

NOTIFICATION OF ADDENDUM

ADDENDUM NO. 1

DATED 6/03/2016

Control	0025-02-198, ETC.
Project	C 25-2-198, ETC.
Highway	IH 10
County	BEXAR

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: C 25-2-198

CONTROL: 0025-02-198

COUNTY: BEXAR

LETTING: 06/08/2016

REFERENCE NO: 0603

PROPOSAL ADDENDUMS

-
- PROPOSAL COVER
 - BID INSERTS (SH. NO.: 1 THRU 34))
 - GENERAL NOTES (SH. NO.: A))

 - SPEC LIST (SH. NO.: 1 & 2))
 - SPECIAL PROVISIONS:
 - ADDED:

 - DELETED:

 - SPECIAL SPECIFICATIONS:
 - ADDED:

 - DELETED:

 - OTHER: PLAN SHEET AND OTHER CHANGES

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

**** BID INSERTS ****

REVISED QUANTITY FOR THE FOLLOWING BID ITEMS: 342-6002, 462-6013, 464-6003, 465-6179, AND 502-6001.

DELETED THE FOLLOWING BID ITEMS: 105-6014 & 360-6050.

ADDED THE FOLLOWING BID ITEMS: 342-6006, 360-6056, 451-6052, 462-6010, 466-6183, 529-6012 & 644-6062.

**** SPEC LIST ****

ADDED ITEM 451. DELETED ITEM 105

**** GENERAL NOTES ****

SHEET A: UPDATED PFC CALLOUTS, RATES AND QUANTITIES UNDER THE MAINLANES SECTION OF THE ASPHALT CONCRETE PAVEMENT PORTION OF THE BASIS OF ESTIMATE.

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

**** PLAN SHEETS ****

SHEET 2: INDEX OF SHEETS. ADDED SHEET 670A

SHEETS 32 THRU 34: PAVEMENT STRUCTURE DETAILS A TO P. MODIFIED LOCATION OF GEOGRID AND DEPTH OF CURB. REVISED FLEX BASE NOTE ON DETAIL F ON SHEET 32.

SHEET 35: GENERAL NOTES SHEET. UPDATED PFC CALLOUTS, RATES AND QUANTITIES UNDER THE MAINLANES SECTION OF THE ASPHALT CONCRETE PAVEMENT PORTION OF THE BASIS OF ESTIMATE.

SHEETS 36, 36A THRU 36G: ESTIMATE & QUANTITY SHEETS ALL SHEETS HAVE ITEM SHIFTS DUE TO ADDITION OF BID ITEMS. SEE BID TABS ABOVE FOR CHANGES.

SHEETS 47, 51 & 55: SUMMARY OF ROADWAY QUANTITIES. REMOVED BID ITEM 360-6050 AND REPLACED WITH 360-6056. ADDED NOTE THAT PFC QUANTITY IS FOR CONTRACTORS INFO ONLY TO SEE BASIS OF ESTIMATE IN GENERAL NOTES FOR ITEM AND QUANTITY.

SHEETS 48, 52 & 56: SUMMARY OF ROADWAY QUANTITIES. ADDED BID ITEM 451-6052

SHEET 61: SUMMARY OF EARTHWORK. ADDED NOTE FOR EMBANKMENT.

SHEETS 63-64: SUMMARY OF REMOVAL QUANTITIES. REMOVED ITEM 105-6014 FROM SHEET 63. ADDED ITEM 496-6010 TO SHEET 64.

SHEETS 68-69: SUMMARY OF DRAINAGE QUANTITIES. ADDED ITEM 462-6010 & UPDATE ITEM 464-6003 ON SHEET 68. UPDATED ITEM 465-6179 ON SHEET 69.

SHEET 70: SUMMARY OF CULVERT QUANTITIES. ADDED ITEM 466-6183 AND UPDATED 466-6180.

SHEET 93: SUMMARY OF SMALL SIGN QUANTITIES. ADDED ITEM 644-6092.

SHEETS 405-437: REMOVAL LAYOUT. MADE ADJUSTMENT TO LEGEND. REMOVED ITEM 105-6014 FROM SHEETS 406-433. MODIFIED CALLOUT REFERRING TO EXISTING WINGWALL TO BE REMOVED ON SHEET 407. ADDED ITEM 496-6010 TO SHEET 417.

SHEETS 441-445, 448-451, 454-455, 458-459, 462-463, 466-467, 470-473: PLAN AND PROFILE MAINLANES REMOVED BID ITEM 342-6002 AND ADDED PFC (SY) FOR CONTRACTORS INFO.

SHEET 489: PLAN & PROFILE EASTBOUND FRONTAGE ROAD. ADDED BID ITEM 529-6012 CONC CURB (SLOTTED).

SHEETS 493, 516, 525, 576, 579, & 580: PLAN & PROFILE. REMOVED BID ITEM 360-6050 AND REPLACED WITH 360-6056

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

SHEET 670A: FAST TRACK PAVEMENT DETAIL SHEET. NEW SHEET ADDED FOR NOTES AND DETAILS FOR FAST TRACK PAVEMENT AT INTERSECTIONS.

SHEETS 671-672: MISCELLANEOUS ROADWAY DETAILS. MODIFIED DETAIL DESIGNATION FROM SAW TOOTH CURB (TY 1B) TO CONC CURB(SLOTTED) , ADDED DETAILS FOR ASPHALT INTERSECTION DETAIL AND CONCRETE MEDIAN DETAIL .

SHEET 714: RETAINING WALL AND SOIL NAIL NOTES. OMITTED NOTE 12.

SHEETS 724-727: RETAINING WALL 05. UPDATED TOP OF WALL STRIP GRADE ELEVATIONS.

SHEET 865: RW(MSE)DD. REVISED MIN EARTH REINFORCEMENT LENGTH FOR RETAINING WALLS #1, #2, AND #3.

SHEET 891: STRUCTURE NO. 3 LAYOUT. MODIFIED HEADWALL CALL OUT AND ADDED ITEM 466-6183.

SHEETS 948, & 952-954: DRAINAGE PLAN LAYOUTS. MODIFIED QUANTITY FOR ITEM 464-6003. ADDED ITEM 462-6010 TO SHEET 952.

SHEET 1003: STORM DRAIN PROFILES. CORRECTED CALLOUT ON SYSTEM 2 FROM C2-OUT TO M2-OUT.

SHEET 1031: MISCELLANEOUS DRAINAGE DETAILS. MODIFIED CUT AND RESTORE PAVEMENT DETAIL.

SHEET 1076: ESTIMATED QUANTITIES IH-10 UNDERPASS AT FOSTER ROAD. MODIFIED ITEM 416-6001. DELETED ITEM 496-6005.

SHEET 1088: ESTIMATED QUANTITIES IH-10 WBML OVERPASS AT WOODLAKE PKWY MODIFIED CALL OUTS FOR NUMBER OF DRILL SHAFTS.

SHEET 1093: ESTIMATED QUANTITIES IH-10 WBML OVERPASS AT WOODLAKE PKWY DIMENSION CORRECTION.

SHEET 1102: ESTIMATED QUANTITIES IH-10 EBML OVERPASS AT WOODLAKE PKWY MODIFIED CALL OUTS FOR NUMBER OF DRILL SHAFTS.

SHEET 1107: ESTIMATED QUANTITIES IH-10 EBML OVERPASS AT WOODLAKE PKWY DIMENSION CORRECTION.

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	6002		PREPARING ROW DOLLARS and CENTS	STA	336.000	1
	104	6009		REMOVING CONC (RIPRAP) DOLLARS and CENTS	SY	761.000	2
	104	6011		REMOVING CONC (MEDIANS) DOLLARS and CENTS	SY	387.000	3
	104	6017		REMOVING CONC (DRIVEWAYS) DOLLARS and CENTS	SY	3,890.000	4
	104	6021		REMOVING CONC (CURB) DOLLARS and CENTS	LF	1,372.000	5
	104	6022		REMOVING CONC (CURB AND GUTTER) DOLLARS and CENTS	LF	5,409.000	6
	104	6025		REMOVE CONC (WINGWALL) DOLLARS and CENTS	CY	6.000	7
	104	6036		REMOVING CONC (SIDEWALK OR RAMP) DOLLARS and CENTS	SY	664.000	8
	104	6037		REMOVE CONC (RAIL) DOLLARS and CENTS	LF	528.000	9
	106	6001		OBLITERATING ABANDONED ROAD DOLLARS and CENTS	STA	63.000	10
	110	6001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	241,134.000	11
	110	6002		EXCAVATION (CHANNEL) DOLLARS and CENTS	CY	3,283.000	12

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	132	6006		EMBANKMENT (FINAL)(DENS CONT)(TY C) DOLLARS and CENTS	CY	269,868.000	13
	150	6002		BLADING DOLLARS and CENTS	HR	308.000	14
	161	6017		COMPOST MANUF TOPSOIL (4") DOLLARS and CENTS	SY	358,853.000	15
	164	6039		DRILL SEEDING (PERM) (URBAN) (CLAY) DOLLARS and CENTS	SY	358,853.000	16
	164	6041		DRILL SEEDING (TEMP) (WARM) DOLLARS and CENTS	SY	99,256.000	17
	164	6043		DRILL SEEDING (TEMP) (COOL) DOLLARS and CENTS	SY	99,256.000	18
	168	6001		VEGETATIVE WATERING DOLLARS and CENTS	MG	6,636.700	19
	169	6001		SOIL RETENTION BLANKETS (CL 1) (TY A) DOLLARS and CENTS	SY	35,555.000	20
	216	6001		PROOF ROLLING DOLLARS and CENTS	HR	181.000	21
	247	6059		FL BS (CMP IN PLC)(TY E GR 3)(FNAL POS) DOLLARS and CENTS	CY	54,255.000	22
	247	6475		FL BS (CIP)(TY D GR 1-2, OR 5)FINAL POS DOLLARS and CENTS	CY	101,762.000	23
	275	6001		CEMENT DOLLARS and CENTS	TON	488.000	24

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	275	6003		CEMENT TREAT (NEW BASE) (6") DOLLARS and CENTS	SY	58,983.000	25
	305	6003		SALV, HAUL & STKPL RCL APH PV (2 TO 4") DOLLARS and CENTS	SY	11,713.000	26
	310	6027		PRIME COAT(MC-30 OR AE-P) DOLLARS and CENTS	GAL	85,874.000	27
	341	6008		D-GR HMA TY-B PG64-22 DOLLARS and CENTS	TON	88,762.000	28
	341	6028		D-GR HMA TY-C PG70-22 DOLLARS and CENTS	TON	36,306.000	29
	341	6031		D-GR HMA TY-C PG76-22 DOLLARS and CENTS	TON	7,213.000	30
	341	6040		D-GR HMA TY-D PG64-22 DOLLARS and CENTS	TON	3,242.000	31
	341	6049		D-GR HMA TY-D PG76-22 DOLLARS and CENTS	TON	602.000	32
	342	6002		PFC (ASPHALT) PG76-22 DOLLARS and CENTS	TON	186.000	33
	342	6006		PFC-C (AGGREGATE)(PG76 MIX) SAC-A DOLLARS and CENTS	TON	2,912.000	34
	344	6066		SUPERPAVE MIXTURES SP-C PG76-22 DOLLARS and CENTS	TON	30,960.000	35
	351	6025		FLEX PAVEMENT STRUCTURE REPAIR (8"- 15") DOLLARS and CENTS	SY	1,000.000	36

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	354	6021		PLANE ASPH CONC PAV(0" TO 2") DOLLARS and CENTS	SY	60,750.000	37
	354	6045		PLANE ASPH CONC PAV (2") DOLLARS and CENTS	SY	5,482.000	38
	360	6005		CONC PVMT (CONT REINF - CRCP) (11") DOLLARS and CENTS	SY	23,032.000	39
	360	6007		CONC PVMT (CONT REINF - CRCP) (13") DOLLARS and CENTS	SY	28,058.000	40
	360	6056		CONC PAV (CONT REINF)(HES)(14") DOLLARS and CENTS	SY	5,271.000	41
	400	6005		CEM STABIL BKFL DOLLARS and CENTS	CY	752.000	42
	400	6007		CUT & RESTORE CONC PAVING DOLLARS and CENTS	SY	22.000	43
	400	6008		CUT & RESTORE ASPH PAVING DOLLARS and CENTS	SY	8,144.000	44
	401	6001		FLOWABLE BACKFILL DOLLARS and CENTS	CY	4,993.000	45
	402	6001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	30,160.000	46
	403	6002		TEMPORARY SPL SHORING (SOIL NAIL) DOLLARS and CENTS	SF	7,457.000	47
	416	6001		DRILL SHAFT (18 IN) DOLLARS and CENTS	LF	210.000	48

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	416	6002		DRILL SHAFT (24 IN) DOLLARS and CENTS	LF	202.000	49
	416	6003		DRILL SHAFT (30 IN) DOLLARS and CENTS	LF	368.000	50
	416	6004		DRILL SHAFT (36 IN) DOLLARS and CENTS	LF	2,764.000	51
	416	6005		DRILL SHAFT (42 IN) DOLLARS and CENTS	LF	2,569.000	52
	416	6006		DRILL SHAFT (48 IN) DOLLARS and CENTS	LF	41.000	53
	416	6007		DRILL SHAFT (54 IN) DOLLARS and CENTS	LF	182.000	54
	416	6029		DRILL SHAFT (RDWY ILL POLE) (30 IN) DOLLARS and CENTS	LF	560.000	55
	416	6031		DRILL SHAFT (TRF SIG POLE) (30 IN) DOLLARS and CENTS	LF	22.000	56
	416	6032		DRILL SHAFT (TRF SIG POLE) (36 IN) DOLLARS and CENTS	LF	182.000	57
	416	6034		DRILL SHAFT (TRF SIG POLE) (48 IN) DOLLARS and CENTS	LF	132.000	58
	416	6052		DRILLED SHAFT (12 IN) DOLLARS and CENTS	LF	70.000	59
	420	6013		CL C CONC (ABUT) DOLLARS and CENTS	CY	263.100	60

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	420	6025		CL C CONC (BENT) DOLLARS and CENTS	CY	435.200	61
	420	6057		CL C CONC (WINGWALLS) DOLLARS and CENTS	CY	8.000	62
	420	6066		CL C CONC (RAIL FOUNDATION) DOLLARS and CENTS	CY	59.000	63
	420	6071		CL C CONC (COLLAR) DOLLARS and CENTS	EA	52.000	64
	422	6001		REINF CONC SLAB DOLLARS and CENTS	SF	53,697.000	65
	422	6013		BRIDGE SIDEWALK DOLLARS and CENTS	SF	2,096.000	66
	422	6015		APPROACH SLAB DOLLARS and CENTS	CY	441.600	67
	423	6001		RETAINING WALL (MSE) DOLLARS and CENTS	SF	137,482.000	68
	423	6003		RETAINING WALL (TEMP WALL) DOLLARS and CENTS	SF	45,089.000	69
	425	6037		PRESTR CONC GIRDER (TX40) DOLLARS and CENTS	LF	2,012.750	70
	425	6039		PRESTR CONC GIRDER (TX54) DOLLARS and CENTS	LF	4,433.040	71
	432	6001		RIPRAP (CONC)(4 IN) DOLLARS and CENTS	CY	447.000	72

