(430)(440)(464)

ITEM 467 SAFETY END TREATMENT (400)(420)(421)(424)(430)(432)(440)
(445)(464)

ITEM 479 ADJUSTING MANHOLES AND INLETS (400)(421)(465)

ITEM 480 CLEANING EXISTING CULVERTS

ITEM 481 PVC PIPE FOR DRAINS (400)

ITEM 496 REMOVING STRUCTURES (430)

ITEM 500 MOBILIZATION

ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING

ITEM 504 FIELD OFFICE AND LABORATORY

ITEM 508 CONSTRUCTING DETOURS

ITEM 512 PORTABLE CONCRETE TRAFFIC BARRIER (420)(421)(424)(440)
(442)

ITEM 514 PERMANENT CONCRETE TRAFFIC BARRIER (400)(416)(420)(421)
(424)(440)(442)(448)

ITEM 528 COLOR TEXTURED CONCRETE AND LANDSCAPE PAVERS (132)(247)
(420)(421)(440)

ITEM 529 CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER (360)
(420)(421)(440)

ITEM 530 INTERSECTIONS, DRIVEWAYS, AND TURNOUTS (247)(260)(263)
(275)(276)(292)(316)(330)(334)(340)(360)(421)(440)

ITEM 531 SIDEWALKS (104)(360)(420)(421)(440)(530)

ITEM 540 METAL BEAM GUARD FENCE (421)(445)(529)(542)(544)

ITEM 542 REMOVING METAL BEAM GUARD FENCE

ITEM 544 GUARDRAIL END TREATMENTS

ITEM 545 CRASH CUSHION ATTENUATORS (421)

ITEM 550 CHAIN LINK FENCE (421)(445)

ITEM 610 ROADWAY ILLUMINATION ASSEMBLIES (421)(441)(442)(445)(446)
(449)(616)(620)

ITEM 618 CONDUIT (400)(445)(476)(622)

ITEM 620 ELECTRICAL CONDUCTORS

ITEM 621 TRAY CABLE

ITEM 624 GROUND BOXES (421)(440)

ITEM 627 TREATED TIMBER POLES

ITEM 628 ELECTRICAL SERVICES (441)(445)(449)(618)(620)(627)(656)

ITEM 636 ALUMINUM SIGNS (643)

ITEM 644 SMALL ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421)(440)
(441)(442)(445)(634)(636)(643)(656)

ITEM 647 LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421)(440)
(441)(442)(445)(643)

ITEM 650 OVERHEAD SIGN SUPPORTS (416)(420)(421)(441)(442)(445)

(449)(618)

ITEM 658 DELINEATOR AND OBJECT MARKER ASSEMBLIES (445)

ITEM 662 WORK ZONE PAVEMENT MARKINGS (666)(668)(672)(677)

ITEM 666 REFLECTORIZED PAVEMENT MARKINGS (316)(318)(662)(677)(678)

ITEM 668 PREFABRICATED PAVEMENT MARKINGS

ITEM 672 RAISED PAVEMENT MARKERS (677)(678)

ITEM 677 ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS (300)
(302)(316)

ITEM 680 INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (610)(625)(627)
(634)(636)(656)

ITEM 681 TEMPORARY TRAFFIC SIGNALS (628)(680)

ITEM 682 VEHICLE AND PEDESTRIAN SIGNAL HEADS

ITEM 684 TRAFFIC SIGNAL CABLES

ITEM 686 TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (416)(421)(441)
(442)(445)(449)

ITEM 687 PEDESTAL POLE ASSEMBLIES (445)(449)(656)(4003)

ITEM 690 MAINTENANCE OF TRAFFIC SIGNALS (416)(421)(476)(610)(618)
(620)(622)(624)(625)(627)(628)(634)(636)(656)(680)(682)
(684)(685)(686)(687)(688)

SPECIAL PROVISIONS: SPECIAL PROVISIONS WILL GOVERN AND TAKE
 ----- PRECEDENCE OVER THE SPECIFICATIONS ENUMERATED
 HEREON WHEREVER IN CONFLICT THEREWITH.

REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS
 (FORM FHWA 1273, MAY, 2012)

WAGE RATES

SPECIAL PROVISION "NOTICE TO ALL BIDDERS" (000---003)

SPECIAL PROVISION "NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO
 ENSURE EQUAL EMPLOYMENT OPPORTUNITY" (000---004)

SPECIAL PROVISION "STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
 CONSTRUCTION CONTRACT SPECIFICATIONS" (000---006)

SPECIAL PROVISION "CERTIFICATION OF NONDISCRIMINATION IN EMPLOYMENT"
 (000---009)

SPECIAL PROVISION "DEPARTMENT DIVISION MAILING AND PHYSICAL ADDRESS"
 (000---011)

SPECIAL PROVISION "NOTICE OF CHANGES TO U.S. DEPARTMENT OF LABOR
 REQUIRED PAYROLL INFORMATION" (000--1483)

SPECIAL PROVISION "ON-THE-JOB TRAINING PROGRAM" (000--2638)

SPECIAL PROVISION "DISADVANTAGED BUSINESS ENTERPRISE IN FEDERAL AID
 CONTRACTS" (000--1966)

SPECIAL PROVISION "PARTNERING" (000--2329)

SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000--2332)

SPECIAL PROVISION "NONDISCRIMINATION" (000--2607)

SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000--2839)

SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000--3024)

SPECIAL PROVISION TO ITEM 1 (001---015)

SPECIAL PROVISION TO ITEM 2 (002---017)

SPECIAL PROVISION TO ITEM 3 (003---033)

SPECIAL PROVISION TO ITEM 4 (004---017)

SPECIAL PROVISION TO ITEM 5 (005---004)

SPECIAL PROVISIONS TO ITEM 6 (006---030)(006---047)

SPECIAL PROVISION	TO ITEM	7	(007---918)		
SPECIAL PROVISIONS	TO ITEM	8	(008---119)	(008---167)	
SPECIAL PROVISIONS	TO ITEM	9	(009---009)	(009---015)	
SPECIAL PROVISION	TO ITEM	100	(100---002)		
SPECIAL PROVISION	TO ITEM	161	(161---006)		
SPECIAL PROVISION	TO ITEM	164	(164---002)		
SPECIAL PROVISION	TO ITEM	166	(166---001)		
SPECIAL PROVISION	TO ITEM	169	(169---002)		
SPECIAL PROVISION	TO ITEM	247	(247---033)		
SPECIAL PROVISION	TO ITEM	260	(260---003)		
SPECIAL PROVISION	TO ITEM	275	(275---003)		
SPECIAL PROVISION	TO ITEM	300	(300---039)		
SPECIAL PROVISION	TO ITEM	302	(302---010)		
SPECIAL PROVISION	TO ITEM	316	(316---016)		
SPECIAL PROVISION	TO ITEM	318	(318---010)		
SPECIAL PROVISION	TO ITEM	330	(330---001)		
SPECIAL PROVISION	TO ITEM	340	(340---003)		
SPECIAL PROVISION	TO ITEM	360	(360---013)		
SPECIAL PROVISION	TO ITEM	420	(420---002)		
SPECIAL PROVISION	TO ITEM	421	(421---035)		
SPECIAL PROVISION	TO ITEM	424	(424---003)		
SPECIAL PROVISION	TO ITEM	425	(425---001)		
SPECIAL PROVISION	TO ITEM	431	(431---001)		
SPECIAL PROVISION	TO ITEM	434	(434---003)		
SPECIAL PROVISION	TO ITEM	440	(440---006)		
SPECIAL PROVISION	TO ITEM	441	(441---008)		
SPECIAL PROVISION	TO ITEM	442	(442---016)		
SPECIAL PROVISION	TO ITEM	447	(447---002)		
SPECIAL PROVISION	TO ITEM	448	(448---002)		
SPECIAL PROVISION	TO ITEM	450	(450---001)		
SPECIAL PROVISION	TO ITEM	454	(454---003)		
SPECIAL PROVISION	TO ITEM	462	(462---015)		
SPECIAL PROVISION	TO ITEM	464	(464---006)		
SPECIAL PROVISION	TO ITEM	465	(465---002)		
SPECIAL PROVISION	TO ITEM	476	(476---003)		
SPECIAL PROVISION	TO ITEM	500	(500---011)		
SPECIAL PROVISION	TO ITEM	502	(502---033)		
SPECIAL PROVISION	TO ITEM	512	(512---002)		
SPECIAL PROVISION	TO ITEM	514	(514---002)		
SPECIAL PROVISION	TO ITEM	530	(530---006)		
SPECIAL PROVISION	TO ITEM	540	(540---031)		
SPECIAL PROVISION	TO ITEM	610	(610---015)		
SPECIAL PROVISION	TO ITEM	620	(620---001)		
SPECIAL PROVISION	TO ITEM	624	(624---014)		
SPECIAL PROVISION	TO ITEM	628	(628---003)		
SPECIAL PROVISION	TO ITEM	636	(636---014)		
SPECIAL PROVISION	TO ITEM	643	(643---001)		
SPECIAL PROVISION	TO ITEM	672	(672---034)		
SPECIAL PROVISION	TO ITEM	681	(681---002)		
SPECIAL PROVISION	TO ITEM	682	(682---003)		
SPECIAL PROVISION	TO ITEM	685	(685---014)		
SPECIAL PROVISION	TO ITEM	687	(687---005)		
SPECIAL PROVISION	TO SPECIAL SPECIFICATION ITEM	1122	(1122--001)		
SPECIAL PROVISION	TO SPECIAL SPECIFICATION ITEM	6014	(6014--041)		

