

NOTIFICATION OF ADDENDUM

ADDENDUM NO. 2

DATED 2/04/2008

Control	2980-01-008
Project	C 2980-1-8
Highway	FM 2934
County	DENTON

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 2980-1-8

CONTROL: 2980-01-008

COUNTY: DENTON

LETTING: 02/07/2008

REFERENCE NO: 0201

PROPOSAL ADDENDUMS

PROPOSAL COVER

X BID INSERTS (SH. NO.: 2-16, 3-16, AND 7-16)

X GENERAL NOTES (SH. NO.: E)

X SPEC LIST (SH. NO.: 2-3 AND 3-3)

X SPECIAL PROVISIONS:

ADDED: 008---049, 008---007, 008---082

DELETED: 008-070

X SPECIAL SPECIFICATIONS:

ADDED: 5010

DELETED:

X OTHER: PLAN SHEETS

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

BID INSERTS: SHEET 2-16: REVISED QUANTITY FOR ITEM 260-2002 FROM 15,785.0 TO 17,455.0 TONS.
 REVISED QUANTITY FOR ITEM 260-2026 FROM 179,845.0 TO 179,918.0 SY.
 REVISED QUANTITY FOR ITEM 341-2011 FROM 38,078.0 TO 39,236.0 TONS.
 ADDED ITEM 275-2067 WITH A QUANTITY OF 3194.0 SY
 SHEET 3-16: REVISED QUANTITY FOR ITEM 360-2002 FROM 155,951.0 TO 163,851.0 SY
 ADDED ITEM 416-2016 WITH A QUANTITY OF 16.0 LF.

SHEETS 4-16 THRU 16-16 REVISED AND SHEET 17-17 ADDED DUE TO SHIFTING.

GENERAL NOTES: SHEET E: REVISED NOTE TO ITEM 8

SPEC LIST: SHEET 2-3: REVISED REFERENCE ITEMS FOR ITEM 500
 SHEET 3-3: DELETED SPECIAL PROVISION (008---070)
 ADDED SPECIAL PROVISION (008---007)
 ADDED SPECIAL PROVISION (008---049)
 ADDED SPECIAL PROVISION (008---082)

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

ADDED SPECIAL SPECIFICATION 5010

PLAN SHEETS: THE FOLLOWING PLAN SHEETS HAVE BEEN REVISED: 2, 18B, 19,
19A-19C, AND 233

THE FOLLOWING PLAN SHEETS HAVE BEEN REPLACED: 16, 17, 20-22,
25, 26, 37, 41A, 42, 44, 46, 48-50, 52, 53, 55, 56, 163,
181-200, 235, 243, 262A, 280, 305, 330-338, 420, AND 423

THE FOLLOWING PLAN SHEETS HAVE BEEN ADDED: 321A, 321B,
AND 360

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	2002	002	PREPARING ROW DOLLARS and CENTS	STA	149.650	1
	104	2001		REMOVING CONC (PAV) DOLLARS and CENTS	SY	8,641.000	2
	104	2009		REMOVING CONC (RIPRAP) DOLLARS and CENTS	SY	766.000	3
	104	2017		REMOVING CONC (DRIVEWAYS) DOLLARS and CENTS	SY	623.000	4
	104	2021		REMOVING CONC (CURB) DOLLARS and CENTS	LF	80.000	5
	104	2024		REMOVING CONC (RETAINING WALLS) DOLLARS and CENTS	SY	331.000	6
	105	2015		REMOVING STAB BASE & ASPH PAV (8"-10") DOLLARS and CENTS	SY	49,322.000	7
	110	2001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	85,145.000	8
	132	2006		EMBANKMENT (FINAL)(DENS CONT)(TY C) DOLLARS and CENTS	CY	29,511.000	9
	161	2026	001	COMPOST MANUF TOPSOIL (BOS OR PB) (6") DOLLARS and CENTS	SY	66,830.000	10
	162	2002		BLOCK SODDING DOLLARS and CENTS	SY	66,830.000	11

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	164	2009	002	BROADCAST SEED (TEMP) (WARM) DOLLARS and CENTS	SY	33,414.000	12
	164	2011	002	BROADCAST SEED (TEMP) (COOL) DOLLARS and CENTS	SY	33,414.000	13
	168	2001		VEGETATIVE WATERING DOLLARS and CENTS	MG	6,620.000	14
	260	2002	001	LIME (HYDRATED LIME (SLURRY)) DOLLARS and CENTS	TON	17,455.000	15
	260	2006	001	LIME TRT (EXST MATL) (6") DOLLARS and CENTS	SY	3,597.000	16
	260	2026	001	LIME TRT (EXIST MATL)(24") DOLLARS and CENTS	SY	179,918.000	17
	275	2001		CEMENT DOLLARS and CENTS	TON	43.000	18
	275	2067		CEMENT TREAT (SUBGRADE) (11" - 15") DOLLARS and CENTS	SY	3,194.000	19
	305	2005		SALV, HAUL & STKPL RCL APH PV (6 TO 8") DOLLARS and CENTS	SY	49,322.000	20
	310	2015		PRIME COAT (SS-1 OR AE-P) DOLLARS and CENTS	GAL	64,323.000	21
	341	2011		D-GR HMA(QCQA) TY-B PG64-22 DOLLARS and CENTS	TON	39,236.000	22

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	341	2050		D-GR HMA(QCQA) TY-C PG70-22 DOLLARS and CENTS	TON	396.000	23
	360	2002	003	CONC PVMT (CONT REINF-CRCP)(9") DOLLARS and CENTS	SY	163,851.000	24
	400	2005		CEM STABIL BKFL DOLLARS and CENTS	CY	1,423.000	25
	400	2006		CUT & RESTORING PAV DOLLARS and CENTS	SY	679.000	26
	402	2001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	18,715.000	27
	416	2016		DRILL SHAFT (SIGN MTS)(12 IN) DOLLARS and CENTS	LF	16.000	28
	416	2032		DRILL SHAFT (TRF SIG POLE) (36 IN) DOLLARS and CENTS	LF	26.000	29
	416	2034		DRILL SHAFT (TRF SIG POLE) (48 IN) DOLLARS and CENTS	LF	132.000	30
	432	2001		RIPRAP (CONC)(4 IN) DOLLARS and CENTS	CY	356.000	31
	432	2002		RIPRAP (CONC)(5 IN) DOLLARS and CENTS	CY	190.000	32
	450	2025		RAIL (TY PR1) DOLLARS and CENTS	LF	166.000	33

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	ITEM NO	DESC CODE	S.P. NO.				
	462	2007		CONC BOX CULV (5 FT X 3 FT) and DOLLARS CENTS	LF	895.000	34
	462	2019		CONC BOX CULV (8 FT X 4 FT) and DOLLARS CENTS	LF	3,473.000	35
	462	2029		CONC BOX CULV (10 FT X 5 FT) and DOLLARS CENTS	LF	591.000	36
	462	2032		CONC BOX CULV (10 FT X 8 FT) and DOLLARS CENTS	LF	874.000	37
	464	2005		RC PIPE (CL III)(24 IN) and DOLLARS CENTS	LF	1,965.000	38
	464	2007		RC PIPE (CL III)(30 IN) and DOLLARS CENTS	LF	1,782.000	39
	464	2009		RC PIPE (CL III)(36 IN) and DOLLARS CENTS	LF	2,423.000	40
	464	2010		RC PIPE (CL III)(42 IN) and DOLLARS CENTS	LF	1,716.000	41
	464	2011		RC PIPE (CL III)(48 IN) and DOLLARS CENTS	LF	471.000	42
	464	2013		RC PIPE (CL III)(60 IN) and DOLLARS CENTS	LF	566.000	43
	464	2014		RC PIPE (CL III)(66 IN) and DOLLARS CENTS	LF	470.000	44

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	ITEM NO	DESC CODE	S.P. NO.				
	464	2022		RC PIPE (CL IV)(24 IN) and DOLLARS CENTS	LF	5,386.000	45
	464	2024		RC PIPE (CL IV)(30 IN) and DOLLARS CENTS	LF	2,522.000	46
	464	2026		RC PIPE (CL IV)(36 IN) and DOLLARS CENTS	LF	1,816.000	47
	465	2001	001	INLET (COMPL)(TY C) and DOLLARS CENTS	EA	118.000	48
	465	2003	001	INLET (COMPL)(TY H) and DOLLARS CENTS	EA	1.000	49
	465	2005	001	MANH (COMPL)(TY M) and DOLLARS CENTS	EA	7.000	50
	465	2008	001	INLET EXT (TY E) and DOLLARS CENTS	EA	171.000	51
	465	2211	001	JUNCTION BOX (SPL) and DOLLARS CENTS	EA	3.000	52
	466	2010		WINGWALL (SW-0)(HW=8 FT) and DOLLARS CENTS	EA	1.000	53
	466	2011		WINGWALL (SW-0)(HW=9 FT) and DOLLARS CENTS	EA	1.000	54
	466	2022		WINGWALL (FW-0)(HW=6 FT) and DOLLARS CENTS	EA	1.000	55