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	432	6002		RIPRAP (CONC)(5 IN) DOLLARS and CENTS	CY	130.000	73
	432	6006		RIPRAP (CONC)(CL B) DOLLARS and CENTS	CY	82.600	74
	432	6022		RIPRAP (STONE COMMON)(DRY)(6 IN) DOLLARS and CENTS	CY	201.000	75
	432	6024		RIPRAP (STONE COMMON)(DRY)(12 IN) DOLLARS and CENTS	CY	190.000	76
	432	6044		RIPRAP (CONC)(FLUME) DOLLARS and CENTS	CY	456.000	77
	432	6045		RIPRAP (MOW STRIP)(4 IN) DOLLARS and CENTS	CY	704.000	78
	450	6004		RAIL (TY T221) DOLLARS and CENTS	LF	295.000	79
	450	6012		RAIL (TY T411) DOLLARS and CENTS	LF	1,748.000	80
	450	6023		RAIL (TY SSTR) DOLLARS and CENTS	LF	1,586.000	81
	450	6036		RAIL (TY C411) DOLLARS and CENTS	LF	494.000	82
	450	6042		RAIL (TY PR1) DOLLARS and CENTS	LF	7,514.000	83
	450	6062		RAIL (TY SSTR)(MOD) DOLLARS and CENTS	LF	1,086.000	84

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	451	6052		RETROFIT RAIL (ADD PEDESTRIAN HSS) DOLLARS and CENTS	LF	230.000	85
	454	6001		SEALED EXPANSION JOINT (4 IN) (SEJ - A) DOLLARS and CENTS	LF	389.000	86
	462	6001		CONC BOX CULV (3 FT X 2 FT) DOLLARS and CENTS	LF	780.000	87
	462	6002		CONC BOX CULV (3 FT X 3 FT) DOLLARS and CENTS	LF	32.000	88
	462	6003		CONC BOX CULV (4 FT X 2 FT) DOLLARS and CENTS	LF	834.000	89
	462	6005		CONC BOX CULV (4 FT X 4 FT) DOLLARS and CENTS	LF	104.000	90
	462	6006		CONC BOX CULV (5 FT X 2 FT) DOLLARS and CENTS	LF	410.000	91
	462	6007		CONC BOX CULV (5 FT X 3 FT) DOLLARS and CENTS	LF	501.000	92
	462	6010		CONC BOX CULV (6 FT X 3 FT) DOLLARS and CENTS	LF	246.000	93
	462	6013		CONC BOX CULV (6 FT X 6 FT) DOLLARS and CENTS	LF	1,151.000	94
	462	6019		CONC BOX CULV (8 FT X 4 FT) DOLLARS and CENTS	LF	1,791.000	95
	464	6003		RC PIPE (CL III)(18 IN) DOLLARS and CENTS	LF	997.000	96

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	464	6005		RC PIPE (CL III)(24 IN) DOLLARS and CENTS	LF	24,060.000	97
	464	6007		RC PIPE (CL III)(30 IN) DOLLARS and CENTS	LF	1,401.000	98
	464	6008		RC PIPE (CL III)(36 IN) DOLLARS and CENTS	LF	7,606.000	99
	465	6005		JCTBOX(COMPL)(PJB)(3FTX3FT) DOLLARS and CENTS	EA	26.000	100
	465	6006		JCTBOX(COMPL)(PJB)(4FTX4FT) DOLLARS and CENTS	EA	11.000	101
	465	6007		JCTBOX(COMPL)(PJB)(3FTX5FT) DOLLARS and CENTS	EA	1.000	102
	465	6009		JCTBOX(COMPL)(PJB)(5FTX5FT) DOLLARS and CENTS	EA	5.000	103
	465	6011		JCTBOX(COMPL)(PJB)(6FTX6FT) DOLLARS and CENTS	EA	5.000	104
	465	6012		JCTBOX(COMPL)(PJB)(8FTX8FT) DOLLARS and CENTS	EA	2.000	105
	465	6013		INLET (COMPL)(PCO)(3FT)(NONE) DOLLARS and CENTS	EA	4.000	106
	465	6014		INLET (COMPL)(PCO)(3FT)(LEFT) DOLLARS and CENTS	EA	7.000	107
	465	6015		INLET (COMPL)(PCO)(3FT)(RIGHT) DOLLARS and CENTS	EA	12.000	108

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	465	6016		INLET (COMPL)(PCO)(3FT)(BOTH) DOLLARS and CENTS	EA	36.000	109
	465	6018		INLET (COMPL)(PCO)(4FT)(LEFT) DOLLARS and CENTS	EA	1.000	110
	465	6019		INLET (COMPL)(PCO)(4FT)(RIGHT) DOLLARS and CENTS	EA	1.000	111
	465	6020		INLET (COMPL)(PCO)(4FT)(BOTH) DOLLARS and CENTS	EA	9.000	112
	465	6030		INLET (COMPL)(PCU)(3FT)(LEFT) DOLLARS and CENTS	EA	1.000	113
	465	6031		INLET (COMPL)(PCU)(3FT)(RIGHT) DOLLARS and CENTS	EA	1.000	114
	465	6032		INLET (COMPL)(PCU)(3FT)(BOTH) DOLLARS and CENTS	EA	12.000	115
	465	6033		INLET (COMPL)(PCU)(4FT)(NONE) DOLLARS and CENTS	EA	1.000	116
	465	6034		INLET (COMPL)(PCU)(4FT)(LEFT) DOLLARS and CENTS	EA	1.000	117
	465	6035		INLET (COMPL)(PCU)(4FT)(RIGHT) DOLLARS and CENTS	EA	1.000	118
	465	6036		INLET (COMPL)(PCU)(4FT)(BOTH) DOLLARS and CENTS	EA	4.000	119
	465	6042		INLET (COMPL)(PCU)(6FT)(LEFT) DOLLARS and CENTS	EA	2.000	120

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	465	6048		INLET (COMPL)(POD)(FG)(3FTX3FT) DOLLARS and CENTS	EA	2.000	121
	465	6049		INLET (COMPL)(POD)(FG)(4FTX4FT) DOLLARS and CENTS	EA	1.000	122
	465	6070		INLET (COMPL)(PSL)(RC)(3FTX3FT) DOLLARS and CENTS	EA	25.000	123
	465	6071		INLET (COMPL)(PSL)(RC)(4FTX4FT) DOLLARS and CENTS	EA	13.000	124
	465	6126		INLET (COMPL)(PSL)(FG)(3FTX3FT-3FTX- 3FT) DOLLARS and CENTS	EA	12.000	125
	465	6128		INLET (COMPL)(PSL)(FG)(4FTX4FT-4FTX- 4FT) DOLLARS and CENTS	EA	19.000	126
	465	6130		INLET (COMPL)(PSL)(FG)(3FTX5FT-3FTX- 5FT) DOLLARS and CENTS	EA	4.000	127
	465	6135		INLET (COMPL)(PSL)(FG)(5FTX5FT-4FTX- 4FT) DOLLARS and CENTS	EA	3.000	128
	465	6179		INLET (COMPL)(TY MSE2) DOLLARS and CENTS	EA	31.000	129
	465	6221		INLET (COMPL)(DROP)(TY 3A) DOLLARS and CENTS	EA	5.000	130
	465	6233		INLET (COMP) (TY SIDEWALK BRIDGE) DOLLARS and CENTS	EA	1.000	131

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	465	6256		INLET(COMPL)(CURB)(SPL) DOLLARS and CENTS	EA	5.000	132
	465	6314		INLET (COMPL)CI(3)(OB)-02 FW(15')(MOD) DOLLARS and CENTS	EA	1.000	133
	466	6152		WINGWALL (FW - 0) (HW=5 FT) DOLLARS and CENTS	EA	1.000	134
	466	6179		WINGWALL (PW - 1) (HW=4 FT) DOLLARS and CENTS	EA	2.000	135
	466	6180		WINGWALL (PW - 1) (HW=5 FT) DOLLARS and CENTS	EA	1.000	136
	466	6183		WINGWALL (PW - 1) (HW=8 FT) DOLLARS and CENTS	EA	1.000	137
	466	6232		WINGWALL (SPL) DOLLARS and CENTS	EA	10.000	138
	467	6348		SET (TY II) (18 IN) (CMP) (6: 1) (P) DOLLARS and CENTS	EA	2.000	139
	467	6395		SET (TY II) (24 IN) (RCP) (6: 1) (P) DOLLARS and CENTS	EA	16.000	140
	474	6009		SLOT DRAIN (GAL STL) (24 IN) DOLLARS and CENTS	LF	40.000	141
	479	6002		ADJUSTING INLETS DOLLARS and CENTS	EA	4.000	142
	480	6001		CLEAN EXIST CULVERTS DOLLARS and CENTS	EA	12.000	143

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	496	6002		REMOV STR (INLET) DOLLARS and CENTS	EA	36.000	144
	496	6004		REMOV STR (SET) DOLLARS and CENTS	EA	15.000	145
	496	6005		REMOV STR (WINGWALL) DOLLARS and CENTS	EA	15.000	146
	496	6006		REMOV STR (HEADWALL) DOLLARS and CENTS	EA	16.000	147
	496	6007		REMOV STR (PIPE) DOLLARS and CENTS	LF	4,211.000	148
	496	6008		REMOV STR (BOX CULVERT) DOLLARS and CENTS	LF	1,825.000	149
	496	6010		REMOV STR (BRIDGE 100 - 499 FT LENGTH) DOLLARS and CENTS	EA	1.000	150
	496	6040		REMOV STR (RET WALL) DOLLARS and CENTS	LF	569.000	151
	500	6001		MOBILIZATION DOLLARS and CENTS	LS	1.000	152
	502	6001		BARRICADES, SIGNS AND TRAFFIC HAN- DLING DOLLARS and CENTS	MO	33.000	153
	506	6002	003	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	1,941.000	154
	506	6003	003	ROCK FILTER DAMS (INSTALL) (TY 3) DOLLARS and CENTS	LF	327.000	155

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	506	6011	003	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	2,268.000	156
	506	6020	003	CONSTRUCTION EXITS (INSTALL) (TY 1) DOLLARS and CENTS	SY	2,964.000	157
	506	6024	003	CONSTRUCTION EXITS (REMOVE) DOLLARS and CENTS	SY	2,964.000	158
	506	6031	003	FRNT END LOADER WORK (ERSN & SEDM CONT) DOLLARS and CENTS	HR	262.000	159
	506	6038	003	TEMP SEDMT CONT FENCE (INSTALL) DOLLARS and CENTS	LF	38,876.000	160
	506	6039	003	TEMP SEDMT CONT FENCE (REMOVE) DOLLARS and CENTS	LF	38,876.000	161
	506	6041	003	BIODEG EROSN CONT LOGS (INSTL) (12") DOLLARS and CENTS	LF	1,991.000	162
	506	6043	003	BIODEG EROSN CONT LOGS (REMOVE) DOLLARS and CENTS	LF	1,991.000	163
	508	6001		CONSTRUCTING DETOURS DOLLARS and CENTS	SY	53,989.000	164
	512	6001		PORT CTB (FUR & INST)(SGL SLOPE)(TY 1) DOLLARS and CENTS	LF	24,750.000	165
	512	6009		PORT CTB (FUR & INST)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	22,140.000	166
	512	6010		PORT CTB (FUR & INST)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	1,720.000	167

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	512	6025		PORT CTB (MOVE)(SGL SLP)(TY 1) DOLLARS and CENTS	LF	46,070.000	168
	512	6033		PORT CTB (MOVE)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	59,000.000	169
	512	6034		PORT CTB (MOVE)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	2,880.000	170
	512	6049		PORT CTB (REMOVE)(SGL SLP)(TY 1) DOLLARS and CENTS	LF	24,750.000	171
	512	6057		PORT CTB (REMOVE)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	22,140.000	172
	512	6058		PORT CTB (REMOVE)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	1,720.000	173
	514	6001		PERM CTB (SGL SLOPE) (TY 1) (42) DOLLARS and CENTS	LF	16,830.000	174
	514	6036		PERM CTB (TRAN SSCB TO SSTR) (MOD) DOLLARS and CENTS	LF	120.000	175
	528	6001		COLORED TEXTURED CONC (4") DOLLARS and CENTS	SY	510.000	176
	529	6001		CONC CURB (TY I) DOLLARS and CENTS	LF	116,629.000	177
	529	6012		CONC CURB (SLOTTED) DOLLARS and CENTS	LF	211.000	178
	529	6015		CONC CURB (TY C1) DOLLARS and CENTS	LF	670.000	179

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	529	6018		CONC CURB (TY F3) DOLLARS and CENTS	LF	1,329.000	180
	529	6020		CONC CURB & GUTTER (ARMOR CURB) DOLLARS and CENTS	LF	994.000	181
	530	6002		INTERSECTIONS (ACP) DOLLARS and CENTS	SY	890.000	182
	530	6004		DRIVEWAYS (CONC) DOLLARS and CENTS	SY	5,256.000	183
	530	6005		DRIVEWAYS (ACP) DOLLARS and CENTS	SY	3,647.000	184
	531	6001		CONC SIDEWALKS (4") DOLLARS and CENTS	SY	28,621.000	185
	531	6004		CURB RAMPS (TY 1) DOLLARS and CENTS	EA	23.000	186
	531	6005		CURB RAMPS (TY 2) DOLLARS and CENTS	EA	9.000	187
	531	6010		CURB RAMPS (TY 7) DOLLARS and CENTS	EA	4.000	188
	531	6013		CURB RAMPS (TY 10) DOLLARS and CENTS	EA	13.000	189
	531	6014		CURB RAMPS (TY 11) DOLLARS and CENTS	EA	2.000	190
	531	6036		CURB RAMPS (TY 2)(MOD) DOLLARS and CENTS	EA	2.000	191

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	536	6002		CONC MEDIAN DOLLARS and CENTS	SY	476.000	192
	540	6001		MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	5,253.000	193
	540	6006		MTL BEAM GD FEN TRANS (THRIE-BEAM) DOLLARS and CENTS	EA	9.000	194
	540	6016		DOWNSTREAM ANCHOR TERMINAL SEC- TION DOLLARS and CENTS	EA	19.000	195
	542	6001		REMOVE METAL BEAM GUARD FENCE DOLLARS and CENTS	LF	3,484.000	196
	542	6002		REMOVE TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	20.000	197
	542	6004		RM MTL BM GD FENCE TRANS (THRIE- BEAM) DOLLARS and CENTS	EA	4.000	198
	543	6019	001	CABLE BARRIER TERMINAL SECTION (TL- 3) DOLLARS and CENTS	EA	4.000	199
	543	6021	001	REMOVE CABLE BARRIER DOLLARS and CENTS	LF	4,887.000	200
	544	6003		GUARDRAIL END TREATMENT (REMOVE) DOLLARS and CENTS	EA	21.000	201
	544	6006		GDRAIL END TRT(INST)(WOOD POST)(TY III) DOLLARS and CENTS	EA	17.000	202

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	545	6001		CRASH CUSH ATTEN (INSTL) DOLLARS and CENTS	EA	8.000	203
	545	6003		CRASH CUSH ATTEN (MOVE & RESET) DOLLARS and CENTS	EA	11.000	204
	545	6005		CRASH CUSH ATTEN (REMOVE) DOLLARS and CENTS	EA	7.000	205
	610	6104		IN RD IL (U/P) (TY 1) (150W EQ) LED DOLLARS and CENTS	EA	8.000	206
	610	6214		IN RD IL (TY SA) 40T-8 (250W EQ) LED DOLLARS and CENTS	EA	56.000	207
	610	6265		IN RD IL (TY SP) 48S-10-10(400W EQ)LED DOLLARS and CENTS	EA	14.000	208
	618	6023		CONDT (PVC) (SCH 40) (2") DOLLARS and CENTS	LF	16,760.000	209
	618	6024		CONDT (PVC) (SCH 40) (2") (BORE) DOLLARS and CENTS	LF	765.000	210
	618	6029		CONDT (PVC) (SCH 40) (3") DOLLARS and CENTS	LF	595.000	211
	618	6030		CONDT (PVC) (SCH 40) (3") (BORE) DOLLARS and CENTS	LF	1,420.000	212
	618	6046		CONDT (PVC) (SCH 80) (2") DOLLARS and CENTS	LF	1,248.000	213
	618	6047		CONDT (PVC) (SCH 80) (2") (BORE) DOLLARS and CENTS	LF	4,217.000	214