SPECIAL PROVISION TO SPECIAL SPECIFICATION ITEM 6266 (6266--017)
SPECIAL PROVISION TO SPECIAL SPECIFICATION ITEM 6834 (6834--002)

SPECIAL SPECIFICATIONS:

- ITEM 1003 LANDSCAPE BOULDERS
- ITEM 1018 TREE PROTECTION
- ITEM 1122 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS (161)(432)(556)
- ITEM 1150 LANDSCAPE MAINTENANCE
- ITEM 2280 MULTI-DUCT CONDUIT (400)(476)
- ITEM 2282 DECORATIVE METALWORK LED BACKLIGHTING (616)(618)(620)
- ITEM 2284 FIBER OPTIC CABLE (SELF-SUPPORTING)
- ITEM 2285 ITS SYSTEM SUPPORT EQUIPMENT
- ITEM 2286 REMOVE AND RELOCATE CAMERA POLE STRUCTURE (416)(445)(446)(449)(618)
- ITEM 2289 WATER MAINS AND WASTEWATER APPURTENANCES
- ITEM 2299 RELOCATE FLAGPOLE (421)(441)(442)
- ITEM 2301 REMOVE/RELOCATE APPURTENANCES
- ITEM 2307 MONUMENT SIGN (420)(421)(440)
- ITEM 2309 CHAMBER DETENTION SYSTEM
- ITEM 3267 DENSE-GRADED HOT-MIX ASPHALT (SMALL QUANTITY) (210)(300)(301)(320)(520)(585)
- ITEM 3268 DENSE-GRADED HOT-MIX ASPHALT (300)(301)(320)(520)(585)
- ITEM 3270 SUPERPAVE MIXTURES (210)(300)(301)(320)(520)(585)
- ITEM 3271 STONE-MATRIX ASPHALT (210)(300)(301)(320)(520)(585)
- ITEM 4003 SCREW-IN TYPE ANCHOR FOUNDATIONS (441)(442)(445)
- ITEM 5434 PRECAST CONCRETE WHEEL STOPS (421)(440)
- ITEM 5445 DEAD END ROADWAY BARRICADE (644)
- ITEM 6006 SPREAD SPECTRUM RADIOS FOR TRAFFIC SIGNALS
- ITEM 6007 REMOVING TRAFFIC SIGNALS
- ITEM 6011 TESTING, TRAINING, DOCUMENTATION, FINAL ACCEPTANCE AND WARRANTY
- ITEM 6013 ELECTRONIC COMPONENTS
- ITEM 6014 FIBER OPTIC CABLE (6011)(6013)
- ITEM 6025 CCTV FIELD EQUIPMENT (6011)(6013)
- ITEM 6266 VIDEO IMAGING VEHICLE DETECTION SYSTEM
- ITEM 6834 PORTABLE CHANGEABLE MESSAGE SIGN
- ITEM 8368 PREPARATION OF EXISTING CONDUITS, GROUND BOXES OR MANHOLES (465)(618)(624)
- ITEM 8835 ACCESSIBLE PEDESTRIAN SIGNAL UNITS (618)(624)(682)(684)(688)
- ITEM 8859 CAMERA POLE STRUCTURE WITH CABINETS (416)(441)(442)(447)(449)
- ITEM 8961 REMOVE AND RELOCATE EXISTING CCTV FIELD EQUIPMENT (416)