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	ITEM NO	DESC CODE	S.P. NO.				
	466	2053		WINGWALL (PW)(HW=9 FT) DOLLARS and CENTS	EA	1.000	56
	466	2071		HEADWALL (CH-FW-0)(DIA= 48 IN) DOLLARS and CENTS	EA	1.000	57
	466	2073		HEADWALL (CH-FW-0)(DIA= 60 IN) DOLLARS and CENTS	EA	1.000	58
	466	2133		HEADWALL (CH-PW-0)(DIA= 60 IN) DOLLARS and CENTS	EA	1.000	59
	467	2158		SET (TY I)(S= 5 FT)(HW= 4 FT)(6:1)(C) DOLLARS and CENTS	EA	1.000	60
	467	2236		SET (TY II)(24 IN)(RCP)(6:1)(C) DOLLARS and CENTS	EA	1.000	61
	467	2242		SET (TY II)(48 IN)(RCP)(6:1)(C) DOLLARS and CENTS	EA	2.000	62
	467	2297		SET (TY II)(66 IN)(RCP)(6:1)(P) DOLLARS and CENTS	EA	1.000	63
	496	2001		REMOV STR (BOX CULVERT) DOLLARS and CENTS	EA	5.000	64
	496	2002		REMOV STR (INLET) DOLLARS and CENTS	EA	5.000	65
	496	2004		REMOV STR (SET) DOLLARS and CENTS	EA	10.000	66

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	ITEM NO	DESC CODE	S.P. NO.				
	496	2006		REMOV STR (HEADWALL) and DOLLARS CENTS	EA	22.000	67
	496	2007		REMOV STR (PIPE) and DOLLARS CENTS	LF	1,206.000	68
	496	2008		REMOV STR (BOX CULVERT) and DOLLARS CENTS	LF	34.000	69
	500	2001	004	MOBILIZATION and DOLLARS CENTS	LS	1.000	70
	502	2001	033	BARRICADES, SIGNS AND TRAFFIC HAN- DLING and DOLLARS CENTS	MO	26.000	71
	506	2001	010	ROCK FILTER DAMS (INSTALL) (TY 1) and DOLLARS CENTS	LF	132.000	72
	506	2009	010	ROCK FILTER DAMS (REMOVE) and DOLLARS CENTS	LF	132.000	73
	506	2016	010	CONSTRUCTION EXITS (INSTALL) (TY 1) and DOLLARS CENTS	SY	3,300.000	74
	506	2019	010	CONSTRUCTION EXITS (REMOVE) and DOLLARS CENTS	SY	3,300.000	75
	506	2024	010	BACKHOE WORK (EROSION & SEDM CONT) and DOLLARS CENTS	HR	50.000	76

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	ITEM NO	DESC CODE	S.P. NO.				
	506	2034	010	TEMPORARY SEDIMENT CONTROL FENCE DOLLARS and CENTS	LF	6,818.000	77
	506	2042	010	BIODEGRADABLE EROSION CONTROL LOGS(18") DOLLARS and CENTS	LF	3,861.000	78
	508	2002		CONSTRUCTING DETOURS DOLLARS and CENTS	SY	8,563.000	79
	512	2008	001	PORT CTB (FUR & INST)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	9,660.000	80
	512	2009	001	PORT CTB (FUR & INST)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	720.000	81
	512	2011	001	PORT CTB (DES SOURCE)(SAFETY SH)(TY 2) DOLLARS and CENTS	LF	60.000	82
	512	2026	001	PORT CTB (MOVE)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	8,520.000	83
	512	2027	001	PORT CTB (MOVE)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	220.000	84
	512	2029	001	PORT CTB (STKPL)(SAFETY SH)(TY 2) DOLLARS and CENTS	LF	60.000	85
	512	2044	001	PORT CTB (REMOVE)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	9,660.000	86

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	ITEM NO	DESC CODE	S.P. NO.				
	512	2045	001	PORT CTB (REMOVE)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	720.000	87
	529	2006		CONC CURB (MONO) (TY II) DOLLARS and CENTS	LF	61,062.000	88
	529	2007		CONC CURB (DOWEL) DOLLARS and CENTS	LF	309.000	89
	530	2010		DRIVEWAYS (CONC) DOLLARS and CENTS	SY	1,258.000	90
	530	2011		DRIVEWAYS (ACP) DOLLARS and CENTS	SY	248.000	91
	531	2010		CURB RAMPS (TY 7) DOLLARS and CENTS	EA	58.000	92
	540	2001		MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	700.000	93
	542	2001		REMOVING METAL BEAM GUARD FENCE DOLLARS and CENTS	LF	353.000	94
	542	2002		REMOVING TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	1.000	95
	544	2001		GUARDRAIL END TREATMENT (INSTALL) DOLLARS and CENTS	EA	2.000	96
	544	2003		GUARDRAIL END TREATMENT (REMOVE) DOLLARS and CENTS	EA	2.000	97

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	ITEM NO	DESC CODE	S.P. NO.				
	618	2018		CONDT (PVC) (SCHD 40) (2") DOLLARS and CENTS	LF	390.000	98
	618	2019		CONDT (PVC) (SCHD 40) (2") (BORE) DOLLARS and CENTS	LF	1,020.000	99
	618	2022		CONDT (PVC) (SCHD 40) (3") DOLLARS and CENTS	LF	230.000	100
	618	2024		CONDT (PVC) (SCHD 40) (4") DOLLARS and CENTS	LF	450.000	101
	618	2025		CONDT (PVC) (SCHD 40) (4") (BORE) DOLLARS and CENTS	LF	1,020.000	102
	618	2040		CONDT (PVC) (SCHD 80) (4") DOLLARS and CENTS	LF	864.000	103
	620	2008	001	ELEC CONDR (NO. 4) INSULATED DOLLARS and CENTS	LF	350.000	104
	620	2009	001	ELEC CONDR (NO. 6) BARE DOLLARS and CENTS	LF	1,790.000	105
	620	2012	001	ELEC CONDR (NO. 8) INSULATED DOLLARS and CENTS	LF	2,500.000	106
	620	2016	001	ELEC CONDR (NO.12) INSULATED DOLLARS and CENTS	LF	1,100.000	107
	624	2012		GROUND BOX TY C (162911) W/APRON DOLLARS and CENTS	EA	24.000	108

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	636	2002		ALUMINUM SIGNS (TY G) DOLLARS and CENTS	SF	35.000	109
	644	2001		INS SM RD SN SUP&AM TY 10BWG(1) SA(P) DOLLARS and CENTS	EA	82.000	110
	644	2006		INS SM RD SN SUP&AM TY 10BWG(1) SA(U) DOLLARS and CENTS	EA	5.000	111
	644	2056		RELOCATE SM RD SN SUP & AM TY 10BWG DOLLARS and CENTS	EA	2.000	112
	644	2060		REMOVE SM RD SN SUP & AM DOLLARS and CENTS	EA	35.000	113
	647	2001		INSTALL LRSS (STRUCT STEEL) DOLLARS and CENTS	LB	177.500	114
	662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	11,669.000	115
	662	2012		WK ZN PAV MRK NON-REMOV (W) 8" (SLD) DOLLARS and CENTS	LF	872.000	116
	662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	10,829.000	117
	662	2064		WK ZN PAV MRK REMOV (W) 4" (BRK) DOLLARS and CENTS	LF	125.000	118
	662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	63,280.000	119

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	ITEM NO	DESC CODE	S.P. NO.				
	662	2072		WK ZN PAV MRK REMOV (W) 8" (BRK) DOLLARS and CENTS	LF	623.000	120
	662	2075		WK ZN PAV MRK REMOV (W) 8" (SLD) DOLLARS and CENTS	LF	4,441.000	121
	662	2079		WK ZN PAV MRK REMOV (W) 24" (SLD) DOLLARS and CENTS	LF	512.000	122
	662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	120,635.000	123
	666	2003		REFL PAV MRK TY I (W) 4" (BRK)(100MIL) DOLLARS and CENTS	LF	13,860.000	124
	666	2012		REFL PAV MRK TY I (W) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	31,155.000	125
	666	2036		REFL PAV MRK TY I (W) 8" (SLD)(100MIL) DOLLARS and CENTS	LF	13,129.000	126
	666	2042		REFL PAV MRK TY I (W) 12"(SLD)(100MIL) DOLLARS and CENTS	LF	5,367.000	127
	666	2048		REFL PAV MRK TY I (W) 24"(SLD)(100MIL) DOLLARS and CENTS	LF	1,086.000	128
	666	2054		REFL PAV MRK TY I (W) (ARROW) (100MIL) DOLLARS and CENTS	EA	56.000	129
	666	2096		REFL PAV MRK TY I (W) (WORD) (100MIL) DOLLARS and CENTS	EA	52.000	130