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	618	6053		CONDT (PVC) (SCH 80) (3") DOLLARS and CENTS	LF	1,737.000	215
	618	6054		CONDT (PVC) (SCH 80) (3") (BORE) DOLLARS and CENTS	LF	2,990.000	216
	618	6064		CONDT (RM) (1") DOLLARS and CENTS	LF	130.000	217
	618	6070		CONDT (RM) (2") DOLLARS and CENTS	LF	777.000	218
	620	6003		ELEC CONDR (NO.12) BARE DOLLARS and CENTS	LF	130.000	219
	620	6004		ELEC CONDR (NO.12) INSULATED DOLLARS and CENTS	LF	260.000	220
	620	6007		ELEC CONDR (NO.8) BARE DOLLARS and CENTS	LF	23,098.000	221
	620	6008		ELEC CONDR (NO.8) INSULATED DOLLARS and CENTS	LF	31,390.000	222
	620	6009		ELEC CONDR (NO.6) BARE DOLLARS and CENTS	LF	8,990.000	223
	620	6010		ELEC CONDR (NO.6) INSULATED DOLLARS and CENTS	LF	100.000	224
	621	6005		TRAY CABLE (4 CONDR) (12 AWG) DOLLARS and CENTS	LF	6,384.000	225
	624	6001		GROUND BOX TY A (122311) DOLLARS and CENTS	EA	6.000	226

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	624	6002		GROUND BOX TY A (122311)W/APRON DOLLARS and CENTS	EA	30.000	227
	624	6009		GROUND BOX TY D (162922) DOLLARS and CENTS	EA	22.000	228
	624	6010		GROUND BOX TY D (162922)W/APRON DOLLARS and CENTS	EA	15.000	229
	624	6027		GROUND BOX TY 3 (081208)W/APRON DOLLARS and CENTS	EA	6.000	230
	628	6078		ELC SRV TY A 240/480 100(NS)SS(E)TP(O) DOLLARS and CENTS	EA	8.000	231
	628	6118		ELC SRV TY D 120/240 060(NS)AL(E)TP(O) DOLLARS and CENTS	EA	2.000	232
	628	6213		ELC SRV TY D 120/240 100(NS)AL(E)PS(U) DOLLARS and CENTS	EA	1.000	233
	628	6239		ELC SRV TY D 120/240 100(NS)SS(E)PS(U) DOLLARS and CENTS	EA	1.000	234
	636	6001		ALUMINUM SIGNS (TY A) DOLLARS and CENTS	SF	9.000	235
	636	6002		ALUMINUM SIGNS (TY G) DOLLARS and CENTS	SF	1,910.000	236
	636	6003		ALUMINUM SIGNS (TY O) DOLLARS and CENTS	SF	3,196.000	237
	644	6001		IN SM RD SN SUP&AM TY10BWG(1)SA(P) DOLLARS and CENTS	EA	19.000	238

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	644	6004		IN SM RD SN SUP&AM TY10BWG(1)SA(T) DOLLARS and CENTS	EA	230.000	239
	644	6005		IN SM RD SN SUP&AM TY10BWG(1)SA(T- 2EXT) DOLLARS and CENTS	EA	5.000	240
	644	6030		IN SM RD SN SUP&AM TYS80(1)SA(T) DOLLARS and CENTS	EA	16.000	241
	644	6033		IN SM RD SN SUP&AM TYS80(1)SA(U) DOLLARS and CENTS	EA	3.000	242
	644	6034		IN SM RD SN SUP&AM TYS80(1)SA(U-1EXT) DOLLARS and CENTS	EA	21.000	243
	644	6035		IN SM RD SN SUP&AM TYS80(1)SA(U-2EXT) DOLLARS and CENTS	EA	9.000	244
	644	6036		IN SM RD SN SUP&AM TYS80(1)SA(U-BM) DOLLARS and CENTS	EA	10.000	245
	644	6050		IN SM RD SN SUP&AM TYS80(2)SA(P) DOLLARS and CENTS	EA	3.000	246
	644	6062		IN SM RD SN SUP&AM TYTWT(1)WP(P) DOLLARS and CENTS	EA	16.000	247
	644	6064		IN BRIDGE MNT CLEARANCE SGN ASSM(TY N) DOLLARS and CENTS	EA	12.000	248
	644	6066		IN SM RD SN SUP&AM (RAIL MOUNT) DOLLARS and CENTS	EA	2.000	249
	644	6076		REMOVE SM RD SN SUP&AM DOLLARS and CENTS	EA	227.000	250

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	647	6001		INSTALL LRSS (STRUCT STEEL) and DOLLARS CENTS	LB	9,266.000	251
	647	6002		RELOCATE LRSA and DOLLARS CENTS	EA	4.000	252
	647	6003		REMOVE LRSA and DOLLARS CENTS	EA	26.000	253
	650	6032		INS OH SN SUP(30 FT CANT) and DOLLARS CENTS	EA	4.000	254
	650	6038		INS OH SN SUP(35 FT CANT) and DOLLARS CENTS	EA	5.000	255
	650	6045		INS OH SN SUP(40 FT CANT) and DOLLARS CENTS	EA	2.000	256
	650	6074		INS OH SN SUP(65 FT BRDG) and DOLLARS CENTS	EA	1.000	257
	650	6079		INS OH SN SUP(70 FT BRDG) and DOLLARS CENTS	EA	2.000	258
	650	6084		INS OH SN SUP(75 FT BRDG) and DOLLARS CENTS	EA	1.000	259
	650	6099		INS OH SN SUP(90 FT BRDG) and DOLLARS CENTS	EA	1.000	260
	650	6204		REMOVE OVERHD SIGN SUP and DOLLARS CENTS	EA	2.000	261
	658	6001		INSTL DEL ASSM (D-SW)SZ 1(FLX)GND and DOLLARS CENTS	EA	97.000	262

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	658	6013		INSTL DEL ASSM (D-SW)SZ (BRF)CTB DOLLARS and CENTS	EA	14.000	263
	658	6018		INSTL DEL ASSM (D-SY)SZ 1(FLX)GND DOLLARS and CENTS	EA	9.000	264
	658	6026		INSTL DEL ASSM (D-SY)SZ (BRF)CTB DOLLARS and CENTS	EA	6.000	265
	658	6027		INSTL DEL ASSM (D-SY)SZ (BRF)CTB (BI) DOLLARS and CENTS	EA	13.000	266
	658	6036		INSTL DEL ASSM (D-DW)SZ 1(FLX)GND DOLLARS and CENTS	EA	153.000	267
	658	6047		INSTL OM ASSM (OM-2Y)(WC)GND DOLLARS and CENTS	EA	8.000	268
	658	6050		INSTL OM ASSM (OM-2Z)(FLX)SRF DOLLARS and CENTS	EA	37.000	269
	662	6050		WK ZN PAV MRK REMOV (REFL) TY II-A-A DOLLARS and CENTS	EA	112.000	270
	662	6052		WK ZN PAV MRK REMOV (REFL) TY II-C-R DOLLARS and CENTS	EA	171.000	271
	662	6060		WK ZN PAV MRK REMOV (W)4"(BRK) DOLLARS and CENTS	LF	7,535.000	272
	662	6063		WK ZN PAV MRK REMOV (W)4"(SLD) DOLLARS and CENTS	LF	160,204.000	273
	662	6075		WK ZN PAV MRK REMOV (W)24"(SLD) DOLLARS and CENTS	LF	119.000	274

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	6095		WK ZN PAV MRK REMOV (Y)4"(SLD) DOLLARS and CENTS	LF	184,606.000	275
	662	6109		WK ZN PAV MRK SHT TERM (TAB)TY W DOLLARS and CENTS	EA	1,100.000	276
	662	6111		WK ZN PAV MRK SHT TERM (TAB)TY Y-2 DOLLARS and CENTS	EA	39.000	277
	666	6006		REFL PAV MRK TY I (W)4"(DOT)(100MIL) DOLLARS and CENTS	LF	531.000	278
	666	6033		REFL PAV MRK TY I (W)8"(LNDP)(100MIL) DOLLARS and CENTS	LF	3,387.000	279
	666	6036		REFL PAV MRK TY I (W)8"(SLD)(100MIL) DOLLARS and CENTS	LF	35,699.000	280
	666	6039		REFL PAV MRK TY I (W)12"(LNDP)(100MIL) DOLLARS and CENTS	LF	1,616.000	281
	666	6042		REFL PAV MRK TY I (W)12"(SLD)(100MIL) DOLLARS and CENTS	LF	2,803.000	282
	666	6048		REFL PAV MRK TY I (W)24"(SLD)(100MIL) DOLLARS and CENTS	LF	2,477.000	283
	666	6054		REFL PAV MRK TY I (W)(ARROW)(100MIL) DOLLARS and CENTS	EA	75.000	284
	666	6057		REFL PAV MRK TY I(W)(DBL ARROW)(100MIL) DOLLARS and CENTS	EA	17.000	285
	666	6063		REFL PAV MRK TY I(W)(UTURN ARW)(100MIL) DOLLARS and CENTS	EA	9.000	286

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	6075		REFL PAV MRK TY I (W)(NUMBER)(100MIL) DOLLARS and CENTS	EA	8.000	287
	666	6078		REFL PAV MRK TY I (W)(WORD)(100MIL) DOLLARS and CENTS	EA	81.000	288
	666	6138		REFL PAV MRK TY I (Y)8"(SLD)(100MIL) DOLLARS and CENTS	LF	1,391.000	289
	666	6147		REFL PAV MRK TY I (Y)24"(SLD)(100MIL) DOLLARS and CENTS	LF	166.000	290
	666	6224		PAVEMENT SEALER 4" DOLLARS and CENTS	LF	17,886.000	291
	666	6225		PAVEMENT SEALER 6" DOLLARS and CENTS	LF	1,336.000	292
	666	6226		PAVEMENT SEALER 8" DOLLARS and CENTS	LF	5,689.000	293
	666	6228		PAVEMENT SEALER 12" DOLLARS and CENTS	LF	1,175.000	294
	666	6230		PAVEMENT SEALER 24" DOLLARS and CENTS	LF	1,357.000	295
	666	6282		REF PROF PAV MRK TY I(W)4"(SLD)(060MIL) DOLLARS and CENTS	LF	13,728.000	296
	666	6286		REF PROF PAV MRK TY I(Y)4"(SLD)(060MIL) DOLLARS and CENTS	LF	11,559.000	297
	666	6300		RE PM W/RET REQ TY I (W)4"(BRK)(100MIL) DOLLARS and CENTS	LF	21,548.000	298

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	6303		RE PM W/RET REQ TY I (W)4"(SLD)(100MIL) DOLLARS and CENTS	LF	89,466.000	299
	666	6306		RE PM W/RET REQ TY I (W)6"(BRK)(100MIL) DOLLARS and CENTS	LF	2,529.000	300
	666	6315		RE PM W/RET REQ TY I (Y)4"(SLD)(100MIL) DOLLARS and CENTS	LF	81,571.000	301
	672	6008		REFL PAV MRKR TY I-R DOLLARS and CENTS	EA	224.000	302
	672	6009		REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	151.000	303
	672	6010		REFL PAV MRKR TY II-C-R DOLLARS and CENTS	EA	3,406.000	304
	677	6001		ELIM EXT PAV MRK & MRKS (4") DOLLARS and CENTS	LF	117,633.000	305
	677	6007		ELIM EXT PAV MRK & MRKS (24") DOLLARS and CENTS	LF	2,344.000	306
	677	6008		ELIM EXT PAV MRK & MRKS (ARROW) DOLLARS and CENTS	EA	2.000	307
	678	6001		PAV SURF PREP FOR MRK (4") DOLLARS and CENTS	LF	20,480.000	308
	678	6002		PAV SURF PREP FOR MRK (6") DOLLARS and CENTS	LF	1,336.000	309
	678	6004		PAV SURF PREP FOR MRK (8") DOLLARS and CENTS	LF	5,689.000	310

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	678	6006		PAV SURF PREP FOR MRK (12") DOLLARS and CENTS	LF	2,172.000	311
	678	6008		PAV SURF PREP FOR MRK (24") DOLLARS and CENTS	LF	1,681.000	312
	680	6002		INSTALL HWY TRF SIG (ISOLATED) DOLLARS and CENTS	EA	4.000	313
	681	6001		TEMP TRAF SIGNALS DOLLARS and CENTS	EA	2.000	314
	682	6001		VEH SIG SEC (12")LED(GRN) DOLLARS and CENTS	EA	46.000	315
	682	6002		VEH SIG SEC (12")LED(GRN ARW) DOLLARS and CENTS	EA	13.000	316
	682	6003		VEH SIG SEC (12")LED(YEL) DOLLARS and CENTS	EA	46.000	317
	682	6004		VEH SIG SEC (12")LED(YEL ARW) DOLLARS and CENTS	EA	13.000	318
	682	6005		VEH SIG SEC (12")LED(RED) DOLLARS and CENTS	EA	65.000	319
	682	6018		PED SIG SEC (LED)(COUNTDOWN) DOLLARS and CENTS	EA	32.000	320
	682	6023		BACK PLATE (12")(3 SEC) DOLLARS and CENTS	EA	38.000	321
	682	6024		BACK PLATE (12")(4 SEC) DOLLARS and CENTS	EA	4.000	322

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	682	6025		BACK PLATE (12")(5 SEC) DOLLARS and CENTS	EA	7.000	323
	684	6009		TRF SIG CBL (TY A)(12 AWG)(4 CONDR) DOLLARS and CENTS	LF	6,440.000	324
	684	6012		TRF SIG CBL (TY A)(12 AWG)(7 CONDR) DOLLARS and CENTS	LF	7,835.000	325
	684	6028		TRF SIG CBL (TY A)(14 AWG)(2 CONDR) DOLLARS and CENTS	LF	3,500.000	326
	684	6030		TRF SIG CBL (TY A)(14 AWG)(4 CONDR) DOLLARS and CENTS	LF	2,322.000	327
	684	6035		TRF SIG CBL (TY A)(14 AWG)(9 CONDR) DOLLARS and CENTS	LF	6,303.000	328
	684	6080		TRF SIG CBL (TY C)(14 AWG)(2 CONDR) DOLLARS and CENTS	LF	2,940.000	329
	686	6028		INS TRF SIG PL AM(S)1 ARM(24')LUM&ILSN DOLLARS and CENTS	EA	1.000	330
	686	6036		INS TRF SIG PL AM(S)1 ARM(32')LUM&ILSN DOLLARS and CENTS	EA	1.000	331
	686	6037		INS TRF SIG PL AM(S)1 ARM(36') DOLLARS and CENTS	EA	1.000	332
	686	6040		INS TRF SIG PL AM(S)1 ARM(36')LUM&ILSN DOLLARS and CENTS	EA	1.000	333
	686	6043		INS TRF SIG PL AM(S)1 ARM(40')LUM DOLLARS and CENTS	EA	3.000	334