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 SPECIFI-

CATIONS FOR THIS PROJECT.

SPECIAL SPECIFICATION**2307****Monument Sign**

1. **Description.** Approved masonry monument sign structure, laid in lime-cement mortar, and shall be constructed in accordance with this specification, in conformity with the form, dimensions, and design shown on the plans, and to the lines and grades established by the Engineer.
2. **Concrete Footing Materials.** Use materials that meet requirements of:
Item 421 “Hydraulic Cement Concrete”, Class A
Item 440 “Reinforcing Steel”
3. **Cast Stone Materials.**
Physical properties: Provide the following:
Compressive Strength, ASTM C 1194: 6,500 psi min.
Absorption, ASTM C 1195: 6% max.
Raw materials:
Portland cement - Type I or III, white and/or grey as required to match existing cast stone, ASTM C 150
Coarse aggregates - Granite, quartz or limestone, ASTM C 33
Fine aggregates - Manufactured or natural sands, ASTM C 33
Colors - Inorganic iron oxide pigments, ASTM C 979
Admixtures - ASTM C 494
Water - potable.
Reinforcement - ASTM A 615, Comply with Item 440
Concrete. Class specified on the plans and comply with Item 421, “Hydraulic Cement Concrete,” except for measurement and payment.
Anchors - Non-corrosive; galvanized, brass or stainless steel type 304.
Mortar - Type S, ASTM C 270
4. **Brick & Concrete Masonry Materials.** Use materials conforming to the pertinent requirements of Item 420, “Concrete Structures”, Item 421, “Hydraulic Cement Concrete” and Item 440, “Reinforcing Steel”. Use wall ties, anchors, miscellaneous accessories and hardware specified. Use corrosion resistant metal products.
Concrete Masonry Units. Use Concrete Masonry Units (CMU) that conform to ASTM C90, “Hollow Load Bearing Concrete Masonry Units”.
Clay Masonry Units. Use Clay Masonry Units that conform to ASTM C216-10 “Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)” and ASTM C652-10 “Standard Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale)”. Provide Clay Masonry Units of the sizes, shapes, colors and finishes shown on the plans. Bond to match existing construction.

Grout & Mortar. Use ASTM C-476 3,000 PSI GROUT AND ASTM C-270 TYPE "S" MORTAR. Mortar is to be proportioned (by volume) as follows: one part portland cement, 1/4 to 1/2 parts hydrated lime or lime putty, and fine aggregate not less than 2 1/4 and not more than 3 times the sum of the volumes of cement and lime used. No admixtures are permitted. Add water as required for proper consistency.

Reinforcement. Reinforcing, metal ties and anchors shall be protected from contact with soil and before being placed shall be free from loose rust and other coatings that will destroy or reduce the bond. All reinforcing steel shall be ASTM A615, grade 60. Minimum lap shall be 48 bar diameters. Provide horizontal wire joint reinforcing (Dur-O-Wal or approved equal), minimum 9 ga rods, at 16" on center vertical. Provide Dur-O-Eye adjustable multi wythe joint reinforcing at brick veneers.

Accent Tile. Color & pattern to match existing building tile. Attach tile to masonry wall using Direct Adhered Ceramic Tile adhered with Laticrete MVIS system, or approved equal. Grout to be Laticrete Permacolor grout, or approved equal.