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	ITEM NO	DESC CODE	S.P. NO.				
	666	2111		REFL PAV MRK TY I (Y) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	29,863.000	131
	666	2126		REFL PAV MRK TY I (Y) 12"(SLD)(100MIL) DOLLARS and CENTS	LF	291.000	132
	666	2189		PAVEMENT SEALER 4" DOLLARS and CENTS	LF	74,614.000	133
	666	2191		PAVEMENT SEALER 8" DOLLARS and CENTS	LF	13,129.000	134
	666	2193		PAVEMENT SEALER 12" DOLLARS and CENTS	LF	5,658.000	135
	666	2195		PAVEMENT SEALER 24" DOLLARS and CENTS	LF	1,086.000	136
	666	2219		PAVEMENT SEALER (ARROW) DOLLARS and CENTS	EA	56.000	137
	666	2220		PAVEMENT SEALER (WORD) DOLLARS and CENTS	EA	52.000	138
	672	2017		REFL PAV MRKR TY II-C-R DOLLARS and CENTS	EA	681.000	139
	677	2001		ELIM EXT PAV MRK & MRKS (4") DOLLARS and CENTS	LF	48,919.000	140
	677	2003		ELIM EXT PAV MRK & MRKS (8") DOLLARS and CENTS	LF	2,760.000	141

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	ITEM NO	DESC CODE	S.P. NO.				
	677	2005		ELIM EXT PAV MRK & MRKS (12") DOLLARS and CENTS	LF	381.000	142
	677	2007		ELIM EXT PAV MRK & MRKS (24") DOLLARS and CENTS	LF	124.000	143
	677	2008		ELIM EXT PAV MRK & MRKS (ARROW) DOLLARS and CENTS	EA	22.000	144
	677	2009		ELIM EXT PAV MRK & MRKS (DBL ARROW) DOLLARS and CENTS	EA	2.000	145
	677	2018		ELIM EXT PAV MRK & MRKS (WORD) DOLLARS and CENTS	EA	20.000	146
	678	2001		PAV SURF PREP FOR MRK (4") DOLLARS and CENTS	LF	74,614.000	147
	678	2003		PAV SURF PREP FOR MRK (8") DOLLARS and CENTS	LF	13,129.000	148
	678	2004		PAV SURF PREP FOR MRK (12") DOLLARS and CENTS	LF	5,658.000	149
	678	2006		PAV SURF PREP FOR MRK (24") DOLLARS and CENTS	LF	1,086.000	150
	678	2007		PAV SURF PREP FOR MRK (ARROW) DOLLARS and CENTS	EA	56.000	151
	678	2018		PAV SURF PREP FOR MRK (WORD) DOLLARS and CENTS	EA	52.000	152

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	ITEM NO	DESC CODE	S.P. NO.				
	680	2002		INSTALL HWY TRF SIG (ISOLATED) DOLLARS and CENTS	EA	2.000	153
	681	2001		TEMP TRAF SIGNALS DOLLARS and CENTS	EA	3.000	154
	682	2001		BACK PLATE (12 IN) (3 SEC) DOLLARS and CENTS	EA	20.000	155
	682	2002		BACK PLATE (12 IN) (4 SEC) DOLLARS and CENTS	EA	8.000	156
	682	2003		BACK PLATE (12 IN) (5 SEC) DOLLARS and CENTS	EA	9.000	157
	682	2014		PED SIG SEC (12 IN) LED (2 INDICATIONS) DOLLARS and CENTS	EA	16.000	158
	682	2022		VEH SIG SEC (12 IN) LED (GRN ARW) DOLLARS and CENTS	EA	17.000	159
	682	2023		VEH SIG SEC (12 IN) LED (GRN) DOLLARS and CENTS	EA	29.000	160
	682	2024		VEH SIG SEC (12 IN) LED (YEL ARW) DOLLARS and CENTS	EA	17.000	161
	682	2025		VEH SIG SEC (12 IN) LED (YEL) DOLLARS and CENTS	EA	29.000	162
	682	2027		VEH SIG SEC (12 IN) LED (RED) DOLLARS and CENTS	EA	45.000	163

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	ITEM NO	DESC CODE	S.P. NO.				
	684	2031		TRF SIG CBL (TY A) (14 AWG) (5 CONDR) DOLLARS and CENTS	LF	1,410.000	164
	684	2033		TRF SIG CBL (TY A) (14 AWG) (7 CONDR) DOLLARS and CENTS	LF	1,155.000	165
	684	2036		TRF SIG CBL (TY A) (14 AWG) (10 CONDR) DOLLARS and CENTS	LF	30.000	166
	684	2046		TRF SIG CBL (TY A) (14 AWG) (20 CONDR) DOLLARS and CENTS	LF	1,815.000	167
	686	2049		INS TRF SIG PL AM(S) 1 ARM (48') LUM DOLLARS and CENTS	EA	2.000	168
	686	2065		INS TRF SIG PL AM(S) 1 ARM (65') LUM DOLLARS and CENTS	EA	6.000	169
	687	2001		PED POLE ASSEMBLY DOLLARS and CENTS	EA	2.000	170
	688	2001		PED DETECT (2 INCH PUSH BTN) DOLLARS and CENTS	EA	16.000	171
	730	2113	003	FULL-WIDTH MOWING DOLLARS and CENTS	CYC	6.000	172
	772	2001		POST AND CABLE FENCE(REMOVAL) DOLLARS and CENTS	LF	2,405.000	173
	6007	2001		REMOVING TRAFFIC SIGNALS DOLLARS and CENTS	EA	2.000	174

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	6010	2036		COMM CABLE (UNDRGRND)(18 AWG)(6 PAIR) and DOLLARS CENTS	LF	3,515.000	175

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General notes:

SW3P RESPONSIBILITIES

TxDOT Area of Responsibility

Responsible for the area defined by the limits of the subject project, except for those areas utilized and operated by the contractor. These areas include, though are not limited to, areas used for field offices, equipment and/or material storage, and concrete or asphalt plants.

TxDOT Operational Responsibility

Responsible for seeking coverage under the TPDES Construction General Permit (CGP) and operating the project within the requirements of the CGP for discharging storm water from the subject project and to notify MS4 permit holders of the intent to discharge storm water.

File a Notice of Termination with TCEQ upon completion of the project when the exposed areas have been stabilized with a vegetative cover of at least 70%.

Contractor Area of Responsibility

Responsible for all areas under their direct operational control which includes, though not limited to, areas used for field offices, equipment and/or material storage, and concrete or asphalt plants. These areas may be located on or off the subject project's R.O.W.

Contractor Operational Responsibility

Responsible for seeking coverage under the TPDES Construction General Permit (CGP) and adhering to all requirements of the permit for discharging storm water from the areas under their operational control. Perform regular inspections, prepare a written report of deficiencies, and repair deficiencies within the time frame set forth by the permit. File a Notice of Termination with TCEQ upon completion of the project when the exposed areas have been stabilized with a vegetative cover of at least 70%.

Responsible under contractual obligations to TxDOT to install, clean, repair, replace or remove sediment and erosion control devices as indicated on TxDOT's Inspection Reports, or as required by daily construction practices, within the time frame set forth by the permit.

Specification Data

Table 1: Soil Constants Requirements

	Description	Plasticity Index		Note
		Max	Min	
132	Embk(FINAL)(DENS CONT)(Type C)	35	12	1

Note 1: The above PI requirements do not apply to material excavated from the project. Do not use shale and obtain approval to incorporate shaley clay produced by the construction project.

Table 2: Basis of Estimate for Permanent Construction

Item	Description	Thickness	Rate		Quantity	
162	Block Sod	N/A			66830	SY
166*	Fert (12-12-12)		425	Lbs /Ac	2.93	TON
168	Vegetative Watering	N/A	240	Mg/Ac	3310	Mg
260	Hydrated Lime (slurry)	24"		9% by wt	16138	Ton
310	Prime Coat (SS-1 OR AE-P)	N/A	0.35	Gal/Sy	64323	Gal
341	Hot Mix Asphalt (Ty B)	4"	110	Lbs/Sy/In	37770	Ton
341	Hot Mix Asphalt (Ty B)	8"	110	Lbs/Sy/In	308	Ton
341	Hot Mix Asphalt (Ty C)	2"	110	Lbs/Sy/In	396	Ton

Note: (1) Base material weight based on 1.50 Ton/Cy (dry- compacted)
 (2) Asphalt weight based on 110 Lbs/Sy/inch
 (3) Subgrade weight based on 1.62 Ton/Cy (dry- compacted)

Table 3: Basis of Estimate for Temporary Erosion Control Items

Item	Description	Rate		Quantity	
164	Broadcast Seed (Temp)(Warm)			33414	SY
164	Broadcast Seed (Temp)(Cool)			33414	SY
166*	Fert (12-12-12)	425	Lbs /Ac	2.93	Ton
168	Vegetative Watering	140	Mg/Ac	3310	Mg
730	Strip Mowing	6	Cycles/yr*2 Yrs	176	AC

*For contractor's information only

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General:

Access will be provided to all business and residences at all times. Materials, labor and maintenance for these temporary accesses will not be paid for directly but will be considered subsidiary to the various bid items.