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	686	6046		INS TRF SIG PL AM(S)1 ARM(44')ILSN DOLLARS and CENTS	EA	2.000	335
	686	6047		INS TRF SIG PL AM(S)1 ARM(44')LUM DOLLARS and CENTS	EA	4.000	336
	686	6051		INS TRF SIG PL AM(S)1 ARM(48')LUM DOLLARS and CENTS	EA	2.000	337
	686	6052		INS TRF SIG PL AM(S)1 ARM(48')LUM&ILSN DOLLARS and CENTS	EA	1.000	338
	686	6055		INS TRF SIG PL AM(S)1 ARM(50')LUM DOLLARS and CENTS	EA	1.000	339
	686	6057		INS TRF SIG PL AM(S)1 ARM(55') DOLLARS and CENTS	EA	1.000	340
	686	6059		INS TRF SIG PL AM(S)1 ARM(55')LUM DOLLARS and CENTS	EA	3.000	341
	686	6195		INS TRF SIG PL AM(S)2 ARM(50-44')LUM DOLLARS and CENTS	EA	1.000	342
	687	6001		PED POLE ASSEMBLY DOLLARS and CENTS	EA	19.000	343
	688	6001		PED DETECT PUSH BUTTON (APS) DOLLARS and CENTS	EA	32.000	344
	688	6003		PED DETECTOR CONTROLLER UNIT DOLLARS and CENTS	EA	4.000	345
	690	6100		REMOVE TRAFFIC SIGNAL DOLLARS and CENTS	EA	2.000	346

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	730	6106	003	STRIP MOWING DOLLARS and CENTS	CYC	4.000	347
	734	6002		LITTER REMOVAL DOLLARS and CENTS	CYC	4.000	348
	740	6004		ANTI - GRAFFITI COATING(PERMNENT-TY II) DOLLARS and CENTS	SF	137,482.000	349
	3031	6001		GEOGRID BASE REINFORCEMENT (TY II) DOLLARS and CENTS	SY	1,926.000	350
	3031	6002		GEOGRID BASE REINFORCEMENT (TY III) DOLLARS and CENTS	SY	468,902.000	351
	4048	6001		PRESTRESSED GROUND ANCHORS DOLLARS and CENTS	LF	3,690.000	352
	6001	6001		PORTABLE CHANGEABLE MESSAGE SIGN DOLLARS and CENTS	DAY	195.000	353
	6001	6002		PORTABLE CHANGEABLE MESSAGE SIGN DOLLARS and CENTS	EA	2.000	354
	6025	6001		RADAR PRESENCE DETECTOR DOLLARS and CENTS	EA	16.000	355
	6025	6002		RADAR PRESENCE DETECTOR COMM CABLE DOLLARS and CENTS	LF	9,341.000	356
	6027	6003		CONDUIT (PREPARE) DOLLARS and CENTS	LF	355.000	357
	6057	6001		RADAR ADVANCED DETECTION DEVICE DOLLARS and CENTS	EA	15.000	358

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	6058	6001		BBU SYSTEM (EXTERNAL BATT CABINET) DOLLARS and CENTS	EA	1.000	359
	6072	6001		MODULAR GLARE SCREENS (FURN & INSTALL) DOLLARS and CENTS	LF	4,600.000	360
	6072	6002		MODULAR GLARE SCREENS (REMOVE) DOLLARS and CENTS	LF	4,600.000	361
	7087	6001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	2,616.000	362
	7087	6002		PIPE WATER MAIN (PVC)(6") DOLLARS and CENTS	LF	103.000	363
	7087	6003		PIPE WATER MAIN (PVC)(16") DOLLARS and CENTS	LF	733.000	364
	7087	6004		GATE VALVE AND BOX (COMP)(6") DOLLARS and CENTS	EA	2.000	365
	7087	6005		GATE VALVE AND BOX (COMP)(16") DOLLARS and CENTS	EA	4.000	366
	7087	6006		CUT-IN GATE VALVE AND BOX (COMP)(6") DOLLARS and CENTS	EA	2.000	367
	7087	6007		CUT-IN GATE VALVE AND BOX (COMP)(20") DOLLARS and CENTS	EA	2.000	368
	7087	6008		CUT-IN TEE (COMP)(6"X6") DOLLARS and CENTS	EA	1.000	369
	7087	6009		CUT-IN TEE (COMP)(16"X16") DOLLARS and CENTS	EA	2.000	370

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	7087	6010		TAP SLEEVE VALVE AND BOX (COMP)(16"X6") DOLLARS and CENTS	EA	1.000	371
	7087	6011		DUCTILE IRON FITTINGS DOLLARS and CENTS	TON	7.000	372
	7087	6012		TIE-IN (COMP)(6") DOLLARS and CENTS	EA	3.000	373
	7087	6013		TIE-IN (COMP)(16") DOLLARS and CENTS	EA	6.000	374
	7087	6014		HYDROSTATIC PRESSURE TEST DOLLARS and CENTS	EA	3.000	375
	7087	6015		TEMPORARY BLOW-OFF (COMP)(2") DOLLARS and CENTS	EA	6.000	376
	7087	6016		AUTOMATIC AIR RELEASE VALVE (COMP)(1") DOLLARS and CENTS	EA	4.000	377
	7087	6017		CASING OR LINER FOR BORING (18") DOLLARS and CENTS	LF	335.000	378
	7087	6018		CASING OR LINER FOR BORING (30") DOLLARS and CENTS	LF	1,215.000	379
	7087	6019		CASING FOR OPEN CUT TRENCH (30") DOLLARS and CENTS	LF	145.000	380
	7087	6020		CASING FOR OPEN CUT TRENCH (36") DOLLARS and CENTS	LF	941.000	381
	7087	6021		CASING FOR OPEN CUT TRENCH (18") DOLLARS and CENTS	LF	236.000	382

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	7087	6022		JACKING OR BORING (WATER MAIN)(18") DOLLARS and CENTS	LF	319.000	383
	7087	6023		JACKING OR BORING (WATER MAIN)(30") DOLLARS and CENTS	LF	1,215.000	384
	7087	6024		CARRIER PIPE FOR BORING (6") DOLLARS and CENTS	LF	335.000	385
	7087	6025		CARRIER PIPE FOR BORING (16") DOLLARS and CENTS	LF	1,215.000	386
	7087	6027		ADJUST EXISTING VALVE BOX DOLLARS and CENTS	EA	38.000	387
	7087	6028		CONCRETE ENCASEMENT AND SADDLES DOLLARS and CENTS	CY	286.000	388
	7087	6029		RELOCATE FIRE HYDRANT DOLLARS and CENTS	EA	3.000	389
	7087	6030		ADJUST FIRE HYDRANT DOLLARS and CENTS	EA	8.000	390
	7087	6031		ADJUST PERMANENT BLOW-OFF (2") DOLLARS and CENTS	EA	1.000	391
	7087	6032		ADJUST PERMANENT BLOW-OFF (4") DOLLARS and CENTS	EA	1.000	392
	7087	6033		ADJUST AUTOMATIC AIR RELEASE VALVE (1") DOLLARS and CENTS	EA	2.000	393
	7087	6034		ADJUST EXIST METER AND NEW METER BOX DOLLARS and CENTS	EA	3.000	394

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	7087	6035		RELOCATE SHORT SERVICE DOLLARS and CENTS	EA	2.000	395
	7087	6036		PIPE WTR MAIN(SPL STL CAS)OPEN CUT(30") DOLLARS and CENTS	LF	252.000	396
	7087	6037		PIPE WTR MAIN(SPL STL CAS)OPEN CUT(36") DOLLARS and CENTS	LF	401.000	397
	7087	6038		CARRIER PIPE FOR OPEN CUT TRENCH (6") DOLLARS and CENTS	LF	16.000	398
	7087	6039		CARRIER PIPE FOR OPEN CUT TRENCH (16") DOLLARS and CENTS	LF	25.000	399

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*****GENERAL NOTES*****
 2014 Specification Book

===== Asphalt Concrete Pavement =====

Main lanes

Type	Location	Depth	Rate/in	Area	Quant-Tons
TY-B PG64-22	Main lanes	8.5"	110 LBS/SY	67410 SY	31514
TY-D PG64-22	Main lanes	1"	110 LBS/SY	28309 SY	1557
TY-C PG70-22	Main lanes	3"	110 LBS/SY	66127 SY	10911
TY-C PG76-22	Main lanes	2"	110 LBS/SY	65573 SY	7213
PFC (ASPHALT) PG76-22	Main lanes	1"	95 LBS/SY	65228 SY	186
PFC-C(AGGR)(PG76MIX) SAC A	Main lanes	1"	95 LBS/SY	65212 SY	2912

Frontage Roads

Type	Location	Depth	Rate	Area	Quant-Tons
TY-B PG64-22	Frontage	4.5"	110 LBS/SY	201851 SY	49958
TY-D PG64-22	Frontage	1"	110 LBS/SY	19964 SY	1098
TY-C PG70-22	Frontage	2"	110 LBS/SY	201836 SY	22202
SP-C PG76-22	Frontage	2"	110 LBS/SY	247036 SY	27174

Cross Street

Type	Location	Depth	Rate	Area	Quant-Tons
TY-B PG64-22	Frontage	4.5"	110 LBS/SY	6638 SY	1643
TY-D PG64-22	Frontage	1"	110 LBS/SY	10673 SY	587
TY-C PG70-22	Frontage	2"	110 LBS/SY	6745 SY	742
SP-C PG76-22	Frontage	2"	110 LBS/SY	12391 SY	1363

Ramps

Type	Location	Depth	Rate	Area	Quant-Tons
TY-B PG64-22	Frontage	4.5"	110 LBS/SY	22816 SY	5647
TY-C PG70-22	Frontage	2"	110 LBS/SY	22282 SY	2451
SP-C PG76-22	Frontage	2"	110 LBS/SY	22027 SY	2423

-----See Bid Item-----

asphalt--rate(gal/sy) 0.30gal/1sy = 88762 gal
 cement--rate 120lbs/sy/in @ 3% = 488 tons

Steel Wrapped or Asbestos Utility Lines:

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Existing steel wrapped natural gas and/or asbestos cement (AC) water lines that will no longer be in service are usually abandoned in place (AIP). However, if any of these lines have to be removed for whatever reason (in the way of other construction, to make tie-ins, etc.) comply with all federal, state and local laws, ordinances and regulations regarding the management of these materials. At a minimum:

1. Contact the Engineer.
2. Remove the minimum amount of pipe needed to perform the proposed work.
3. Cover and secure the ends of the pipe with a double layer of 6 mil plastic. If the pipe is damaged, cover the entire pipe.
4. Move the pipe to an approved temporary site within the project.
5. The Engineer will determine the owner (utility company) of the pipe and will coordinate removal from the project. The contractor will load the pipe onto the removal vehicles but will NOT be responsible for removing the pipe from the project.
6. Removal of the pipe from the trench is subsidiary to the work that created the need for the removal (excavation for structures, roadway, a new line, tie-ins, etc.). The work performed in handling the pipe after it has been removed from the trench (covering with plastic, hauling to the temporary site and later loading on to the disposal vehicles will be paid for through the Force Account procedure.

Contact the Engineer or the City when construction operations are within 400 feet of a signalized intersection to determine/verify the location of loop detectors, conduit, ground-boxes, etc. Repair or replace any signal equipment damaged by construction operations. The method of repair or replacement shall be pre-approved and inspected. Depending on the type and extent of the damage, the Engineer reserves the right to perform the repair or replacement work and the Contractor will be billed for this work.

Remove existing raised pavement markings as the work progresses or as approved. This work is subsidiary to the various bid items. Properly dispose materials removed.

To better fit field conditions, the cross sections may be varied when approved.

If there are waste areas or material source areas, follow the Texas Aggregate Quarry and Pit Safety Act requirements.

Any materials removed and not reused and determined to be salvageable shall be stored within the project limits at an approved location or delivered undamaged to the storage yard as directed.

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Properly dispose unsalvageable materials in accordance with local, state, and federal regulations. Deface traffic signs so that they will not reappear in public as signs.

Any sign panels that are adjusted or removed and replaced, shall be done the same workday unless otherwise approved. This work shall be considered subsidiary to Item 502.

Notify the Engineer at least two weeks prior to a proposed traffic pattern change(s) that will require a revision to traffic signals.

Locate and reference all manholes and valves within the construction area with station and offset. Each manhole and valve shall be identified by its owner (SAWS, CPS, etc.). No roadwork will begin until this list has been submitted. Gas valves have to be accessible at all times, therefore; temp. CTB, material stock piles, etc. cannot be placed over these valves.

Construct all manholes and valves to final pavement elevations prior to the final mat of ACP. If, between the final elevation adjustment and the final mat of ACP, the manholes and valves are going to be exposed to traffic, place temporary asphalt around the manhole and valve to provide a +/- 50:1 taper. The cost of elevation adjustment will be part of the manhole and valve work, and asphalt tapers are part of the ACP work.

Hurricane Evacuation

Hurricane Season is from June 1 thru November 30. As the closest metropolitan city inland from the Texas Coast, the City of San Antonio is a major shelter destination during mandatory hurricane evacuations. As such, planned work zone lane or road closures may be restricted and/or suspended during mandatory hurricane evacuation operations. The District will coordinate these restrictions at a minimum H-120 from any projected impact to the Texas Coast.

No time charges will be made if the Engineer determines that work on the project was impacted by the hurricane.

The Engineer may order changes in the Traffic Control Plan to accommodate evacuation traffic, and may suspend the work, all or in part, to ensure timely completion of this work. All work to implement changes in the Traffic Control Plan will be paid through existing bid prices or through Item 9.5, Force Account. However, the Department will not entertain any request for delay damages, loss of efficiency that may be attributed to the restriction or suspension of road or lane closures, or to changes in the Traffic Control Plan.

The Contractor should be aware that the "City Public Service" (CPS) will be consulted by the Engineer in matters concerning the execution of the work, materials and testing related to the CPS work. As such; a CPS employee may be observing the construction and related operations as they progress.

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If a sanitary sewer overflow (SSO) occurs:

1. Attempt to eliminate the source of the SSO.
2. Contain sewage from the SSO to the extent possible to prevent contamination of waterways.
3. Call SAWS at (210) 233-2015.

Excavation 5' or greater within 5' of a utility pole will require bracing.

20 CPS Energy poles will require bracing during the construction of the East Bound and West Bound Frontage Roads. Contact CPS Energy Utility Coordination group (John Offer (jeoffer@cpsenergy.com), Anna Esquivel (apesquivel@cpsenergy.com) or Claudia Valles-Tovar (cvalles-tova@cpsenergy.com) eight (8) weeks prior to starting work on either Frontage Road to request pole bracing.

--Item 5--

Reference all existing striping and other pavement markings to allow these markings to be re-established. Ensure the markings (lane lines, edge lines, ramp gores, etc.) are in line with signs, TMS arrows, etc. located on overhead sign supports.

Taper ACP placed at curb inlets, traffic inlets and slotted drains.

When a bridge deck is milled, seal coated and overlaid, remove excess material. Do not just broom to the sides of the bridge, under guardrail, etc. Cover or protect all sealed expansion joints and rails on bridges and all railroad tracks encountered as approved. Clean all of these features if they weren't properly protected. This work is subsidiary work to applicable bid items.

Prior to 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 cross-sections in addition to, or instead of, the CD are requested, they will be available at the Engineer's office for borrowing by copying companies at the bidder's expense.

When working near aerial electrical lines or utility poles, comply with Federal, State and local regulations. For electrical lines and poles shown in the plans, if the lines need to be de-energized or if poles need to be braced, contact the electrical company. Work pertaining to de-energizing lines, bracing poles and other protective measures will not be paid by TxDOT.

Prevention of Migratory Bird Nesting

It is anticipated that migratory birds, a protected group of species, may try to nest on bridges, culverts, vegetation, or gravel substrate, at any time of the year. The preferred nesting season for migratory birds is from February 15 through October 1. When practicable, schedule construction operations outside of the preferred nesting season. Otherwise, nests containing migratory birds

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must be avoided and no work will be performed in the nesting areas until the young birds have fledged.