5. **Decorative Sign Materials.** Furnish steel sign and attachment hardware, as shown on plans or as directed.

6. **Cast Stone Fabrication methods allowed**

- Use Vibrant-Tamp method or machine manufacture using zero slump mixture to achieve desired appearance and physical properties.
- COLOR AND FINISH - Match sample on file in architect's office. Exposed surfaces shall exhibit a fine grained texture similar to natural stone. No bugholes or air voids will be permitted. Color shall match cast stone elements on existing buildings.
- Variation: Must match color and finish of approved sample when viewed in direct daylight at a 10 foot distance.
- CURING AND FINISHING. Cure cast stone components with a direct fired steam generator at a minimum temperature of 105 degrees F (41 degrees C) for a minimum of 6 hours, within 12 hours of fabrication. Cure cast stone components in presence of carbon monoxide and carbon dioxide to promote carbonation at surface, to minimize efflorescence. Yard cure for 350 degree-days (i.e. 7 days @ 50F or 5 days @ 70F) prior to shipment. Acid-etch exposed surfaces to remove cement film prior to packaging for shipment.

7. **Cast Stone Construction.**

General. Submit samples of the stone, which show the complete color range to the Engineer for approval.

Be responsible for verifying all dimensions incidental to this work and promptly report any discrepancies to the Engineer.

Jointing.

Joint size:

At stone/brick joints - 3/8"

At stone/stone joints in vertical position - 1/4" (3/8" optional)

Stone/stone joints exposed on topside - 3/8"

Joint material:

Use a full bed of mortar at all bed joints.

Flush vertical joints full with mortar.

Leave all joints with exposed tops open for sealant.

Mortar. Meet the requirements of ASTM C270, Type N. Mixed in the proportions by volume of 1 part Portland cement, 1 part hydrated lime, and 6 parts of sand; or, 1 part of Type N masonry cement and 3 parts of sand.

Water content in the mortar mix shall be the amount required to obtain a workable plastic mortar. Mixture shall be mixed for a minimum period of 3 minutes in a drum type batch mixer and used within 1 hour after mixing. Discard mortar not used within that time (retempering will not be permitted). The mortar boxes will be cleaned at the end of each day's work.

Workmanship. Each stone shall be cleaned, sponged, and drenched with clean water just before setting. Each stone shall be set in a full bed of plastic mortar.

Face joints of random rubble stone may vary from 1/2 to 2 in. in thickness. Face joints of roughly squared stone may vary from 1/4 to 1/2 in. in thickness. Joints shall be uniform and raked out 3/4 in. deep for face pointing. Where necessary to prevent crushing mortar, small lead pads the thickness of the joint and set 1 in. back of the face shall be used. Wood wedges will not be allowed. Joints not pointed at the time the stone is laid shall be thoroughly wet with clean water and filled with mortar. Drive mortar well into the joints and finished with an approved pointing tool. Keep wall wet while the pointing is being done.

After the pointing is completed and the mortar set, all showing surfaces shall be cleaned of loose mortar and cement stains. Just prior to the completion of the contract, the showing surfaces shall again be cleaned in a manner satisfactory to the Engineer.

Setting. Drench stones with clear, running water just prior to setting. Fill all dowel holes and anchor slots completely with mortar or non-shrink grout. Set all stones in a full bed of mortar. Leave head joints in coping and similar stones open for sealant. Rake mortar joints 3/4" for pointing. Sponge the face of each stone to remove excess mortar. Tuck point stone joints to a slight concave.

Sealant joints. Prime the ends of stones, insert properly sized foam backup rod and gun-in sealant. Use sealant on all cornices, copings and, in general, all stone areas either partially or totally horizontal. Protect stone while on ground (and after setting) from splashing, mortar and damage from other trades.

Cleaning and repair. Clean stone by wetting with clear running water and applying a solution of "Sure Kleen #600" by ProSoCo Products, Inc. or equal. Repair obvious chips with touchup material furnished by the manufacturer. Inspect by Cast Stone Institute Standards.