Prior to contract letting, bidders may obtain a free computer diskette or electronic files (from the engineer's office) that contains the earthwork information. If copies of the actual cross-sections, in addition to or instead of the diskette, are requested, they will be available at the engineers office for borrowing by copying companies for the purpose of making copies for the bidder at the bidders expense. This data is for non-construction purposes only and it is the responsibility of the prospective bidder to validate the enclosed data with appropriate plans, specifications and estimate for the project(s).

The construction, operation and maintenance of the proposed project will be consistent with the state implementation plan as prepared by the Texas Commission on Environmental Quality.

The disturbed area for this project, as shown on the plans is 46.1 acres. However, **the Total Disturbed Area** (TDA) will establish the required authorization for storm water discharges. The TDA of this project will be determined by the sum of the disturbed area in all project locations in the contract, and all disturbed area on all Project-Specific Locations (PSL) located in the project limits and/or within 1 mile of the project limits. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction site as shown on the plans, according to the TDA of the project. The contractor will obtain any required authorization from the TCEQ for the discharge of storm water from any PSL for construction support activities on or off of the project row according to the TDA of the project. When the TDA for the project exceeds 1 acre, provide a copy of the appropriate application of permit (NOI, or Construction Site Notice) to the engineer, for any PSL located in the project limits or within 1 mile of the project limits. Follow the directives and adhere to all requirements set forth in the TCEQ, Texas Pollution Discharge Elimination System, Construction General Permit (TPDES, CGP).

Leave all right of way areas undisturbed until actual construction is to be performed in said areas.

Use established industry and utility safety practices to erect poles, luminaries, signs or structures near any overhead or underground utility. Consult with the appropriate utility company prior to beginning such work.

Furnish project schedule in CPM format in accordance with SP008-049. If at any time during construction of this project the Contractor falls more than 15 days behind his schedule, submitted under provisions of Article 8.2, he shall furnish the Engineer with an updated realistic construction schedule.

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For the project to be deemed complete, permanently stabilize all unpaved disturbed areas of the project with a vegetative cover at a minimum of 70% density for the control of erosion.

Repair or replace any structures and utilities that might have been damaged by negligence or a failure to have utility locates performed.

Perform all electrical work in accordance with the National Electrical Code and Texas Department of Transportation Specifications.

Consult with appropriate electric company representatives according to their respective area to coordinate electrical services installations.

Questions prior to letting may be submitted by e-mail or fax to all three below and will be answered by e-mail or fax (e-mail:

CLAUD P. ELSOM III: CELSOM@DOT.STATE.TX.US
CHRIS W. BEHNKE: CBEHNKE@DOT.STATE.TX.US
LINDA DILLON: LDILLON@DOT.STATE.TX.US
FAX: 1-940-383-2267

A file containing these questions and answers will be available for review at the area engineer's office located at 2624 W. Prairie, Denton, TX, 76201.

All shop drawings, working drawings or other documents which require review by the Project Engineer will be submitted by the Contractor sufficiently in advance of scheduled construction to allow no less than thirty (30) calendar days for review and response by the Project Engineer.

Material On Hand (MOH) will not be used in calculating partial payments for Mobilization.

Provide the Engineer with a copy of all DBE subcontractor agreements prior to commencing work.

The following standard detail sheets have been modified:
MC-10-7 (MOD)

Underground utilities owned by the Texas Department of Transportation may be present within the Right-Of-Way on this project. For signal, illumination, surveillance, and communication & control, call 1-800-DIG-TESS (1-800-344-8377), TxDOT Traffic Signal Office (214-320-6682), and TxDOT Freeway Management Office (214-320-4439) for locates a minimum of 48 hours in advance of excavation. For irrigation systems, call TxDOT Maintenance Landscape Office (214-320-6205) for locates a minimum of 48 hours in advance of excavation. If city or town owned irrigation facilities are present, call the appropriate department of the local city or town a minimum of 48 hours in advance of excavation.

The contractor shall take extreme care when excavating or drilling in the vicinity of utilities. The contractor may be required to probe or expose these facilities. The

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contractor will be responsible for damages to utilities if the damage is caused by negligence or failure to have locates performed.

If any overhead or underground power lines need to be de-energized, the contractor shall call the power company to do this work. Any cost associated with de-energizing the power line and/or any other protective measures required shall be at the contractor's expense.

The contractor shall not place pedestrian crosswalk and stop bar pavement markings until pedestrian signals and push buttons are installed and operational.

Item 8:

This Project will be a Five-Day Workweek in accordance with Article 8.3.A.1.

Saw-cutting the existing intersection pavement, for removal, will be limited to two weeks in advance of removal.

To expedite intersection construction; the contractor may utilize hot mix asphalt concrete (HMAC) at a depth of one-half the plan thickness for lime treated subgrade in-lieu of the lime treated subgrade. The additional excavation and HMAC will be calculated for payment using the appropriate bid items. Overruns due to excess excavation for the added HMAC will not be paid for directly but is subsidiary to the HMAC. HMAC will be considered "small placements."

Intersection		Free Intersection Impact Days (days)	Daily Intersection Rental Charge (\$)
FM 423	Phase 1A-B	8	400
FM 423	Phase 1C	9	400
FM 423	Phase 1D	8	400
FM 423	Phase 1E	9	400
FM 423	Phase 1F	7	400
FM 423	Phase 1G	7	400
FM 423	Phase 1H	7	400
Teel	Phase 3A	13	400
Teel	Phase 3B	8	400
Teel	Phase 4A	9	400
Teel	Phase 5A	11	400
Teel	Phase 5B	10	400

Item 100:

The limits of preparing right of way will be measured from Sta. 50+30.00 to Sta. 200+00.00 along the centerline of construction.

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A significant portion of this project will have newly acquired Right of Ways and Easements. The contractor is encouraged to perform a site visit to obtain a comprehensive understanding of all of the obstructions such as, but not limited to, fences and gates which will be required to be removed and disposed of under this item.

The contractor will need to contact and document contacts with the adjacent property owners in situations where private irrigation systems extend onto TxDOT Right of Way to give them notice that these systems will be removed and possibly damaged during construction activities. If the adjacent property owner does not remove the components of the system from the right of way within one week of being notified; the contractor will be allowed to remove the irrigation system(s) within the Right of Way and shall cap each irrigation pipe that extends onto the ROW at or near the ROW line using common industry materials and methods. Payment for this work will be considered included in this item.

Item 104:

In those areas where the pavement is not to be overlaid, provide a smooth surface after the curb removal. Planing or grinding is considered an acceptable method at these locations. Measurement and payment is in accordance with this item.

Sawing of concrete is not paid for directly, but is considered subsidiary to this item.

Saw cutting of concrete will be full depth where portions are to remain.

Items 104 and 496:

Concrete pavement removed as a result of removing the inlets will not be paid for directly but will be considered as subsidiary to Item 496.

Removal of all concrete and structures of the types specified in the plans will be paid for under the pertinent bid item. The removal of other types of obstructions encountered will be paid for under Item 100, if applicable.

Item 110 and 132:

Excavation for driveways, sleeper slabs, alleys and intersections will not be paid for directly, but will be considered subsidiary to this item.

Items 110,132 and 164:

Use an approved laboratory to perform tests for sulfate and plasticity index and provide results on sources outside the right of way at no additional expense to the department. Test soil for sulfate levels in accordance with Tex-145-E. Contact the engineer for a list of approved laboratories. Notify the engineer 72 hours before sampling and testing material. Perform split-sample verification testing with the engineer when directed. The engineer will sample and test material produced by the construction project for specification requirements or material sources specified in the plans.

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When lime treatment is permitted, apply lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)." Furnish material containing sulfate at or below the threshold of 5000 parts per million (ppm). For material with sulfate levels greater than 3000 ppm, allow the mixture to mellow for at least 3 days, or as directed. The engineer will test material placed or excavated to a depth of one foot below and laterally to one foot outside the proposed treatment limit. Notify the engineer 48 hours before beginning to lime treat the material.

Shale is not an acceptable material for embankment. Do not use shaley clays in embankment unless approved in writing.