Structures

Bridge and culvert construction operations can not begin until swallow nesting prevention is implemented, until after October 1 if it's determined that swallow nesting is actively occurring, or until it's determined swallow nests have been abandoned. If the State installed nesting deterrent on the bridges and culverts, maintain the existing nesting deterrent to prevent swallow nesting until October 1 or completion of the bridge and culvert work, whichever occurs earlier. If new nests are built and occupied after the beginning of the work, do not perform work that can interfere with or discourage swallows from returning to their nests. Prevention of swallow nesting can be performed by one of the following methods:

1. By February 15 begin the removal of any existing mud nests and all other mud placed by swallows for the construction of nests on any portion of the bridge and culverts. The Engineer will inspect the bridges and culverts for nest building activity. If swallows begin nest building, scrape or wash down all nest sites. Perform these activities daily unless the Engineer determines the need to do this work more frequently. Remove nests and mud through October 1 or until bridge and culvert construction operations are completed.
2. By February 15 place a nesting deterrent (which prevents access to the bridge and culvert by swallows) on the entire bridge (except deck and railing) and culverts.

No extension of time or compensation payment will be granted for a delay or suspension of work caused by nesting swallows. This work is subsidiary to the various bid items.

Provide a non-intrusive back-up alarm system on all heavy equipment used in close proximity to residential areas. This item is subsidiary to various bid items.

--Item 6--

Show the stockpile lot and/or sub lot numbers on all tickets for all materials.

--Item 7--

The project's total disturbed area is 116.76 Acres. The disturbed area in all project locations and Contractor project specific locations (PSL's), within 1/4 mile of the project limits, 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. Obtain any required authorization from the TCEQ for any PSL's on or off the ROW. When the total area disturbed on the project and PSL's within 1/4 mile of the project exceeds 5 acres, provide a copy of the Contractor NOI for PSL's to the Engineer (to the appropriate MS4 operator when the project is on an off-state system route).

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Notify the Engineer of the disturbed acreage within one (1) mile of the project limits. Obtain authorization from the TCEQ for Contractor PSL's for construction support activities on or off ROW.

--Item 8--

Working days will be computed and charged in accordance with Article 8.3.1.2: 6-Day work week.

This project requires night work. Provide adequate lighting necessary to safely construct the project and protect construction personnel. Cost of lighting will not be paid for directly, but will be subsidiary to all pertinent bid items.

In the mill and overlay areas, the contractor will complete a maximum of two miles prior to moving to the next section or as approved by the Engineer.

Contractor will be required to place overlay the same day of placing seal/tack coat and milling operations.

Create and maintain a Critical Path Method (CPM) schedule.

The CPM schedule shall be created and maintained using software fully compatible with version 6.1 of Primavera Project Planner or SureTrak Project Scheduler.

Provide a Project Schedule Summary Report monthly

There is a suggested sequence of construction defined for this project. Contractor must adhere to this sequence. Liquidated damages will be assessed for each independent milestone, as well as for the completion of this project. There will be utilities relocating on the frontage roads while contractor will be working on the mainlanes. Contractor to coordinate all work, so it does not impede progress of the utility relocation work.

Lane Rental Fees

The Lane Rental Charges are shown in the plans on the Lane Closure and Assessment Fee Schedule Sheet.

The Lane Closure Fee Schedule applies to IH 10 mainlane, ramps and frontage road closures or obstructions of the lanes that overlap into restricted hour traffic for each hour, per lane, per mile. The length of each closure is measured from the point of the lane closure taper and is measured to the point where traffic is opened up to preconstruction configuration.

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Unless otherwise shown in the plans, directed or approved, the contractor shall limit lane closures to the approved hours listed in the Lane Closure Fee Schedule sheet in the plans.

If the Contractor fails to re-open closed lanes and or ramps on time, late charges will be assessed as shown on the Lane Closure Fee Schedule sheet in the plans.

Disincentives based on road user cost shall apply to the Milestone work as shown in the plans and in accordance with Special Provision 008-006.

Incentive based on road user cost shall apply to Milestone 2 only, as shown in the plans and in accordance with Special Provision 008-006.

This project has the following milestones.

Milestone 1 includes all pavement widening west of Foster Road along with any construction activities that result in closure of the existing eastbound-to-westbound turnaround lane at Foster Road.

Working day time charges for Milestone 1 will be computed based upon a six day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 1 shall begin at initiation of any work that results in closure of the existing eastbound-to-westbound turnaround lane at Foster Road. The time charges for substantial completion of Milestone 1 shall end when the eastbound-to-westbound turnaround lane is reopened to traffic and appropriate signing, pavement markings and channelization measures are in place for safe operation of the intersection of Foster Road and I-10 frontage roads.

The daily road-user cost for Milestone 1 shall be \$2,370.00 per day.

The Contractor shall have **45** calendar days to complete Milestone 1.

Failure to substantially complete the work for Milestone 1 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

Milestone 2 includes the beginning of Phase I Step 2 activities through the end of Phase III Step 3 activities: including construction of the grade separation at Woodlake Parkway along with any construction activities that result in diversion of I-10 main lanes; or any construction activities that result in one-way operation on any part of the frontage roads prior to completion of the intersection of I-10 at Woodlake Parkway.

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Working day time charges for Milestone 2 will be computed based upon a six day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 2 shall begin at initiation of any work in Phase II Step 2 that results in I-10 main lane diversion toward the south of the work zone. The time charges for substantial completion of Milestone 2 shall end when Woodlake Parkway is opened to traffic and appropriate signing, pavement markings and channelization measures are in place for safe operation of the I-10 at Woodlake Parkway intersection, Woodlake WB-EB Turnaround, and Woodlake EB-WB Turnaround.

The daily road-user cost for Milestone 2 shall be \$4,990.00 per day.

The Contractor shall have 339 calendar days to complete Milestone 2.

Failure to substantially complete the work for Milestone 2 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

Incentive based on road user cost shall apply to Milestone 2 only.

The maximum number of working days for computing the incentive credit for Milestone 2 shall be 30 days.

Milestone 3 includes construction of the I-10 westbound frontage road at Martinez Creek bridge: including any construction activities that result in closing the existing north frontage road to through-traffic between Foster Road and FM 1516 for a duration exceeding one weekend work period.

Working day time charges for Milestone 3 will be computed based upon a six day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 3 shall begin at initiation of any work in Phase II that results in closure of the existing north frontage road to through-traffic between Foster Road and FM 1516. The time charges for substantial completion of Milestone 3 shall end when the north frontage road is reopened to two-lane two-way operation in Phase II and appropriate signing, pavement markings and channelization measures are in place for safe contiguous operation of the north frontage road.

The daily road-user cost for Milestone 3 shall be \$3,100.00 per day.

The Contractor shall have 104 calendar days to complete Milestone 3.

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Failure to substantially complete the work for Milestone 3 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

Milestone 4 includes the Phase III Step 2 activities: including all construction activities that result in closure of southbound Woodlake Parkway.

Working day time charges for Milestone 4 will be computed based upon a seven day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 4 shall begin at initiation of any work in Phase III Step 2 that results in closure of the existing southbound lanes of Woodlake Parkway. The time charges for substantial completion of Milestone 4 shall end when Woodlake Parkway is reopened to two-way operation in Phase III Step 3 and appropriate signing, pavement markings and channelization measures are in place for safe operation of the intersection of Woodlake Parkway and westbound frontage road.

The daily road-user cost for Milestone 4 shall be \$4,840.00 per day.

The Contractor shall have 12 calendar days to complete Milestone 4.

Failure to substantially complete the work for Milestone 4 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

Milestone 5 includes the Phase V Step 3 activities within the southwest quadrant of the intersection of FM 1516 and westbound frontage road: including all construction activities that result in a reduction of the existing northbound to westbound turn radius.

Working day time charges for Milestone 5 will be computed based upon a seven day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 5 shall begin at initiation of any work in Phase V Step 3 that results in reduction of the available northbound to westbound turn radius. The time charges for substantial completion of Milestone 5 shall end when pavement within the southwest quadrant is completed east of Station 295+00 WBFR and north of Station 17+50 FM 1516, PCTB is removed from the completed pavement, and appropriate signing, pavement markings and channelization measures are in place for safe operation of the intersection of FM 1516 and westbound frontage road.

The daily road-user cost for Milestone 5 shall be \$680.00 per day.

The Contractor shall have 8 calendar days to complete Milestone 5.

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Failure to substantially complete the work for Milestone 5 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

Milestone 6 includes the Phase V Step 4 activities within the northwest quadrant of the intersection of FM 1516 and westbound frontage road: including all construction activities that result in a reduction of the existing southbound to westbound turn radius.

Working day time charges for Milestone 6 will be computed based upon a seven day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 6 shall begin at initiation of any work in Phase V Step 4 that results in reduction of the available southbound to westbound turn radius. The time charges for substantial completion of Milestone 6 shall end when pavement within the northwest quadrant is completed east of Station 295+00 WBFR and south of Station 15+38 FM 1516, PCTB is removed from the completed pavement, and appropriate signing, pavement markings and channelization measures are in place for safe operation of the intersection of FM 1516 and westbound frontage road.

The daily road-user cost for Milestone 6 shall be \$1,480.00 per day.

The Contractor shall have 8 calendar days to complete Milestone 6.

Failure to substantially complete the work for Milestone 6 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

Milestone 7 includes the Phase V Step 4A activities within the southwest quadrant of the intersection of FM 1516 and eastbound frontage road: including all construction activities that result in a reduction of the existing eastbound to southbound turn radius.

Working day time charges for Milestone 7 will be computed based upon a seven day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 7 shall begin at initiation of any work in Phase V Step 4A that results in reduction of the available eastbound to southbound turn radius. The time charges for substantial completion of Milestone 7 shall end when pavement within the southwest quadrant is completed east of Station 295+00 EBFR and north of Station 22+50 FM 1516, PCTB is removed from the completed pavement, and appropriate signing, pavement markings and channelization measures are in place for safe operation of the intersection of FM 1516 and eastbound frontage road.

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The daily road-user cost for Milestone 7 shall be \$440.00 per day.

The Contractor shall have 10 calendar days to complete Milestone 7.

Failure to substantially complete the work for Milestone 7 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

Milestone 8 includes the construction of Culvert Structure No. 6B: including all construction activities that result in closing the eastbound main lanes of I-10.

Working day time charges for Milestone 8 will be computed based upon a seven day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 8 shall begin at initiation of any work in Phase V Step 7 that results in a weekend closure of the I-10 eastbound main lanes. The time charges for substantial completion of Milestone 8 shall end when Culvert Structure No. 6B is completed across I-10 EB and main lane pavement is restored and appropriate signing, pavement markings and channelization measures are in place for safe contiguous operation of the I-10 main lanes.

The daily road-user cost for Milestone 8 shall be \$1,620.00 per day.

The Contractor shall have 2 calendar days to complete Milestone 8.

Failure to substantially complete the work for Milestone 8 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

Milestone 9 includes the construction of Culvert Structure No. 6B: including all construction activities that result in closing the westbound main lanes of I-10.

Working day time charges for Milestone 9 will be computed based upon a seven day work week and charged in accordance with Article 8.3.A.5. Calendar-Day.

Time charges of Milestone 9 shall begin at initiation of any work in Phase V Step 7 that results in a weekend closure of the I-10 westbound main lanes. The time charges for substantial completion of Milestone 9 shall end when Culvert Structure No. 6B is completed across I-10 WB and main lane pavement is restored and appropriate signing, pavement markings and channelization measures are in place for safe contiguous operation of the I-10 main lanes.

The daily road-user cost for Milestone 9 shall be \$310.00 per day.

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The Contractor shall have 2 calendar days to complete Milestone 9.

Failure to substantially complete the work for Milestone 9 within the established number of calendar days will result in the assessment of disincentives using the daily road user cost shown above. This disincentives charge will be based on the individual and separate milestone(s).

--Item 9--

When approved, provide uniformed, off-duty law enforcement officers with marked vehicles during work that requires a lane closure. The officer in marked vehicles shall be located as approved to monitor or direct traffic during the closure. The method used to direct traffic at signalized intersections shall be as approved. Additional officers and vehicles may be provided when approved or directed.

Complete the daily tracking form 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.

Show proof of certification by the Texas Commission on Law Enforcement Standards.

All law enforcement personnel used in Work Zone Traffic Control shall be trained for performing duties in work zones and are required to take "Safe and Effective Use of Law Enforcement Personnel in Work Zones" (Course #133119) which can be found online at the following site: www.nhi.fhwa.dot.gov

Certificates of completion should be available to all who finish the course. These should be kept by the officers in order to substantiate completion when reporting to the work site.

Minimums, scheduling fees, etc. will not be paid; TxDOT will consider paying cancellation fees on a case by case basis.

--Item 100--

Removal of all obstructions on the Right-of-way that are not shown on the plans but necessary to be removed must be removed and their removal will be paid for as subsidiary to this item.

Begin clearing operations after trees and other areas of vegetation to be protected have been identified and approved. Install fencing around features to be protected as shown in the plans or directed. Coordinate all right of way clearing operations with the SW3P.

Many items necessary to be removed, have been quantified. Removals necessary, but not shown in the plans must be removed and their payment is subsidiary to PREP ROW bid item.

Trim and remove brush and trees as needed for construction operations. Obtain approval for proposed method of tree and brush trimming and removal. Vertical flailing equipment is not allowed. Treat damaged or cut branches, roots and/or stumps of all oak trees with a commercial

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tree wound dressing. Disinfect all pruning tools with a solution of 70% alcohol before moving from one tree to another. Unless otherwise approved remove all resulting vegetative debris from the ROW within 24 hours. The Engineer can stop all construction operations if the dressing, cut and removal requirements are not followed.

Burning of Brush will not be permitted.

There are several concrete sign foundations, concrete slabs and other obstructions anticipated throughout the project, which will require removal. All labor, materials and equipment used to remove and dispose of these will be subsidiary to this pay item.

--Item 110--

Where excavation extends beyond a right of way fence, remove and replace the fence to a comparable condition. This work shall be considered subsidiary to the bid item.

All existing Asphaltic concrete pavement (ACP) shown as to be removed, must be removed as outlined in the plans.

All work requiring to saw cut the existing pavement, concrete curbs, etc. as shown on the plans or as directed will not be paid for directly, but will be subsidiary to this item.

--Item 132--

At no time shall the retaining wall backfill material exceed the adjacent embankment operation by more than one embankment lift. At no time will the embankment adjacent to the retaining wall backfill exceed the wall backfill by any elevation.

Embankment fill shall consist of Type C Material that is free from vegetation or other objectionable material and meets the requirements of Tables 1 and 2 below.

**Table 1
Testing Requirements**

Property	Test Method	Specification Limit
Liquid Limit (LL)	Tex-104-E	≤ 45
Plasticity Index (PI)	Tex-106-E	≤ 25

**Table 2
Field Density Control Requirements**

Density	Moisture
Tex-115-E	
100% Minimum of Maximum Dry Density (Tex-114-E)	-2 to +2 Percentage Points of Optimum Moisture (Tex-114-E)

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The embankment material must be consistent and homogeneous, free from vegetation or other objectionable matter, reasonably free from lumps of earth and suitable for forming a stable embankment.

Item 150-

Blading work will be used as specifically directed by the engineer.

--Item 161--

Approximately 12,590 CY of existing topsoil may be salvaged and windrowed or stockpiled (as approved) for later use as Compost Manufactured Topsoil (CMT). Place erosion control measures for the stockpile and/or windrow.