8. **Brick & Concrete Masonry Construction.** Construct all load bearing walls to comply with "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI 530.1-11/ASCE 6-05/TMS 602-11. Construct masonry walls at locations designated on the plans or as directed. Cover CMU walls with clay masonry units matching existing building size, color and texture as described on plans and in specifications.

Brick work shall be laid with full bed and head joints. All brick shall be thoroughly wet before laying except in freezing weather. Joints are to be level and plumb for both horizontal and vertical joints and are assumed to be 3/8" and rodded with a 1/2" diameter tool unless noted otherwise on plans. Wall will be carried up evenly with no difference in height of progress greater than 4" being permitted. The tops of all walls shall be protected with non-staining waterproof covering at the end of each day.

Cleaning and pointing. On completion, all exposed brick surfaces shall be thoroughly cleaned. Cleaning shall be done with fiber brushes. No cleaning solution containing acid shall be used. Care shall be taken that all other surfaces are protected to avoid staining during cleaning operations. Surfaces shall be left free from mortar and other stains. All exposed mortar joints and nail holes shall be properly pointed. Defective joints and loose mortar shall be cut out and re-pointed where necessary.

Grouting. Grout for filling reinforced or unreinforced cells shall be consolidated in place by shaking vertical bars to ensure complete filling of the cells and cavities. Grout shall be installed in 4 foot lifts and consolidated within 10 minutes of placement. Succeeding lifts shall follow after waiting 15 to 60 minutes to allow for settlement and absorption of excess water. Use fine grout for filling openings or core openings smaller than 4 inches in least dimension. Fine grout shall consist of portland cement, lime or lime putty, water, and fine aggregate, and shall meet scheduled strength requirements. Use coarse grout for filling openings or cores where least dimension of opening is 4 inches or more. Coarse grout shall consist of portland cement, hydrated lime or lime putty, water, fine aggregate and coarse aggregate, and shall meet scheduled strength requirements.

Storage. Before erection, and while in storage at the site of the job, units must be protected from moisture and kept dry prior to laying. No units shall be placed directly upon the ground while being stored.

9. **Decorative Sign Construction.** Install letters projected 6 inches from the wall surface using a 3/16" steel sign plate. Mounting of the decorative sign shall be as shown in the drawings. Letters to be mounted as shown using round bars, 1/2 in. diameter with Type VII (or approved equal) epoxy glue. The letter style shall be as shown in the drawings and CADD files will be made available to the contractor.

Shop drawings of the decorative sign shall be submitted to the engineer for review and approval prior to the contractor beginning work.

10. **Measurement.** This Item will be measured as each monument sign supplied, constructed and installed.
11. **Payment.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Monument Sign" of the type specified. This price shall be full compensation for furnishing and hauling all materials; for all freight involved; for excavation, backfilling and regrading; for preparing and placing all materials, including concrete and reinforcing steel for footing; and for all labor, tools, equipment, and incidentals necessary to complete the work for a completed monument sign with decorative signage.

SPECIAL SPECIFICATION**2309****Chamber Detention System**

1. Description. Furnish and install pre-engineered, sub-surface chamber detention system(s), complete in place. Work includes all design work, signed and sealed by a Licensed Professional Engineer in the State of TX, labor, materials, equipment and incidentals required to install chamber detention systems, pipe connections and appurtenances in accordance with the plans and these specifications.

2. Materials. Before delivery of the chamber detention system, provide product specifications for the following:

- ASTM F 2418 - Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers
- AASHTO M 294 – Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter

A. Chamber. Chambers will be injection molded from virgin polypropylene resin.

Chamber rows will provide continuous, unobstructed internal space with no internal support panels in order to provide ease of access for inspection and maintenance functions.

Install inspection ports along the sedimentation chamber as shown on the plans to allow for inspection of the sediment build up over time.

The chambers will be open-bottomed.

The chamber will incorporate an overlapping corrugation joint system to allow chamber rows of almost any length to be built

Only chamber detention systems evaluated by a licensed design engineer and found to meet AASHTO section 12.12 safety factors are allowed.

Stormwater chambers must be designed in accordance with ASTM F 2418 Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers.