Perform vertical tracking on slopes to temporarily stabilize soil. Provide equipment with a track undercarriage capable of producing a linear soil impression measuring at least 12 inches in length by 2 to 4 inches in width by ½ to 2 inches in depth. Do not exceed 12 inches between track cleats. Install continuous linear track impressions where the minimum 12 inches in length impressions is perpendicular to the direction of water flow. This will not be paid for directly but considered subsidiary to this item.

Item 132:

Earth embankment Type C, is mainly composed of material other than shale. Furnish material that is free from vegetation or other objectionable material and that conforms to the requirements of Table 1 (Sheet A). If necessary, add lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)" in order to meet these requirements. Use Tex-121-E, figure I, page 5 to calculate the amount of lime required. Furnish material that has soluble sulfate levels of 3000 ppm or less tested in accordance with Tex-145-E. Use an approved laboratory to perform tests for sulfate and plasticity index and provide results on sources outside the right of way to the department. Contact the engineer for a list of approved laboratories. Notify the engineer 48 hours before sampling and testing material. Perform split-sample verification testing with the engineer when directed. The engineer will sample and test material produced by the construction project for specification requirements or material sources specified in the plans. The engineer will test material placed or excavated to a depth of one foot below and laterally to one foot outside the proposed treatment limit. Lime treatment and testing of this material will not be paid for directly, but will be considered subsidiary to this item.

Item 260:

Furnish and distribute MS-2 smoothly and evenly at the rate of 0.20 gallons per square yard to cure lime, as directed.

Provide Commercial Lime Slurry and apply lime by slurry placement method.

Item 301:

Provide liquid antistripping agents unless otherwise directed. Provide manufacturer's instruction for liquid antistripping agent.

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Add the minimum percentage determined by the manufacturer and try subsequent trials at 0.25% increments, unless otherwise instructed by the manufacture.

Items 305:

Saw existing asphalt along neat lines where portions are to be left in place temporarily or permanently. Sawing is not paid for directly, but is subsidiary to this item.

Properly dispose of unsalvageable material at your own expense.

Slope longitudinal faces greater than 1 ¼" To a minimum of 1:1 slope at the end of the work period if traffic is able to traverse the joint. Slope transverse tapers to a minimum of 36:1 at the end of the workday. Remove the taper prior to continuing the milling.

For open shoulder sections, plane the asphalt so the flow of water is not impeded at the shoulder edge or across the surface. Added planing up to three feet in width outside the lines and grades of the plans, necessary to provide proper drainage, will be subsidiary to the bid item.

Separate the asphalt pavement from the base material. Stockpile the asphalt pavement at the intersection of US 377 and US 380 east of Denton. Place the asphalt pavement material in a stockpile that meets the dimensions and requirements designated by the engineer.

Stockpile materials in uniform piles up to 15 feet in height unless otherwise instructed. Furnish adequate equipment at the stockpile to keep and leave the materials in a neat and orderly manner.

Contractor may take possession of 12,000 TONS of recycled asphalt pavement as shown below for use in ACP, for fill in medians per plans, and for temporary driveway access.

Total RAP	24,419 Tons
Contractor use	12,500 Tons
Stockpile	11,919 Tons

If determined by the Engineer to be necessary, replace standard sweepers with vacuum type sweepers to control excessive dust. Vacuum type sweepers will be subsidiary to the bid item.

Items 340, 341, 342, 344, 346, SS3000 and SS3001:

Place hot mix asphalt when the roadway surface temperature is equal to or higher than the temperatures listed in Table 4 unless otherwise approved. Measure the roadway surface temperature with a handheld infrared thermometer. The Engineer may allow mixture placement to begin prior to the roadway surface reaching the required temperature requirements if conditions are such that the roadway surface will reach the

required temperature within 2 hrs. of beginning placement operations. Unless otherwise shown on the plans, place mixtures only when weather conditions and moisture conditions of the roadway surface are suitable in the opinion of the Engineer.

Table 4: Minimum Pavement Surface Temperatures			
		Minimum Pavement Surface Temperatures in Degrees Fahrenheit	
Specification Item Number	High Temperature Binder Grade	Subsurface Layers or Night Paving Operations	Surface Layers Placed in Daylight Operations
Items 340, 341 & 344	PG 64	45	50
	PG 70	55 ¹	60 ¹
	PG 76	60 ¹	60 ¹
Items 342 and 346 SS 3000 & SS 3001	PG 76	65 ¹	70 ¹
	Asphalt Rubber (A-R)	65 ¹	70 ¹

Note 1: Contractors may pave at temperatures 10°F lower than the values shown in Table 4 when utilizing a paving process or equipment that eliminates thermal segregation. In which cases, the contractor must use either an infrared bar attached to the paver, or a hand held thermal camera, or a hand held infrared thermometer operated in accordance with Test Method 244-F to demonstrate to the satisfaction of the engineer that the uncompacted mat has no more than 10°F of thermal segregation.

Items 341:

Use aggregate that meets the Surface Aggregate Classification (SAC) requirement of Class B.

The use of Recycled Asphalt Pavement (RAP) will not be allowed in the top four (4) inches of any final HMAC sections where HMAC is the final surface.

Provide the engineer the opportunity to witness all mixture design tests. The engineer may require a retest if not given the opportunity to witness.

Dilution of tack is not allowed.

Provide PG binder 64-22 in Type B mixture.

Provide PG binder 70-22 in Type C mixture.

Use no more than 20% RAP in Type A or B HMAC mixtures.

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Item 360:

The pavement widening joint detailed in plan is to be used at all locations where concrete pavement is to be placed adjacent to existing concrete pavement. This joint will use 33 inch #6 bars at 36 inch c-c spacings with 12 inch embedment into the existing concrete with an approved epoxy. Holes for the tiebars shall be made by coring impact drilling will not be permitted. Payment for installation of these joints will not be made directly, but will be considered subsidiary to this item.

Use of multiple piece tiebars will be required. Provide chairs for multiple piece tiebars, threaded connectors or other adequate devices, used in concrete paving, or tie them to the pavement reinforcing steel. If approved by the engineer for specific areas, in lieu of multiple piece tiebars, drill holes into the pavement and grout straight tiebars in place with epoxy. Use a non-impact, rotary core drill to prevent damage to the pavement unless otherwise directed. Clean the drill holes and then completely fill with epoxy before inserting the tiebar. Do not bend the tiebars or insert them into plastic concrete without the approval of the engineer.

Provide curbs monolithically constructed with the concrete pavement. If continuous monolithic curb has to be temporarily omitted for any reason, provide dowelled curbs in the proposed areas, as detailed in the plans, and apply an approved epoxy resin to the pavement to receive the curb as directed. This work and materials will not be paid for directly, but is considered subsidiary to this item.

Stockpile the concrete aggregates at the plant site.

Provide a curing machine equipped with rubber tires, or other acceptable arrangement, so that the machine will span the pavement and monolithic curb.

Place construction, sawed and contraction joints in accordance with the pavement detail sheet and as directed. Joint locations, other than as shown on the plans, are subject to approval. Pavement leaveouts are required on this project as necessary to provide for traffic at driveways and side streets as shown in the plans or as directed. The cost of providing these leaveouts, including the construction of a suitable crossover connection at each site, is not paid for directly but is considered subsidiary to this item.

If a traveling form paver is used, provide one equipped with an electronically operated horizontal control device.

Provide tiebars in longitudinal joints but do not place them within 15 inches of transverse joints.

Backfill is not paid for directly but is considered subsidiary to pertinent Items.

Item 360 and 421.

When needed, Contractor personnel performing job-control testing on concrete must be ACI- Certified. Provide a copy of certification paper to the Engineer upon arrival and

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before testing at job site. Furnish hard copies of calibration reports for testing equipment when non-TxDOT approved equipment is used to test concrete.

The engineer may allow the use of local commercial laboratories under contract to provide these services.

Item 400:

Structural Excavation is not paid for directly but is considered subsidiary to pertinent Items.

When placing concrete storm drain pipe on slopes of greater than 10 percent, provide cement stabilized backfill to a depth shown on the plans. The aggregate shall conform to the requirements of Article 421.2.E.2.

Item 416:

The contractor shall probe before drilling foundations to determine the location of utilities and structures. Foundations shall be paid for once regardless of extra work caused by obstructions.

Provide a smooth finish for all portions of drill shafts extending above proposed ground. A 3/4 inch chamfer shall be formed on the top edge of each signal pole foundation. This work will not be paid for directly, but shall be subsidiary to this item.

Item 421:

Furnish mix designs to the Engineer in a format compatible to the latest version of the Department's Construction Management System (Site Manager). Mix Design templates will be provided by the Engineer.

Provide sulfate resistant concrete for box culverts and drill shafts. High performance concrete meets the requirement for sulfate resistant concrete when Class C fly ash and Type I cement is not used in the mix design.

Strength evaluation using maturity testing, Tex-426-A, may be used for all concrete elements except drill shafts and mass concrete pours.

Provide compression testing equipment.