--Item 164--

Drill seeding of permanent grasses requires the use of approved grass seeding equipment capable of properly storing and metering the release of small seeds (such as Bermuda grass) separately from fluffy type seeds (such as bluestems). Equipment manufactured for planting grain crops is acceptable for planting temporary cool season seeds, but not for planting the permanent seed mix.

When drill seeding is required, cultivate the area to a depth of 4 in. after the fertilizer has been applied and before placing the seed.

If performing a permanent seeding in an area with established temporary grass cover and mowing is performed instead of tilling, seed and fertilizer may be distributed simultaneously during "Broadcast Seeding" operations, provided each component is applied at the specified rate.

--Item 166--

Use a fertilizer with an analysis of 13-13-13 (50% of the total N must be sulfur coated urea) to apply 60 lbs of actual N per acre. This requires 460 lbs of 13-13-13 per acre or .095 lbs per SY of area.

--Item 168--

Apply vegetative watering as needed to supplement natural rainfall during the vegetation establishment period. Plan quantity of irrigation water is based on the application of a total of 1.3 gal of water each week for each sq. yd. of area that is sodded or seeded. Establishment time is estimated to be 12 weeks for both sod and permanent seed mixes. Temporary seeding will require less time for establishment. Provide a schedule and coordinate watering cycles and rates per cycle with the Engineer. Obtain approval if the quantity of water to be applied is expected to exceed the plan quantity. Adjust the amount of water applied with each cycle and the number of cycles each wk. according to actual site conditions. Drought or other conditions, as determined

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by the Engineer, may require the application of supplemental irrigation during hours other than normal working hours.

--Item 216 – Rolling (Proof)

Proof Rolling will be used as specifically directed by the engineer. Proof roll all areas of retaining walls as directed by the engineer.

--Item 247--

There is a minimum PI requirement for this project, which is $PI \leq 25$ using TEX-106-E.

The subbase material can be existing site recycled (reclaimed) materials containing no more than 20% RAP material, and meeting the Grade 3 requirements of Item 247. The reclaimed pavement material should be compacted in maximum 8-inch loose lifts to at least 98% of maximum dry density as evaluated by TEX-113-E within +/- 3% points of optimum moisture content.

--Item 305--

An estimated 2,000 CY of reclaimable asphalt pavement (RAP) material will remain the property of the State and shall be stockpiled at 9320 SE Loop 410, San Antonio, TX 78223 (Bexar Metro Area Office) or designated location (with equivalent distance) as indicated by the Engineer. The cost of loading, transporting, and unloading are subsidiary to this bid item. The remaining reclaimable asphalt pavement (RAP) material will be retained by the Contractor and used as subbase as long as requirements of Grade 3 are met.

--Item 314--

Use emulsified asphalt in the final flexible base finishing process. The amount used shall be as approved, but not less than 2 percent of the total mixture.

--Item 320--

Construct all longitudinal ACP joints adjacent to a travel lane with a joint maker device that will create a 3:1 to 6:1 taper. For placement of 2 inches or more, the device shall provide a maximum ½ inch vertical edge. Taper outside edges (next to the grass) or backfill (shoulder-up) the same day.

Provide a material transfer device capable of providing a continuous flow of material to the paver. The material transfer device will consist of a windrow elevator or better.

When placing Item 346 mixtures, provide a material transfer vehicle that is capable of providing a remixing, and continuous flow of material from the haul truck to the paver, such as a Roadtec SM-2500e/ex.

--Item 330--

The asphalt plant shall have truck scales as defined in Item 520. Give three weight tickets bearing the date, the truck number, and the gross, net & tare weights to the truck driver, for the

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State inspector at the spreading and finishing operation. Trucks may be required to weigh on public scales or portable platform scales to verify the weight of the ticket.

Use trap rock or crushed slag as the special aggregate for LRA.

If LRA is stockpiled where it might get contaminated with foreign materials, the bottom of the stockpile can not be used. A set of standard truck scales will be used to determine the quantity of contaminated material that will be deducted. Unless approved, do not stockpile LRA more than 10 days prior to lay-down operations.

The fluxing material shall be either an emulsified combination of asphalt and softening agent added individually (the softening agent may also be an emulsion), or a material meeting the requirements of Item "Asphalt's, Oils and Emulsions". The material(s) selected shall be approved.

--Item 341, 342 & 344 --

Table 10, in Item 340, Table 10 in Item 341 and Table 11 in Item 344, Hamburg Wheel Test Requirements tested in accordance with Tex-242-F are changed for PG 64-22 or lower and PG 70-22. Minimum number of passes at 1/2" Rut Depth, Tested at 122 degrees F will be 5,000 and 10,000 respectively.

Design all mixture types using a target laboratory-molded density of 96.5%, when the Texas Gyrator Compactor is utilized. Increase the target laboratory-molded density to 97.0% or 97.5% at the Contractor's discretion. When utilizing SGC, design all mixture types at 50 gyrations (N-Design) and a target laboratory-molded density of 96.0%, but may be reduced to no less than 35 gyrations at the Contractor's discretion.

The asphalt plant shall have truck scales as defined in Item 520. Give three weight tickets bearing the date, the truck number, the gross, net & tare weights to the truck driver for the State inspector at the spreading and finishing operation. Trucks may be required to weigh on public scales or portable platform scales to verify the weight of the ticket.

Submit a copy of the Tex 233-F production charts on a weekly basis. At the end of the ACP work, provide all originals.

Crushing of aggregate for hot mix and immediate use for production of the mix is not allowed. Stockpile the aggregate until enough material is available for five days of production unless prior approval is provided. Hold a pre-placement meeting one month prior to the placement of the hot mix.

The main purpose of hot mix cores taken by the State are for payment calculations. If (for quality control purposes) the core information is needed sooner, take additional cores.

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Do not use diesel or solvents as asphalt release agents in production, transportation, or construction. A list of approved asphalt release agents is available from the District Laboratory.

No more than one hot mix lot will be open for any specific type of hot mix, unless authorized. After a lot is open and the Contractor gets approval to change plants, the previous lot will be closed and a new lot will be opened. The numbering for the lots produced at the new plant will start with No. 1. If allowed to switch back to the original or previous plant, the next lot from that plant will resume numbering sequentially from the last lot produced by that plant.

Schedule lay-down placement where uneven travel lanes are minimized and eliminated weekly.

If asphalt material is obtained from other than a commercial source presently inspected by TxDOT, furnish a Type D structure for the asphalt mix control laboratory for the Engineer's use. Provide a minimum height of 8 feet and a minimum of 400 square feet of gross floor area for permanently located asphalt plants or 200 square feet for a temporary plant. The floor area will be partitioned into a minimum of two rooms, with a minimum of two windows per room. The floor shall have an impervious cover and sufficient strength to support the testing equipment. Portable structures shall be support blocked for stability and shall be tied down.

The use of Recycled Asphalt Shingles (RAS) will not be allowed on the final riding surface.

When placing item 346 mixtures, utilize a material transfer vehicle as defined in the plans for item 320.

Minimum Roadway Placement Temperature

--Item 341, & 344--

Place mixture when the roadway surface temperature is equal to or higher than listed in Table 1 unless otherwise approved or shown on the plans. Measure the roadway surface temperature with a hand-held thermal camera or infrared thermometer. Placement may be allowed to begin prior to the roadway surface reaching the required temperature if conditions are such that the roadway surface will reach the required temperature within 2 hrs. of beginning placement operations. Place mixtures only when weather and moisture conditions of the roadway surface are suitable in the opinion of the Engineer. The Engineer may restrict the Contractor from paving if the ambient temperature is likely to drop below 32°F within 12 hr. of paving.

Table 1
Minimum Pavement Surface Temperatures

Minimum Pavement Surface Temperatures in Degrees Fahrenheit *

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Specification Item Number	High Temperature Binder Grade	Subsurface Layers or Night Paving Operations	Surface Layers Placed in Daylight Operations
340, 341, & 344	PG 64	45	50
	PG 70	55	60
	PG 76	60	60

* Except for PG 64, may pave at temperatures 10° F lower than the values shown in Table 1 when utilizing a Material Transfer Vehicle that is capable of providing a remixing, and continuous flow of material from the haul truck to the paver, such as a Roadtec SM-2500e/ex, that eliminates thermal segregation. In these cases, use either an infrared bar attached to the paver, or a hand held thermal camera or infrared thermometer, or a hand held infrared thermometer operated in accordance with Text Method 244-F to demonstrate that the uncompacted mat has no more than 10° F of thermal segregation.

Substitute Binder**--Item 341 & 344--**

The Contractor may use a substitute PG binder listed below in Table 1 instead of the PG binder originally specified in Table 5 of the Standard Specification, if the substitute PG binder and mixture made with the substitute PG binder meet the following:

- ◆ The substitute binder meets the specification requirements for the substitute binder grade in accordance with Section 300.2.10., “Performance-Graded Binders;” and
- ◆ The mixture has less than 10.0 mm of rutting on the Hamburg Wheel test (Tex-242-F) after the number of passes required for the originally specified binder. Use of substitute PG binders may only be allowed at the discretion of the Engineer if the Hamburg Wheel test results are between 10.0 mm and 12.5 mm.

Table 1
Allowable Substitute PG Binders and Maximum Recycled Binder Ratios

Originally Specified PG Binder	Allowable Substitute PG Binder	Maximum Ratio of Recycled Binder ¹ to Total Binder (%)		
		Surface	Intermediate	Base
HMA				
76-22 ^{2,5}	70-22	20.0	20.0	20.0
	70-28	20.0	35.0	40.0
70-22 ²	64-22	20.0	20.0	20.0
	64-28 or 58-28	20.0	35.0	40.0
64-22 ²	58-28	20.0	35.0	40.0
76-28 ^{2,5}	70-28	20.0	20.0	20.0
70-28 ²	64-28 or 58-28	20.0	20.0	20.0
	64-34 or 58-34	20.0	35.0	40.0
64-28 ²	58-28	20.0	20.0	20.0
	58-34	20.0	35.0	40.0

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WMA ³				
76-22 ^{2,5}	70- 22	20.0	35.0	40.0
70-22 ²	64-22 or 58-28	20.0	35.0	40.0
64-22 ⁴	58-28	20.0	35.0	40.0
76-28 ^{2,5}	70-28	20.0	35.0	40.0
70-28 ²	64-28 or 58-28	20.0	35.0	40.0
64-28 ⁴	58-28	20.0	35.0	40.0

1. Combined recycled binder from RAP and RAS.
2. Use no more than 20.0% recycled binder when using this originally specified PG binder.
3. WMA as defined in Section 341.2.6.2., "Warm Mix Asphalt (WMA)."
4. When used with WMA, this originally specified PG binder is allowed for use at the maximum recycled binder ratios shown in this table.
5. No more than 1-PG grade lower than what is show on the plans will be permitted for Surface mixtures

--Item 354--

Planed material shall be delivered and stockpiled at 9320 SE Loop 410, San Antonio, TX 78223 or at a location determined by the Area Engineer. The cost of loading, transporting, and unloading planed material are subsidiary to this bid item.

Take precaution to avoid damage to existing bridge decks and armor joints. Repair any damage to the bridge decks and/or armor joints as approved. This work will not be paid directly, but will be performed at the Contractor's expense.

--Item 401--

A shrinkage compensator is not required for when used for backfilling pipes. Strength of the Flowable Backfill will be verified by the District Laboratory. Field testing is not required, unless deemed necessary.

--Item 403--

MSE Walls including Soil Nail Walls for temporary shoring require Proof Nail and Nail Verification Tests. An on site investigation of soils to confirm PS&E soil data is to be performed before erection of temporary or permanent walls. 4' horizontal and vertical nail spacing on temp or permanent soil nail walls will be the maximum allowed.

--Item 416--

Stake all Foundations, for approval, before beginning drilling operations.

Calculate the vertical signal head clearance before placing any signal pole foundation.

For mast-arm signal and strain pole anchor bolts, set two in tension and two in compression. Obtain approval of placement prior to placing concrete.

Remove spoils from a flood plain at the end of each work day.

--Item 420--

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420-2 Restrict large aggregate size to ¾” maximum for class “C” concrete used in aesthetic details requiring form liners.

--Item 421--

Use an automated ticket that contains the same information as TxDOT's ticket. Submit the ticket for approval prior to use. The concrete producer will contact the District Laboratory or the Engineer's Office (outside the San Antonio area) to inform TxDOT of scheduled structural concrete batching. Structural concrete includes bridge drill shafts, columns, caps, abutments, deck or top slabs of direct traffic culverts.

Entrained air is allowed for Class P and Class HES concrete only. Air content testing is waived for all classes of concrete.

--Item 422--

For construction of approach slabs, longitudinal joints shall be placed on lane lines. Joints may be either a saw-cut crack control joint or a construction joint. Saw cut joints shall terminate 1'-0” before reaching the edge of the slab, must be saw cut as soon as possible after placement of concrete, and will be cut within 12 hours of concrete placement. Once sawing begins, it should be a continuous operation and should only be stopped if raveling occurs. Saw cut will be to a depth of 1.5” and filled with approved joint sealant.

Poly-fiber reinforced concrete may be used as an option, with the approval by the Engineer, for riprap, sidewalk, curb/gutter, and mow strip. Use a TxDOT approved manufacturer or producer for the poly-fiber. The poly-fibers shall be combined with the concrete in proportions as recommended by the manufacturer. A concrete mix design must be approved by the Engineer.

--Item 423--

The backfill material for pre cast retaining walls shall be approved before placement. Build stockpile(s) in lifts not to exceed 2 feet and a minimum working face of not less than 10 feet, but not more than 20 feet.

MSE walls located in front of inlets, will require soil reinforcement to attach to the back of the precast inlets. If alternative design is desired, Contractor/Wall Supplier shall provide alternative design in accordance with TXDOT approved MSE wall design and shall include alternate design plans and calculations signed and sealed by a licensed professional engineer to be approved by the District Bridge Section before fabrication and construction.

Contractor is to provide design and detail of the wall repair, panel and coping repair and/or replacement. Design calculations, plans, and details are to be signed and sealed by a registered professional engineer and submitted to the District Bridge Section for approval. Temporary shoring for the repair will be the responsibility of the contractor. Temporary shoring for the repair will be in accordance with Item 403. Payment for this repair will be in accordance with Item 423 and Item 403.

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RAP will not be allowed as the backfill material for MSE retaining walls.

Use the approved Mechanically Stabilized Earth (MSE) wall systems listed at:

http://www.dot.state.tx.us/business/contractors_consultants/bridge/retaining_wall.htm

TxDOT does not allow the use of experimental systems on projects with over 50,000 square feet walls over 25 ft. tall, or walls supporting or immediately adjacent to interstate highways.

When proprietary wall systems are used, a qualified representative of the retaining wall manufacturer must be available upon request during wall construction. As requested or required the manufacturer's representative must be on site to assist with the initial stages of wall construction, provide training to the Contractor wall crew and ensure proper interpretation of MSE wall shop drawings and details. Specific attention must be given to nonstandard wall installation details. The Contractor's wall crew foreman must be on site for the duration of wall construction. Any change to the wall crew foreman may require additional training by the wall supplier. The Contractor will ensure that the retaining walls are installed per the details presented in the construction drawings and as per the proprietary wall system requirements. The Engineer reserves the right to suspend wall construction activities due to any construction issue encountered.

Type DS material will be required on MSE walls in the area of the reinforcement mats.

--Item 427--

The concrete traffic rail surface finish aesthetic treatments will be as follows: All the surfaces will receive an opaque sealer and use the base color (see below). The recessed area of the back of rail will receive accent color No. 1 (See below)

Traffic rail colors (Mission Theme)

Base color

Sherwin Williams SW 6142 "MACADAMIA" or APPROVED EQUAL

Accent color No. 1

Sherwin Williams SW 6125 "CRAFT PAPER" or APPROVED EQUAL.