Stormwater chambers must be designed in accordance with ASTM F 2787 Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers.

All chamber products must be produced in an ISO 9001 certified manufacturing facility or the facility must demonstrate at least 5 years of experience in the production of similar products.

- B. End Caps.** End caps will be injection molded from polyethylene or polypropylene resin and allow pipe connections with polyethylene pipe.

All chamber rows will be terminated with an end cap. End cap placement on end of chamber will vary depending on chamber model. End caps will have a curved face capable of resisting typical horizontal and vertical loads.

End caps may incorporate cutting guides to allow easy field cutting for various diameters of pipe. Cutting guides will be located at both the top and bottom of each end cap.

All end cap products must be produced in an ISO 9001 certified manufacturing facility or the facility must demonstrate at least 5 years of experience in the production of similar products.

- C. Manifold Piping.** Manifold piping will be designed to ensure that peak flows are distributed to the rows of chambers without scour of foundation stone.

Manifold piping will be of HDPE piping such that accepted equations of hydraulics can be used as a basis for design.

- D. Stone.** The foundation, embedment and cover stone will be in accordance with the chamber manufacturer's installation instructions.

- E. Fabric.** Install fabric in accordance with the chamber manufacturer's installation instructions.

If required, a thermoplastic liner may be installed around the entire system to prevent water migration. Follow the manufacturer's guidance on thermoplastic liners for the system.

- F. Treatment Unit.**

- 1. General.** Provide chamber detention systems, pipe connection and appurtenances in accordance with the plans and these specifications.

Alternate designs must be approved by the Engineer and cannot deviate from the functional requirements provided in these specifications. Alternate designs, including any structural re-design requirements, are to be designed and sealed by a licensed professional engineer registered in the State of Texas. All storm water treatment units must be provided by the same manufacturer. The following manufacturers provide pre-engineered, sub-surface chamber detention system(s):

- StormTech, Inc.
- Advanced Drainage Systems, Inc.
- Hancor, Inc.
- Approved Equal

2. **Performance.** Submit a structural evaluation by a licensed structural engineer that demonstrates that the safety factors specified in the AASHTO LRFD Bridge Design Specifications, Section 12.12 are met. The 50-year creep modulus data specified in ASTM F 2418 must be used as part of the AASHTO structural evaluation to verify long-term performance.

Only mechanical and material properties that were determined in accordance with ASTM test methods will be allowed for structural design of the chambers.

Only chambers affixed with the ASTM F 2418 designation will be considered as meeting ASTM F 2418.

Submit a design summary by the manufacturer that demonstrates the discharge from the chamber detention system does not exceed the pre-developed runoff value for the 50-year storm shown on the plans. The approximate required storage volume is estimated to be 70,000 cu. ft.

The system must be designed at the location and within the general limits shown on the plans.

Submit a design summary by the manufacturer that demonstrates that the system is designed to convey peak flow rates without scour of foundation stone.

The chamber detention system will incorporate a sedimentation chamber for stormwater treatment and system maintenance.

The chamber detention system will remove a minimum of 80% of TSS.

Chamber detention system inspection and maintenance will be in accordance with the product manufacturer's published guidance.

3. **Construction.** Before beginning installation provide product installation instructions for the following:

- ASTM F 2418 - Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers
- AASHTO M 294 – Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm Diameter

- A. **General.** Use and understand the latest manufacturer's installation instructions prior to beginning system installation. A pre-installation meeting between the chamber representative and general contractor is required to discuss the chamber system installation. Chamber products must be designed and installed in accordance with the manufacturer's minimum requirements.

Install all drainage structures, pipe and chambers in the locations shown on the design engineer's drawings and/or as approved by the Engineer. Pipe will be of the type and sizes

specified on the plans and will be laid accurately to line and grade. Structures will be accurately located and properly oriented.

Coordinate the installation of the subsurface chamber detention system with the installation of permanent structures on site. Construction loads for permanent structures may require the subsurface chamber system to be installed after the permanent structure(s) on site.

Coordinate chamber detention system connections to off-site storm sewer with the appropriate agency having jurisdiction.