Air-entrain all concrete except for Class "B" and concrete used in drilled shafts. For structural concrete, if the air content is more than 1.5% below the required air, follow manufacturer recommendations to add the necessary approved air bags to increase the air content at the job site. Limit the adding of air bags in the field to one trial. Do not reject the load of concrete due to low air content; accept concrete based on strength tests.

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If the % air is an ongoing problem, the engineer may suspend the use of the concrete design or supplier at any time.

Item 464:

The concrete collars and the connections of pipes to existing or proposed concrete boxes or pipe will not be paid for directly but will be considered subsidiary to the various bid items.

Where storm drains dead-end, plug with a concrete plug of a thickness equal to 1-1/2 inches per foot of diameter of pipe with a minimum thickness of 3 inches. The cost of the plugs shall be included in the unit price bid per foot of the various storm drain pipes.

Item 465:

Tackweld all inlet grates and manhole covers to the frame with two 1-inch welds. Supply un-painted cast iron inlet grate and frame and/or cast iron manhole frame and cover.

Item 465 and 466:

Backfill all excavations for curb inlets, inlet extensions, manholes, junction boxes, headwalls, wingwalls, etc. with flowable backfill. The flowable backfill shall extend a minimum distance of two foot away from the outside face of the structure around the pipe(s) or box(s) attaching to the inlets, etc. along the centerline of the pipe or to the limits of the excavation which ever is greater. The flowable backfill will need to be done in conjunction with the stage construction of the drainage structures. This will be considered included in the price of the structures.

Item 467:

Riprap will be required.

Item 496:

Inlet grates and manhole covers become the property of the contractor for disposal.

Item 502:

Work will not be allowed to occur simultaneously on both sides of the roadway at the same location.

Contractor must coordinate with other construction Contractors on adjacent roadways during construction.

Provide written proposed lane closure information by 1:00 pm on the business day prior to the proposed closures. Do not close lanes for which this requirement has not been met.

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When excavation is required next to a pavement lane carrying traffic and the widening is not completed by the end of the work day, backfill against the edge of the pavement with at least a 3:1 slope using an acceptable material to support vehicular traffic. Carefully remove and dispose of this material when work resumes. Backfilling pavement edges, and the materials required for the work will be subsidiary to this item.

Erect a Type III barricade immediately in front of or at each end of all stockpiles that are less than 30 feet from the edge of any traveled lane. Place one Object Marker (OM-2Y) alongside the stockpile for every 100 feet of stockpile length.

Limit lane closures along existing FM 2934 to the hours between 9:00 am and 3:30 pm. Work in other areas of the project is not restricted to this time frame.

Place barricades and signs in locations that do not obstruct the sight distance of drivers entering the highway from driveways or side streets.

Do not commence work on the road before sunrise. Do not operate or park any equipment/machinery closer than 30 feet from the traveled roadway after sunset unless authorized.

When moving unlicensed equipment on or across any pavement or public highways, protect the pavement from all damage using an acceptable method.

Shadow vehicles equipped with truck mounted attenuators are required as shown on traffic control plan (tcp) standards

Upon placement of one-way traffic construction, entire driveway shall be constructed in 28 days using HES concrete.

Changeable message signs, as shown on the Traffic Control Sheets or Stage/Phase construction sheets, will be considered included in Item 502. The contractor shall determine the number of required changeable message signs based on their construction schedule. If the message is to remain static for more than 14 calendar days; static work zone signs of ample size on crash approved supports may be detailed and submitted for approval for use in-lieu of using changeable message sign(s).

Placement, programming, fuel and maintenance, etc. of CMS's will be subsidiary to this bid item.

Item 504:

The contractor will be required to furnish one field office, type E, and laboratory, type E, at the project site. The field office shall provide a minimum of five hundred (500) square feet of gross floor area. The floor will be partitioned into a minimum of two rooms and furnished with doors, floor covering and a minimum of two windows in each room. The doors and windows shall be reinforced with burglar bars of similar protection. The bath room needs to be at least 6 ft. x 7 ft. the building shall have at least one equipment storage closet that provide a minimum of 3 ft. x 3 ft. of floor space or equivalent, and

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shall have provisions for locking securely. The building shall have two exterior doors. Steps for exterior doors shall have hand railings. The furniture for the field office shall include two desks, one computer desk and a 4-drawer metal filing cabinet. The field laboratory shall not be a metal structure. It shall have minimum dimensions of 8 ft. x 12 ft., and include a turbine vent or equivalent. The structure will be wired for electricity with all outlets being ground fault indicators and have a window of at least 18 inch x 24 inch in size and located on the opposite side of the structure from the door.

The contractor will furnish one asphalt mix control laboratory (type D) At each asphalt mixing plant used for this project. The asphalt mix control laboratory (type D) shall meet the dimensional requirements specified for a field laboratory (type A). The contractor will be required to provide one computer and printer with internet access at each plant used for this project. No direct compensation will be made for providing these items at the asphalt mixing plant(s).

A 10 lb. type a, b, c fire extinguisher will be furnished for each room of all facilities furnished under this item.

An all weather parking area for state vehicles shall be provided adjacent to the field office. The minimum size of the parking area shall be 60 feet by 40 feet and have adequate security lighting. The entire area shall be enclosed in a 6-foot high fence. A lockable vehicle gate shall be provided. This parking area shall not be paid for directly but will be considered subsidiary to the various bid items.

The contractor will furnish beam curing tanks. The tanks shall be elevated to a maximum height of one (1) foot above the ground or as approved by the engineer.

The field office and required furnishings shall be equivalent or better in quality to that utilized for contractor's field office.

The wage board will be of sufficient size for all required paperwork and all weather.

It shall be the entire responsibility of the contractor to maintain all field offices as approved by the engineer.

The contractor shall provide one local phone line to the field office. The contractor shall supply one phone jack and one telephone per room in the field office. The cost of the phone installation and various monthly phone service charges shall be the contractor's responsibility.

Provide and maintain one (1) copier capable of making 11" x 17" high-speed copies with feeder-tray.

Provide and maintain one (1) desktop computer, one (1) laptop computer with unlimited aircard and one (1) printer at the field office and provide internet service using a digital subscriber line (DSL) or a cable connection. DMS-10101, "Computer Equipment" is in the Department Material Specifications Manual and can be found @ the following site: <ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/manuals/dms.pdf>

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Toner and print cartridge in excess of one (1) each per color per month will be paid for by invoice at the request of the contractor.

Provide sealed bottled water, a bottled water cooler and disposable paper cups in each Lab and in the Field Office.

Provide telephone service at each field laboratory and office.

Item 506:

SW3P Maintenance Reports are made every seven calendar days. Make corrections as soon as possible before the next anticipated rain event or within seven calendar days after being able to enter the site to work for each BMP. A BMP site being "Too Wet to Work" is the only acceptable reason for not accomplishing the corrections with the seven calendar day time limit and should be thoroughly documented on Form 2118. If maintenance corrections are not made within this time frame then all work will cease, time charges will continue until SW3P is brought into compliance and is documented on Form 2118 after TxDOT review.

This in no way releases the contractor of liability for noncompliance.

Obtain from the Engineer a copy of the project's TPDES Storm Water Program and Notice of Intent or Construction Site Notice. Laminate the sheets and bond with adhesive to 36" X 48" plywood sign blanks. Ensure the sheets remain dry. Apply Type C Blue reflective sheeting as the background and add the text "SW3P" in 5" white lettering, centered at the top. Attach the signs to approved temporary mounts and locate at each of the project limits or as directed by the Engineer. SW3P Signs, maintenance, and repostings will be subsidiary to Item 502.

Curb Inlet Sediment Protection devices as detailed on the Curb Inlet Sediment Protection Sheet will be paid for by the Linear Foot. The price is full compensation for furnishing and placing the device, maintenance, sediment removal, and removal.

Item 508:

Transition pavement to be constructed in accordance with Item 508 and will be considered subsidiary to Item 502.

Testing of materials used in the construction of temporary detour may be waived when approved by the Engineer.

Item 512:

Furnish low profile concrete barrier as detailed on the Low Profile Concrete Barrier Standards. Retain possession of the barrier at the end of the project.

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Contact Denton Area Office at 940-387-1414 to pick-up and return concrete traffic barrier from the storage area located at the IH 35E and IH 35W interchange. Number and repair concrete traffic barrier prior to returning to stockpile area. Provide necessary connection hardware for installation of concrete traffic barrier. Retain possession of connection hardware provided for this project. Remove damaged barrier from the project. This work is subsidiary to Item 512.

Item 529:

Provide grooved joints at 10' intervals and $\frac{3}{4}$ inch expansion joint material for doweled curb at the same locations as on the existing pavement.

For curb and gutter sections, provide grooved joints at 10 ft intervals and $\frac{3}{4}$ in expansion joint material at a maximum of 50 ft centers and at all radius points and inlets.