--Item 432--

In all riprap slopes, provide 3 inch diameter weep holes at 10 foot maximum spacing and backed with loose graded gravel or crushed stone and galvanized hardware cloth.

In areas where guard fence posts are to be placed in riprap, the riprap shall have an 18 inch +/- blocked out area (round or square). Blocked out areas shall be backfilled with 2 sack flowable backfill and considered subsidiary to the various bid items.

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Match the slope of the Riprap (Mow Strip) to the slope of the adjacent roadway.

--Item 449--

The pipe joint compound used to coat the threads of anchor bolts prior to installation of nuts when erecting a high mast pole shall be an electrically conducting protective thread lubricant compound (Crouse-Hinds TL-2, Oz/Gedney STL, Thomas & Betts Kopr-Shield).

--Item 462--

Use lean concrete or 2 sack flowable backfill for fill between pre-cast boxes. Lean concrete and 2 sack flowable backfill shall be considered subsidiary to this bid item.

All proposed structures shall be pre-cast, no exceptions.

--Item 465--

Concrete Class B invert shaping is required at all inlets, manholes and junction boxes in order to insure positive flow. The material and work performed for the placement of the inverts shall be considered subsidiary to this item.

--Item 496--

The Contractor will submit a demolition plan for all structures to be replaced and/or removed in accordance with Item 496. Sawcut the old bridge columns to a minimum of 2 feet below the finished ground line, unless otherwise directed. Include any special details required for traffic control.

Provide for the safety and health of employees and abide by all OSHA Standards and Regulations. All costs incurred for proper management, shall be subsidiary to this Item.

--Item 500--

"Materials on Hand" payments will not be considered in determining percentages for mobilization payments.

--Item 502--

Contractor is required to notify the following individuals prior to the beginning and during the various stages of the project, in order to address traffic control and construction sequence changes, as well as utility adjustments.

Alex Munoz	Judson ISD	210-945-1237	emunoz@judsonisd.org
Don Davenport	Judson ISD	210-945-1235	ddavenport@judsonisd.org
Donald Stewart	Wagner H.S.	210-662-5001	dstewart@judsonisd.org
Loretta Davidson	Wagner H.S.	210-662-5081	ldavidson@judsonisd.org
Tracey Valree	Masters Elem.	210-945-1150	tvalree@judsonisd.org
Teresa Newbould	Masters Elem.	210-945-1150	tnewbould@judsonisd.org

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Karla Anaya	Horizon Pointe HOA	210-483-8124	kanaya@spectrumam.com
Anna Esquivel	CPS Energy	210-353-4537	apesquivel@cpsenergy.com
Victor Castillo	CPS Energy (Gas)	210-353-5845	vacastillo@cpsenergy.com
Ron Capps	AT&T	210-283-1990	rc2165@att.com
Daryl Spillmann	SAWS	210-233-3012	Daryl.Spillmann@saws.org
Jim Doersam	SARA	210-227-1373	jdoersam@sara-tx.org
Terry Ploetz	SARA	210-302-3653	tploetz@sara-tx.org
Greg Willis	Century Link	512-541-7751	Greg.Willis@centurylink.com
Steve Walker	AT&T	318-282-1591	swalker14@yahoo.com
Chad Gibson	AT&T	512-468-2305	cg2484@att.com
Stephon Robertson	Time Warner Cable	210-352-4308	Stephon.Robertson@twcable.com
Ruben Garcia	TxDOT	210-615-6437	Ruben.Garcia@txdot.gov
Tony Martinez	TxDOT	210-615-6233	tony.s.martinez@txdot.gov
Alan Turner	Level 3	210-413-1489	Alan.Turner@level3.com
Rick Hanks	SAM, Inc.	512-685-3539	rhanks@sam.biz
Corey Smith	CITGO	281-687-7202	csmith6@citgo.com

All these individuals must be invited to attend the pre-construction meeting.

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.

Place standard markings no later than 14 days after surface treatment operations are completed.

When advanced warning flashing arrow panels and/or changeable message sign is specified, have one standby unit in good condition at the job site. Standby time shall be considered subsidiary to the bid item.

Treat the pavement drop-offs as shown in the TCP.

After written notification, the time frame to provide properly maintained signs and barricades before considered in non-compliance is 48 hours from receipt of the notification. Failure to make corrections as noted may result in payment for this item being withheld.

There are traffic signals at the intersection of Foster Road and I-10 (EB and WB), and LP 1604 and I-10 (EB and WB). Keep the signals in operation except when necessary for specific installation operations. New signals are to be installed at FM 1516 (EBFR and WBFR), once installed these signals must be kept in operation.

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Moving an existing sign to a temporary location is subsidiary to this Item. Installations with permanent supports at permanent locations will be paid for under the applicable bid item (s).

Mount temporary mailboxes on plastic drum in accordance with Compliant Work Zone Traffic Control Devices, Section K. Mounting and moving the mailbox as needed for the various construction phases is subsidiary to this Item.

Notify the Engineer in writing 10 business days in advance of any temporary or permanent lane, ramp, connector, etc. closures/detours, restrictions to lane widths, alterations to vertical clearances, or modifications to radii. Any other modifications to the roadway that may adversely affect the mobility of oversized/overweight trucks also require 10 business days advance written notice to the Engineer. Unless shown in the TCP, no lane, ramp, connector, etc. closures are allowed during special events. At least one lane has to remain open at all times. Lane closures will not be allowed if this reporting requirement is not met.

For closures not listed in the TCP; the lane closures are limited to between the hours of 9 PM and 5 AM, and at least one lane has to remain open at all times. Lane closure will follow the Lane Closure Fee Schedule as shown on plans.

No closures will be permitted between December 15 and January 2 (unless otherwise noted and/or approved by the Engineer)

No closures will be permitted on the Wednesday, Thursday, Friday, Saturday and Sunday of Thanksgiving week

No closures will be permitted on the Saturday or Sunday before Memorial Day and Labor Day.

No closures will be permitted on Saturday or Sunday when July 4th falls on Friday or Monday.

Night time is considered from 9 PM to 5 AM during week days, not including Fridays. Coordinate with the Engineer for scheduled night time work.

Weekend work is considered from 9 PM on Friday night to 5 Am on Monday morning. Coordinate with the Engineer for scheduled weekend work.

Avoid placing stockpiles within the roadway's horizontal clear zone. If a stockpile is placed within the clear zone, address in accordance with the TMUTCD.

Do not place barricades, signs, or any other traffic control devices where they interfere with sight distance at driveways or side streets.

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In addition to providing a Contractor's Responsible Person and a phone number for emergency contact, have an employee available to respond on the project for emergencies and for taking corrective measures within 2 hours or within a reasonable time frame as specified by the Engineer.

Temporary Rumble Strips are to be used according to WZ (RS)-14.

Use 2 number of rumble strip arrays.

When Nighttime work is required and work is not behind positive barrier then full TY 3 reflective gear is required to be worn by all workers, hard hat halos are required to be worn by the flaggers at flagging stations, TY III barricades are required to be spaced at 500 ft, and a mandatory night work meeting is required.

Portable Changeable Message Signs (PCMS) required in the traffic control standards will be subsidiary to Item 502. All other PCMS will be paid for by the day. Two PCMS, are required to be available in standby for immediate use if needed. Payment for those two PCMS will be subsidiary to Item 502.

--Item 504--

Furnish one field office Type C structure.

Enclose the field office and the parking area with a fence and provide security lighting.

--Item 506--

An Inspector will perform a regularly scheduled SWP3 inspection every 7 calendar days.

Failure to address items noted on the SW3P inspection report within two report cycles may result in the Department stopping all construction operations, exclusive of time charges, or withholding that month's estimate until the SW3P deficiencies are corrected unless the Engineer determines that the area is too wet to correct SW3P deficiencies.

--Item 510--

The length of the one-way traffic control section is limited to ½ mile, or to an agreed length based on daily production rates, allowing for opening at night.

--Item 512--

New Single Slope or F-Shape CTB (cast in accordance with the Standard Sheets in the plans) may be furnished or the same pre-used shapes (that meet the requirements of this Item) may be furnished. New Safety Shape (New-Jersey) CTB is not allowed, but pre-used New-Jersey (that meets the requirements of this Item) may be furnished. More than one type may be furnished but do not mix the types when placed along the roadway.

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--Item 514--

The Type 3 CTB taper from the Type 2 at obstructions (OSB's, bridge, columns, etc.) shall be 40:1. If gravel is used between the barriers as shown by the Standard Sheet, the top six inches shall be CL A concrete.

--Item 529--

Class "C" concrete is required for machine extruded curb.

Curb inlets and extensions are based on an exposed curb height of 7 inches. The roadway curb height and shape will be transitioned to the inlet's curb with a 40: 1 taper.

--Item 531--

The curb ramp truncated domes will be terra cotta.

The curb ramp locations shown in the plans have taken into account the geometric features of the intersection, traffic signals, and the pavement markings. If anything changes during construction, the location of curb ramps must be adjusted to ensure they meet TAS requirements.

--Item 540--

MBGF posts shall be round with domed tops, and not painted. If 10 or less timber posts are needed, they may be purchased locally and will be accepted by visual inspection.

Guard fence posts placed in proposed and/or existing areas of riprap, sidewalks or other concrete shall have an 18 inch +/- (square or round) block out in the concrete. After the posts are installed, the blocked out area shall be topped off with 4 inches of low strength grout/mortar consisting of about 1 sack of cement per cubic yard of mix.

When connecting a Thrie-Beam to a concrete wingwall, bridge rail, CTB, etc., drill the holes for bolt placement using rotary or core type equipment. Use a core type drill when reinforcing steel is encountered. Do not use percussion or impact drilling. Repair damage to the concrete and spalls exceeding 1/2" from the edge of the hole.

--Item 542--

Salvage all undamaged/acceptable radius guardrail and deliver to the TxDOT maintenance section yard. Delivery to be coordinated with the Engineer, and loading, mileage, delivery and unloading will be subsidiary to pertinent bid items.

--Item 545--

See the Crash Cushion Summary Sheet.

--Item 585--

Use Surface Test Type B, pay adjustment schedule 2 to evaluate ride quality of CRCP Main lane travel lanes.

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Use Surface Test Type A to evaluate ride quality of Frontage Roads and Ramps travel lanes.

--Item 610--

Fabricate steel roadway illumination poles in accordance with the RIP standards. Poles fabricated according to RIP require no shop drawings. Alternate designs or the use of aluminum to fabricate poles will require the submission of shop drawings electronically.

For instructions on submitting shop drawings electronically go to:

<http://www.dot.state.tx.us/publications/bridge.htm>. File is titled: Guide to Electronic Shop Drawing Submittal.

Provide lamps from the pre-qualified Materials Producers List, Category is "Roadway Illumination and Electrical Supplies" located on the Construction Divisions (CST) web site.

Ballast/capacitors removed from the light assembly, will remain the property of the State. Assume all ballast/capacitors contain Polychlorinated Biphenyl (PCB), unless a notation appears on the outside of the unit that specifies it does not contain PCB's. All ballast/capacitors with PCB's shall be placed in 55 gallon open top drum in accordance with Department of Transportation (DOT) specifications. Place six (6) inches of sawdust or other absorbent material in the bottom of the drum. Furnish and place a DOT approved PCB warning label on the outside of the drum. Do not fill a drum more than $\frac{3}{4}$ of capacity. Avoid rupturing the ballast/capacitor(s). If a ballast/capacitor is ruptured, use proper procedures, specialist trained staff and personal protective equipment for the clean-up operations.

The lamps in light fixtures may contain hazardous levels of mercury, halide, and sodium vapors. Observe and comply with all federal, state and local laws, ordinances and regulations regarding the management of these lamps. Prevent the breakage of the lamps. At a minimum, package all lamps removed from the light fixture(s) in a container that minimizes the breakage of the lamps. Broken lamps shall be collected in a sealed plastic bag (i.e. Ziploc). Broken lamps shall be stored in separate containers from unbroken lamps. Furnish a suitable container and attach a label stating "Universal Waste Lamps" on the container. Write the date the first lamp was placed in the container on the "Universal Waste Lamp" label. Within one (1) week after the first lamp is placed in a container, notify the Engineer. The lamps and PCB containing ballast/capacitors, placed in properly labeled containers, will remain the property of the State. Place the container in an area where it is protected from damage and the elements. The Engineer will make arrangements to collect, transport, and dispose/recycle the container. The ballast/capacitor and lamp's removal and storage is subsidiary to this item.

Stencil each illumination assembly with the circuit, light and relay numbers in black paint on the roadway side of the pole at a 45 degree angle. The numbers shall be in 3" tall and begin 6' from the top of the foundation. This work will be considered subsidiary to this item.

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Item 618--

It might be necessary to cut concrete for placement of conduit. Saw cut existing concrete, remove the concrete from the steel reinforcement (bars or fabric) and bend the steel to install the conduit. After the conduit has been placed, bend the steel back to its original position and back-fill the trench with an approved concrete. This work is subsidiary to this Item.

The conduit depth for illumination under the City of San Antonio streets is 36 inches.

Use materials from Material Producers list as shown on the Construction Division's (CST) web site. Category is "Roadway Illumination and Electrical Supplies."

For both transformer and shoe-base type illumination poles, provide double-pole breakaway fuse holder as shown on the Construction Division's (CST) materials producers list Category is "Roadway Illumination and Electrical Supplies." Fuse holder is shown on list under Items 610 & 620.

Provide 10 amp time delay fuses.

--Item 628--

Make all arrangements for electrical service, and compliance with local standards and practices for proper installations.

--Item 650--

Use lengths of trusses, tower heights, and posts shown in the summaries for bidding purposes only. Verify these dimensions upon substantial completion of the subgrade section at the location shown on the plans or as relocated. Notify the Engineer prior to shop drawing production concerning any discrepancies found that might reduce established ground clearance requirements.

Stake all sign support locations and obtain approval by the Engineer before the beginning of any construction of sign erection.

Ensure that neither the sign(s) nor portions of the sign face(s) will be reused at any time, either on or off the Right of Way, in such a way that the traveling public can see the reflective surface.

Remove and dispose of all sign structures removed within this project.

--Item 656--

Field cut holes for anchor bolts only as directed.

Install traffic controller foundation (City Standard) only if called for on the plans or directed to do so.

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Provide all the materials needed for the installation of foundations under this Item.

--Item 658--

CTB reflectors will not be paid for directly but will be considered subsidiary to the barrier.

--Item 666 --

If TY II material is used (vs. an acrylic or epoxy) as the sealer for the TY I markings, place the TY II a minimum of 14 calendar days (to provide adequate curing) before placing the TY I markings.

--Item 672--

Place all adhesive material directly from the heated dispenser to the pavement. Do not use portable or non-heated containers. Use adhesive of sufficient thickness so that when the marker is pressed into the adhesive, 1/8" or more adhesive will remain under 100% of the marker. The adhesive should extend not less than 1/2" but not more than 1 1/2" beyond the perimeter of the marker.

--Item 677--

Obtain approval before using the mechanical method for the elimination of existing thermoplastic pavement markings.

--Item 680--

Furnish and install all required materials and equipment necessary for the complete and operating traffic signal installation at the following intersections:

1. Foster Road and I-10 EBFR
2. Foster Road and I-10 WBFR
3. FM 1516 and I-10 EBFR
4. FM 1516 and I-10 WBFR
5. LP 1604 and I-10 EBFR
6. LP 1604 and I-10 WBFR

The locations shown on the plans for signal pole foundations, controller foundations, conduit and other items may be adjusted to better fit field conditions as approved.