Coordinate chamber detention system connections to existing on-site storm sewer and building roof drainage systems.

Chambers, pipe and drainage structures will be inspected prior to installation and any defective or damaged product will be replaced accordingly.

Contact local underground utility companies prior to construction.

Apply erosion and sediment control measures to protect the stormwater system during all phases of site construction per local codes and design engineer's specifications.

- B. Delivery, Storage and Handling.** Check all materials upon delivery to assure that the proper chamber size and plastic pipe and pipe fittings have been received.

Check the chambers for shipping damage prior to installation. Units that have been damaged must not be installed. Contact chamber manufacturer immediately upon discovery of any damage. Chambers may be left palletized until the units are ready to be installed.

All chambers, pipe and pipe fittings will be delivered to the site and unloaded with handling that conforms to the manufacturer's instructions for reasonable care.

Protect chamber and chamber fittings from dirt and damage.

Protect all pipe and chambers against impact, shock and free fall, and only use equipment of sufficient capacity and proper design in the handling of the pipe. Storage of the pipe on the job will be in accordance with the pipe manufacturer's recommendations.

Refer to the fabric manufacturer's guidance handling and storage of fabric products on site.

- C. Site Preparation.** Excavation must be free of standing water. Dewatering measures must be taken if required. When groundwater is present in the work area, dewater to maintain stability of in-situ and imported materials. Maintain water level below pipe bedding and foundation to provide a stable trench bottom.

Prepare the chamber bed's subgrade soil as outlined on the plans. Requirement for subgrade soil bearing capacity should meet or exceed the chamber manufacturer's required allowable subgrade soil bearing capacity. The contractor must report any discrepancies with subgrade soil's bearing capacity to the design engineer.

- D. Chamber Installation and Backfilling.** Install chamber system flat or at constant slope between points and elevations shown on the plans.

Construct fabric and stone foundation per chamber manufacturer's installation instructions.

Construct the chamber bed by joining the chambers lengthwise in rows. Attach chambers by overlapping the end corrugation of one chamber onto the end corrugation of the last chamber in the row. Spacers can be used to obtain the required minimum spacing between chamber rows.

See pipe manufacturer's installation instructions for pipe assembly.

Stone placement between chamber rows and around perimeter must follow instructions as indicated in the most current version of the chamber manufacturer's installation instructions.

Refer to the chamber manufacturer's installation instructions for a table of acceptable vehicle loads at various depths of cover. Prevent vehicles that exceed the chamber manufacturer's requirements from traveling across or parking over the chamber system. Use temporary fencing, warning tape, appropriately located signs, or other approved means to prevent unauthorized vehicles from entering sensitive construction areas.

Refer to the chamber manufacturer's installation instructions for minimum requirements for backfill material above the chamber detention system.

See the pipe manufacturer's installation instructions for guidance on installing the plastic pipe fittings to the chamber system.

- E. Protection.** Protect all inlets to the chamber detention system during construction. Pipe plugs can be used during construction on all inlet pipes to the chamber detention system to prevent construction sediment from entering the system. Once construction has ceased, the pipe plugs are removed to allow normal system functionality.

Protect all inlet and outlet structures against construction sediments.

- F. Inspection and Maintenance.** As noted in Article 2.A, inspection ports are required to allow for inspection of the stormwater system during normal operations.

Refer to the chamber manufacturer's operation and maintenance manual for guidance on inspection intervals during normal system operation.

Utilize a vacuum system process to remove sediments that have accumulated in the sediment chamber over time.

- 4. Measurement.** Storm water treatment units, satisfactorily completed in accordance with the plans and specifications, will be measured by each, of the type specified, complete in place.

5. **Payment.** The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for as follows:

Stormwater Treatment System: Payment for complete Stormwater Treatment System will be made at the unit price bid for “Storm water Treatment System” of the type specified. These prices are full compensation for furnishing chambers, end caps, manifold piping, stone backfill, fabric, spacers, pipe plugs, fittings, excavation, and backfill and for all other materials, tools, equipment, labor, incidentals, cleaning, and maintenance as necessary to install storm water treatment units, complete in place, in accordance with the plans and specifications.

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