Curb and gutter transitions will be paid for by the foot at the unit price for the corresponding curb or curb and gutter section.

Saw joints at the same location as on the existing pavement.

Curb transition is paid for as Type II curb.

The installation of curb openings is not paid for directly, but is considered subsidiary to this item.

Provide curbs monolithically constructed with the concrete pavement. If continuous monolithic curb has to be temporarily omitted for any reason, provide doweled curbs in the proposed areas, as detailed in standard sheet CCCG-01, and apply approved epoxy resin to the pavement to receive the curb as directed. This work and materials will not be paid for directly, but is considered subsidiary to this item.

Item 540:

Furnish one type of post throughout the project except as specifically noted in the plans.

Item 542:

Salvage metal beam guard fence removed from this project and haul to and stockpile at the storage area located at the IH-35E and IH-35W interchange. The work involved in hauling this material will not be paid for directly, but will be considered subsidiary to this item.

Item 585:

Use Surface Test Type A on channelized turn lanes, intersections and driveways.

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Use Surface Test Type B on all mainlanes. Use pay adjustment schedule 2 for this project for all travel lanes. Corrective action will be required on all travel lanes if the IRI is greater than 95.

Localized roughness penalty will be assessed in accordance with 585.3.D.2.C. (1).

Item 610, Roadway Illumination Assemblies:

Luminaire ballasts for new traffic signal mast arm poles shall be rated for operation at 240 volts and new fixtures shall be 250W metal halide.

The luminaire housings shall be powder coated using RAL 9017 (traffic black) paint or engineer approved equal. The covers for the luminaries shall be a clear flat-glass insert.

When luminaires are to be installed on mast arm poles, a separate terminal strip in the signal pole access compartment shall be provided. The terminal strip shall be 4 circuit Buchanan type 104SN or Kulka type 985-GP-4CU or equivalent.

The conductors from the service pole to the terminal strip shall be No. 8 XHHW wires. The conductors from the terminal strip to the luminaire shall be No. 12 XHHW wires.

Item 618, Conduit:

All conduit shall be installed at a depth of 36" below grade.

The locations of conduit and ground boxes are diagrammatic only and may be shifted by the engineer to accommodate field conditions.

If conduits are bored, conduit shall be placed under existing pavement by an approved boring method unless otherwise directed by the engineer. Pits for boring shall not be closer than 2 feet from the edge of the pavement unless otherwise directed by the engineer. Water jetting will not be permitted.

If boring is used for under pavement conduit installations, the maximum allowable over-cut shall be 1 inch in diameter.

If conduits are bored, the vertical and horizontal tolerances shall not exceed 18 inches as measured from the intended target point.

The use of a pneumatically driven device for punching holes beneath the pavement (commonly known as a "missile") will not be permitted on this project.

The contractor shall install a non-metallic pull rope in conduit runs in excess of 50 feet.

A colored cleaner-primer shall be used on all PVC to PVC joints before application of PVC cement.

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The contractor shall seal all conduit ends with a permanently soft, non-toxic duct seal. The duct seal must not adversely affect plastic materials or corrode metals.

Conduit installed for future use shall have non-metallic pull ropes installed and shall be capped using standard weather tight conduit caps, as approved by the engineer. This work shall not be paid for directly but shall be considered subsidiary to this item.

Existing conduit may be proposed for reuse in this project. If the existing conduit cannot be used, repair or replace this conduit as directed. Repair of the conduit will be paid for as "extra work" on a force account basis. Probe the existing conduit when locating drill shafts so that its condition will be known before it is needed.

When using existing conduit, ensure that all conduits have bushings and are cleaned of mud and debris. This work will not be paid for directly, but shall be subsidiary to this item.

Use materials from prequalified producers as shown on the Construction Division (CST) of the Texas Department of Transportation (TxDOT) material producers list. Use the following website to view this list: <http://www.dot.state.tx.us/business/materialproducerlist.htm>.

The locations of the 2-4" PVC pipes conduits as shown at various locations on the Plan and Profile sheets are for diagrammatic purposes only. These pipes are as detailed on plan sheet 'Miscellaneous Roadway Details Sheet 2 of 2' "PVC Detail". The contractor will be required verify available water sources prior to installation. The contractor shall also provide to the engineer the proposed method of installation, detailing how the conduits, lime treated subgrade and storm sewer system will avoid each other. Open cutting of the lime treated subgrade will not be considered an acceptable method. The contractor will be required to field locate and determine the X, Y, Z coordinates for each end of each set of conduit runs and shall present this information to the TxDOT Project Manager, in data base format, prior to the processing of the monthly estimate in which the installation took place. The contractor shall prepare as-built sheets describing the location of each conduit set (ex. 58 ft. left of Sta. ###) along with the coordinates in a table format for inclusion of the as-built plans.

Item 620, Electrical Conductors:

When two or more conductors are present in one conduit or enclosure, identify the conductors as shown in the "electrical details" (ED) standard sheets. If the identification tag with two plastic straps is too large for the conductors, a tag with a single plastic strap may be used if approved by the engineer. Each tag shall indicate circuit number, letter, or other identification as shown on the plans.

Do not use non-certified persons to perform electrical work. See item 7.15 electrical requirements and special provision to Item 7 for additional details.

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Item 624, Ground Boxes:

All ground boxes used for signals shall have "Traffic Signals" and "Danger-High Voltage" imprinted on the cover.

When using existing ground boxes, ensure that the ground boxes are clean, properly secured, and have a minimum of 9 inches of gravel as a base. This work will not be paid for directly, but shall be subsidiary to this item.

Item 628, Electrical Services:

The contractor shall relocate the existing overhead type 'GC' electrical service at FM 423 to the location shown on the plans. This work shall be coordinated with Co-Serv Electric utility and will be paid for under item 681, "Temporary Traffic Signals".

All neutral wire shall be white insulated wire only.

Item 636:

Attach high intensity sheeting applied to extruded aluminum panels to each individual extrusion. Lap each extrusion's horizontal edge with sheeting and do not bridge horizontal gaps between extrusions.

Install new overhead signs tilted "down" at 3°. Furnish and obtain approval of all shop drawings detailing the method to accomplish this installation. All material and labor required for this special installation is considered subsidiary to Item 636.

Place new guide signs on existing overhead sign structures and bridge rail supports. Existing attachment hardware may be reused as permitted. Sign support brackets may be cut or removed as directed; however do not extend or lengthen existing brackets. Furnish any additional sign attachment hardware, support brackets, etc. as required. Payment will not be made for the additional brackets, but is considered subsidiary to this Item.

Ensure the minimum vertical clearance, as shown in the plans, at the highpoint of the roadway after the installation of all overhead signs. Mount new overhead signs with 46% of the sign height positioned below the centerline of the truss, or obtain approval for any exceptions.

Disconnect all sign lighting fixtures on overhead sign structures at the service poles and remove the service poles where indicated on the plans. Abandon associated conduit as directed at these locations. Contact the appropriate power company and close the accounts at these locations. Notify the TxDOT signal shop at (214)320-6682 when the accounts have been closed and remove the meters at these locations and deliver them to the TxDOT signal shop. Remove existing sign lights on all sign structures and bridge mounted signs within the project limits. Disconnect and isolate any existing electrical power supply prior to removal of the sign lights.

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The contractor shall relocate the existing overhead type 'gc' electrical service at FM 423 to the location shown on the plans. This work shall be coordinated with Co-Serv electric utility and will be paid for under item 681, "temporary traffic signals".

Item 644, Small Roadside Sign Supports and Assemblies:

Any signs required that are not detailed on the plan sheets shall be in conformance with the "Standard Highway Sign Designs for Texas" (SHSD Manual) and the 2006 TMUTCD

Items 644, 647:

Prior to taking elevations to determine lengths for fabrication of sign posts and/or sign support towers, obtain verification of all proposed locations.

Base all sign support quantities for pipe and structural steel on the dimensions shown on the approved shop drawings or as approved in writing. Make calculations for measurement of the sign support quantities from the approved shop drawing in accordance with Article 9.1 of the standard specifications. Measure increases or decreases in quantities caused by changes in design after the shop drawings are approved as specified and revised quantities will be the basis for payment.

Provide field galvanizing and metallizing equipment, as per Item 445, at all times and make repairs to galvanized surfaces according to the above specification item at intervals as directed.

After sign supports with signs attached have been erected, wash individual units requiring cleaning with an approved cleaning solution to remove all grease, oil, dirt, smears, streaks, and other foreign particles.

Torque the anchor bolts for only the Exit Gore signs to 60 foot-pounds.

Item 666:

Provide Type III glass traffic beads that meet the requirements of departmental materials specifications DMS-8290.

Item 672:

Black adhesive will be used on asphalt pavements. White adhesive will be used on concrete pavements.

Item 677:

Grinding of pavements is not allowed to eliminate pavement markings.