High pressure sodium lamps shall meet ANSI C78 requirements and shall be the type that extinguishes at the end of usable lamp life and remains extinguished without cycling. 400 watt lamps shall contain less than 4.0 MG of mercury. 250 watt lamps shall contain less than 3.0 MG of mercury. Lamps shall be lead free. Lamps shall pass the Federal Toxic Characteristic Leachate Procedure (TCLP). Lamp examples: OSRAM-Sylvania LU400/ECO Plus.

Demonstrate that the field wiring is properly installed, install the controller assembly, connect the wiring and turn on the controller.

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Contact the City Traffic Engineer at 210-207-4583 a minimum of fourteen (14) days prior to turning City of San Antonio Signals turned on.

--Item 681--

Take control and be responsible for all Signals within the Project limits as shown on the plans, to commence when the signal system or roadway capacity is affected, or within 30 days after the start of work, whichever comes first. Contact the District Signal Shop Supervisor, at least two weeks in advance, to arrange to take over maintenance.

The scope of this contract will include modifications of existing signal systems as required to support the traffic control plan at the following locations:

Signal Location(s):

1. Foster Road and I-10 EBFR
2. Foster Road and I-10 WBFR
3. LP 1604 and I-10 EBFR
4. LP 1604 and I-10 WBFR

Provide and maintain traffic signal operation of all signalized intersections within the project limits during all phases of construction whether existing, temporary, or final. Provide all items for temporary traffic signal including temporary controller and Video Imaging Vehicle Detection System (VIVDS) equipment. Controller will be an eight-phased NEMA controller. Controller cabinet will meet all the requirements of DMS-11170. Provide a pole-mounted controller cabinet that is 38 inches wide, 54 inches high, 26 inches deep, and that has three brackets for pole mounting. Install a 5' x 5' x 4" Class B concrete pad under the pole-mounted controller cabinet in accordance to Items 420 and 421. Connect all field wiring to the controller assembly. Have a qualified technician and a representative from the controller supplier on the project site to place the traffic signals in operation.

The controller cabinet assembly, including all accessories and components, and all video detection (VIVDS) cameras and processors will be salvaged and delivered to the TxDOT Signal Shop at the end of this project. Provide a 48-hour notice to TxDOT at prior to delivery of salvaged material.

Video equipment will meet all the requirements of Item 6002. Provide signal phasing and timing plans for all construction signals throughout the entire duration of the project. These plans will match the construction sequencing or the Contractor's construction sequencing if different from what is shown in the plans. These plans will be submitted for approval and will provide operations equivalent to the existing signals.

Provide the Department the name and 24-hour telephone number of a person responsible for emergency maintenance operations. Use qualified personnel to respond to and diagnose all trouble calls during the length of the project. Repair any malfunction to signal equipment. Response time to reported trouble calls must be less than 2 hours. Make appropriate repairs

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within 24 hours. Place a logbook in the controller cabinet and keep a record of each trouble call reported. Notify the Engineer of each trouble call. Do not clear the error log in the conflict monitor without approval.

Relocate and modify signal heads as required by project phasing or other project work as directed by the Department. Relocation of signal heads for a phase change will be done during the same day. Consider subsidiary to the pertinent Items.

Be responsible for video detection changes as required by project phasing or other project work as directed by the Department. Consider subsidiary to the pertinent Items.

Maintain an 18-foot minimum vertical clearance for all construction signals at all times.

Make field measurements for treated timber poles in cooperation with the Engineer before construction to ensure the above clearance height from the highest point of the roadway surface. Timber poles provided will meet all the requirements of Item 627. In addition, place the signal heads a minimum of 40 feet and a maximum of 150 feet from the stopline. If the nearest signal head must be more than 150 feet from the stopline, place a supplemental nearside signal head. Determine the field measurements and elevations from the actual field location of the poles, considering all above and below ground utilities and existing roadway elevations.

All permanent signs mounted on the traffic signal wires, traffic signal poles, or traffic signal mast arms will be furnished and installed by the Contractor. The cost of the signs, hardware and erecting the signs will be subsidiary to the pertinent Items.

Be responsible for furnishing all other materials, tools, and labor required to maintain the signal in this project in accordance with the plans and specifications. All new materials provided by the Contractor will be new undepreciated stock.

--Item 682--

Provide all signal heads from the same manufacturer. Pedestrian signals may be by a different manufacturer than the vehicle signal heads.

Cover all signal faces until placed in operation.

All pedestrian signal faces shall be single section LED Type. Die cast polycarbonate is acceptable in lieu of die cast aluminum. All mounting attachments shall be constructed of steel pipe and mounted as shown on the plans.

--Item 684--

Provide an extra 10' for each cable terminating in the controller cabinet. All cables shall be continuous without splices from terminal point to terminal point. All proposed signal cable shall be #12 AWG stranded copper.

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--Item 686 & 687--

Provide all signal poles from the same manufacturer. Pedestrian poles may be from a different manufacturer.

--Item 688--

The pedestrian push button shall be raised or flush and a minimum of 2 inches in the smallest dimension. The force to activate the control shall be no greater than 5 lb/f. The button placement has to be coordinated with the concrete pad to access the button. The concrete pad (if required) shall be paid separately.

Item 690--

All existing signal equipment with the exception of the signal controller and equipment become the property of the Contractor and disposed of in accordance with the specifications. Deliver the controller and related equipment to the Signal shop, located at 4615 NW Loop 410 (corner of IH 410 and Callaghan Road) in San Antonio, Texas or to the Area Office as directed

--Item 730--

Mow full-width and hand trim the right of way, including newly seeded or sodded areas, when vegetation reaches a height of 16" or when directed. Removal of brush sprouts growing within guardrail, concrete barriers or at other locations where mowing or hand trimming is done within the limits of construction is required and subsidiary to this item. Mowing may be required more often in newly sodded or seeded areas than in other parts of the project because of the supplemental irrigation these areas receive and the resulting weed growth. Coordinate mowing to avoid rutting or compaction of the soil when mowing where supplemental irrigation is being used. Use mowing equipment that will not adversely affect soil retention blankets or mulches that have been applied. Work performed under this item does not replace the mowing required when placing permanent seeding in an area that has established temporary seeding as described in Article 164.3, Construction.

--Item 734 & 738--

Perform Litter Removal and Cleaning and Sweeping Highways once a month or as directed.

CONTROL : 0025-02-198, ETC
PROJECT : C 25-2-198, ETC
HIGHWAY : IH 10
COUNTY : BEXAR

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 NOVEMBER 1, 2014.
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 106 OBLITERATING ABANDONED ROAD
ITEM 110 EXCAVATION (132)
ITEM 132 EMBANKMENT (100) (160) (204) (210) (216) (260) (400)
ITEM 150 BLADING
ITEM 161 COMPOST (160)
ITEM 164 SEEDING FOR EROSION CONTROL (162) (166) (168)
ITEM 168 VEGETATIVE WATERING
ITEM 169 SOIL RETENTION BLANKETS
ITEM 216 PROOF ROLLING (210)
ITEM 247 FLEXIBLE BASE (105) (204) (210) (216) (520)
ITEM 275 CEMENT TREATMENT (ROAD-MIXED) (132) (204) (210) (216) (247)
(300) (310) (520)
ITEM 305 SALVAGING, HAULING, AND STOCKPILING RECLAIMABLE ASPHALT
PAVEMENT
ITEM 310 PRIME COAT (300) (316)
ITEM 341 DENSE-GRADED HOT-MIX ASPHALT (300) (301) (320) (520) (585)
ITEM 342 PERMEABLE FRICTION COURSE (PFC) (300) (301) (320) (520) (585)
ITEM 344 SUPERPAVE MIXTURES (300) (301) (320) (520) (585)
ITEM 351 FLEXIBLE PAVEMENT STRUCTURE REPAIR (132) (204) (247) (260)
(263) (275) (276) (292) (310) (316) (330) (334) (340)
ITEM 354 PLANING AND TEXTURING PAVEMENT
ITEM 360 CONCRETE PAVEMENT (421) (422) (438) (440) (529) (585)
ITEM 400 EXCAVATION AND BACKFILL FOR STRUCTURES (110) (132) (401)
(402) (403) (416) (420) (421) (423)
ITEM 401 FLOWABLE BACKFILL (421)
ITEM 402 TRENCH EXCAVATION PROTECTION
ITEM 403 TEMPORARY SPECIAL SHORING (410) (411) (423)

ITEM 416 DRILLED SHAFT FOUNDATIONS (405) (420) (421) (423) (440) (448)
 ITEM 420 CONCRETE SUBSTRUCTURES (400) (404) (421) (422) (426) (427)
 (440) (441) (448)
 ITEM 422 CONCRETE SUPERSTRUCTURES (420) (421) (424) (438) (440) (448)
 (454) (780)
 ITEM 423 RETAINING WALLS (110) (132) (216) (400) (416) (420) (421) (424)
 (440) (445) (458) (556)
 ITEM 425 PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS (409)
 (420) (421) (424) (426) (427) (434) (440) (442) (445) (448)
 ITEM 432 RIPRAP (247) (420) (421) (431) (440)
 ITEM 450 RAILING (420) (421) (422) (424) (440) (441) (442) (445) (446)
 (448) (540)
 ITEM 451 RETROFIT RAILING (421) (429) (440) (442) (445) (446) (450) (540)
 ITEM 454 BRIDGE EXPANSION JOINTS (429) (442) (785)
 ITEM 462 CONCRETE BOX CULVERTS AND DRAINS (400) (402) (403) (420)
 (421) (422) (424) (440) (464) (476)
 ITEM 464 REINFORCED CONCRETE PIPE (400) (402) (403) (467) (476)
 ITEM 465 JUNCTION BOXES, MANHOLES, AND INLETS (400) (420) (421) (424)
 (440) (476)
 ITEM 466 HEADWALLS AND WINGWALLS (400) (420) (421) (432) (440) (464)
 ITEM 467 SAFETY END TREATMENT (400) (420) (421) (432) (440) (442) (445)
 (460) (464)
 ITEM 474 LINEAR DRAINS (400) (420) (421) (440) (445) (460) (471)
 ITEM 479 ADJUSTING MANHOLES AND INLETS (400) (421) (465) (471)
 ITEM 480 CLEANING EXISTING CULVERTS
 ITEM 496 REMOVING STRUCTURES
 ITEM 500 MOBILIZATION
 ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING
 ITEM 504 FIELD OFFICE AND LABORATORY
 ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL
 CONTROLS (161) (432) (556)
 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 COLORED TEXTURED CONCRETE AND LANDSCAPE PAVERS (132) (247)
 (275) (401) (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 536 CONCRETE MEDIANS AND DIRECTIONIONAL ISLANDS (420) (421)
 (427) (440) (529)
 ITEM 540 METAL BEAM GUARD FENCE (421) (441) (445) (529)
 ITEM 542 REMOVING METAL BEAM GUARD FENCE
 ITEM 543 CABLE BARRIER SYSTEM (421) (658)
 ITEM 544 GUARDRAIL END TREATMENTS
 ITEM 545 CRASH CUSHION ATTENUATORS (421)
 ITEM 610 ROADWAY ILLUMINATION ASSEMBLIES (416) (421) (432) (441) (442)
 (445) (449) (614) (616) (618) (620) (622) (624) (628)
 ITEM 618 CONDUIT (400) (476)
 ITEM 620 ELECTRICAL CONDUCTORS (610) (628)

ITEM 621 TRAY CABLE (620)
 ITEM 624 GROUND BOXES (420) (421) (432) (440) (618) (620)
 ITEM 628 ELECTRICAL SERVICES (441) (445) (449) (618) (620) (627) (656)
 ITEM 636 SIGNS (643)
 ITEM 644 SMALL ROADSIDE SIGN ASSEMBLIES (421) (440) (441) (442) (445)
 (636) (643) (656)
 ITEM 647 LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (416) (421)
 (440) (441) (442) (445) (636)
 ITEM 650 OVERHEAD SIGN SUPPORTS (416) (420) (421) (441) (442) (445)
 (449) (618) (636) (654)
 ITEM 658 DELINEATOR AND OBJECT MARKER ASSEMBLIES (445)
 ITEM 662 WORK ZONE PAVEMENT MARKINGS (666) (668) (672) (677)
 ITEM 666 RETROREFLECTORIZED PAVEMENT MARKINGS (316) (502) (662) (677)
 (678) (6040)
 ITEM 672 RAISED PAVEMENT MARKERS (677) (678)
 ITEM 677 ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS (300)
 (302) (316)
 ITEM 678 PAVEMENT SURFACE PREPARATION FOR MARKINGS (677)
 ITEM 680 HIGHWAY TRAFFIC SIGNALS (416) (610) (618) (620) (624) (625)
 (627) (628) (636) (656) (682) (684) (686) (688)
 ITEM 681 TEMPORARY TRAFFIC SIGNALS (416) (610) (618) (620) (621) (622)
 (624) (625) (627) (628) (636) (656) (680) (682) (684) (686) (687)
 (688)
 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) (682)
 ITEM 688 PEDESTRIAN DETECTORS AND VEHICLE LOOP DETECTORS (618)
 (624) (682) (684)
 ITEM 690 MAINTENANCE OF TRAFFIC SIGNALS (416) (421) (476) (610) (618)
 (620) (622) (624) (625) (627) (628) (636) (656) (680) (682) (684)
 (685) (686) (687) (688)
 ITEM 730 ROADSIDE MOWING
 ITEM 734 LITTER REMOVAL
 ITEM 740 GRAFFITI REMOVAL AND ANTI-GRAFFITI COATING

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

SPECIAL LABOR PROVISIONS FOR STATE PROJECTS (000---008)
 WAGE RATES
 SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000---001)
 SPECIAL PROVISION "NONDISCRIMINATION" (000---002)
 SPECIAL PROVISION "SMALL BUSINESS ENTERPRISE IN STATE FUNDED
 CONSTRUCTION" (000---009)
 SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000---010)
 (000---275)
 SPECIAL PROVISION "CERTIFICATE OF INTERESTED PARTIES (FORM 1295)"
 (000---249)
 SPECIAL PROVISION TO ITEM 2 (002---004)

SPECIAL PROVISION TO ITEM 6 (006---001)
 SPECIAL PROVISIONS TO ITEM 7 (007---001) (007---003) (007---004)
 SPECIAL PROVISIONS TO ITEM 8 (008---006) (008---017)
 SPECIAL PROVISION TO ITEM 300 (300---009)
 SPECIAL PROVISION TO ITEM 421 (421---002)
 SPECIAL PROVISION TO ITEM 506 (506---003)
 SPECIAL PROVISION TO ITEM 543 (543---001)
 SPECIAL PROVISION TO ITEM 730 (730---003)

SPECIAL SPECIFICATIONS:

ITEM 3031 GEOGRID BASE REINFORCEMENT
 ITEM 4048 PRESTRESSED GROUND ANCHORS (421) (426) (441) (442)
 ITEM 6001 PORTABLE CHANGEABLE MESSAGE SIGN
 ITEM 6025 RADAR PRESENCE DETECTION DEVICE
 ITEM 6027 PREPARATION OF EXISTING CONDUITS, GROUND BOXES, OR
 MANHOLES (465) (618) (624)
 ITEM 6040 MOBILE RETROREFLECTIVITY DATA COLLECTION FOR PAVEMENT
 MARKINGS
 ITEM 6057 RADAR ADVANCE DETECTION DEVICE (RADD)
 ITEM 6058 BATTERY BACK-UP SYSTEM FOR SIGNAL CABINETS (420) (620)
 ITEM 6072 MODULAR GLARE SCREENS FOR HEADLIGHT BARRIER
 ITEM 7087 WATER MAINS AND SERVICE LINES

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.