Placement of paint or thermo is not allowed to eliminate pavement markings.

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Item 680, Installation of Highway Traffic Signals:

This project shall consist of furnishing and installing all materials and equipment necessary for a complete signal system at the proposed locations. In addition to these items, the contractor shall be responsible for the following:

1. Furnishing and installing all regulatory signs for mounting on signal poles and mast arms. These signs shall be furnished in accordance with item 636, will not be paid for directly, and shall be considered subsidiary to item 680. Signs shall be mounted with Astro-Sign Brac or Signfix aluminum channel or equal as approved by the engineer. All signs shall have type C sheeting.
2. Submittal literature shall be provided for all contractor furnished traffic signal equipment prior to installation.
3. The contractor shall have a qualified technician at the project site along with traffic signal technicians and engineers from the City of Frisco to place the permanent traffic signals in operation.
4. During the thirty-day test period, the contractor shall utilize qualified personnel to respond to and diagnose all trouble calls. He shall repair any malfunctions to signal equipment he supplied on the project. A local telephone number (not subject to frequent changes) where trouble calls are to be received on a 24-hour basis shall be provided to the engineer by the contractor. The contractor's response time to report calls shall be within a reasonable travel time from a Dallas address, but not more than two (2) hours maximum. Appropriate repairs shall be made within 24 hours. The contractor shall place a log book in each controller cabinet and keep a record of each trouble call reported. He shall notify the engineer of each trouble call.
5. Relocating existing street name signs for mounting on signal poles and mast arms. Contractor shall furnish mounting hardware for street name signs.
6. The contractor shall relocate the existing Opticom detectors and video detection cameras from the temporary signals to the new mast arm signals as shown on the plans.
7. The contractor shall install the Opticom cable supplied by the City of Frisco.
8. The contractor shall notify the city traffic signal staff 48 hours prior to needing access to the existing traffic signal cabinets.

No extra compensation will be allowed for fulfilling the requirements stated above.

Item 681, Temporary Traffic Signals:

This project shall consist of furnishing and installing all materials and equipment necessary for the complete signal setup at the proposed locations to be utilized during roadway construction. In addition to these items the contractor shall be responsible for the following:

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1. The contractor shall provide adjustments and maintenance of the existing traffic signals and temporary signals or a combination of both from the time construction begins on the project until the permanent traffic signals are placed in operation. Adjustment and maintenance of the temporary traffic signals should be in accordance with the layout sheets and traffic control plan during the roadway construction.
2. All signal heads shall be re-guyed and the cable re-strapped after adjustments to head locations have been made.
3. All signal heads that are to be relocated shall be done so during the same day. Portable stop signs at all approaches will be required any time the signals are inoperable. Relocation of Opticom detectors, video detection cameras, and street name signs shall be done within 48 hours of the signal head and controller relocation.
4. Bottom tether cable for signal heads and signs will only be required for the FM 423 intersection.
5. Submittal literature shall be provided for all contractor furnished traffic signal equipment prior to installation. New vehicle and pedestrian signal heads for temporary signals shall use LED displays.
6. The contractor shall have a qualified technician at the project site along with traffic signal technicians and engineers from the City of Frisco to place the relocated temporary signals in operation.
7. The temporary traffic signals at Teel Pkwy and Legacy Drive shall be removed after the permanent signals become fully operational. The FM 423 temporary signals shall remain in operation after completion of the project. The equipment shall be salvaged and remain the property of the applicable agency or the contractor. Equipment to be salvaged shall consist of poles, signal heads, controller cabinets, and any other equipment as directed by the engineer. TxDOT owned equipment will become the property of the contractor. City-owned equipment shall be delivered to the City of Frisco traffic signal storage facility after giving 48 hours notice.
8. During the roadway construction period, the contractor shall utilize qualified personnel to respond to and diagnose all trouble calls. He shall repair any malfunctions to signal equipment he supplied on the project. A local telephone number (not subject to frequent changes) where trouble calls are to be received on a 24-hour basis shall be provided to the engineer by the contractor. The contractor's response time to report calls shall be within a reasonable travel time from a Dallas address, but not more than two (2) hours maximum. Appropriate repairs shall be made within 24 hours. The contractor shall place a log book in each controller cabinet and keep a record of each trouble call reported. He shall notify the engineer of each trouble call.
9. Relocating existing street name and regulatory signs for mounting on signal spans. Furnishing and installing new regulatory signs for mounting on signal spans. Contractor shall furnish mounting hardware for the signs.

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10. Relocating existing FM 423 electrical service to location shown on the plans.

11. Furnishing and installing new concrete slab and base, and installing new controller cabinet (furnished by City) at FM 423 as shown on the plans. Contractor shall pick up controller cabinet from the City after giving 48 hours advance notice.

No extra compensation will be allowed for fulfilling the requirements stated above.

Item 682, Vehicle and Pedestrian Signal Heads:

All signal head attachments shall be designed such that the wiring to each signal head shall pass from the mast arm through the signal head bracing or attachment hardware to the signal head. No exposed cable or wiring will be permitted.

The signal head-to-mast arm connection must allow for adjustment about the horizontal and vertical axis.

Traffic signal heads for the permanent signals on this project shall be black polycarbonate with one-piece black polycarbonate back plates. Back plates, louvers (if required), and the inside of the visors shall have a flat black finish.

All mast arm mounted signal heads shall be turned down and all other signal heads shall be covered with burlap or other material approved by the engineer until placed into operation.

Signal heads mounted on poles and mast arms shall be level and plumb and aimed as directed by the engineer.

Item 684, Traffic Signal Cables:

The conductors in the Type A signal cable shall be No. 14 AWG.

A separate multiconductor cable (14 AWG) shall be used inside pedestal poles and mast arm signal poles from the terminal strip to each signal head as shown on the plans.

Each cable shall be identified as shown on the plans (cable 1, etc.) With permanent marking labels (Panduit Type PLM standard single marker tie, Thomas & Betts Type 548M or equivalent) at each ground box, pole base and controller.

Item 686, Traffic Signal pole Assemblies (Steel):

All traffic signal mast arm pole and pedestal pole assemblies shall be powder coated. The powder coat paint shall be RAL 9017 (traffic black) or engineer approved equal.

Powder coat paint finish – all assemblies shall be hot dipped galvanized to ASTM 123 and 153 specifications. Once galvanizing is completed, all exposed surfaces shall be mechanically etched by blast cleaning to remove mill scale, impurities and non-metallic

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foreign materials. All surfaces visually exposed are to be coated with a urethane or triglycidyl (TGIC) polyester powder to a minimum film thickness of 2.0 mils. The coating shall be electro statically applied and cured in a gas fired convention oven by heating the steel substrate to between 350 and 400 degrees Fahrenheit.

Luminaire arms for new signal poles shall be 10 feet in length.

Terminal strips in the signal pole access compartment shall be 12 circuit Buchanan type 112SN, Kulka type 985-GP-12 CU or equivalent. When more than 12 circuits are required, additional terminal strips of 8 circuits each shall be added.

All pole shafts and mast arms for this project shall be marked with the identification numbers from the plans to facilitate assembly of these items in the field. For projects with multiple intersections, the pole shafts and mast arms shall be identified by intersection.

Poles shall have nuts on top and bottom (double nuts) of the base plate.

Anchor bolts for mast arm signal poles shall be set so that two are in tension and two are in compression. Obtain approval of anchor bolt placement from the engineer before placing concrete.

All nuts installed on the anchor bolts for traffic signal pole assemblies need to be installed using an air impact wrench followed by two impacts from a striker wrench.

The traffic signal pole heights and mast arm lengths shown on the plans and in the material summary are to be used for bidding purposes only. Prior to fabrication, the contractor, in cooperation with the engineer, shall make field measurements to determine the actual pole height and mast arm length required. Vertical clearance shall be 17 to 19 feet from the roadway surface to the bottom of the lowest point on the signal head assembly or mast arm. In addition, place the signal heads a minimum of 40 feet and a maximum of 150 feet from the stop line. If the nearest signal must be more than 150 feet from the stop line, place a supplemental near-side signal head. These field measurements and elevations shall be determined from the actual field location of the pole foundations, considering all above and below ground utilities and the existing roadway elevations and lane widths.

All signal mast arms 28 feet and longer shall be provided with vibration dampers. Dampers shall be 18" x 48" for arms up to 48 feet long and 16" x 66" for longer mast arms. Dampers shall be installed with Astro-Sign Brac or Signfix aluminum channel or equal, a maximum of 3 feet from the end of the mast arm.

Provide 3 pipe plugs for wiring access on strain poles.

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Item 688, Pedestrian Detectors:

Pedestrian push buttons shall be the type that have permanent-type signs within the detector unit which explains their purpose and indicates which crosswalk signal is actuated.

The push button shall be activated by a minimum of 2 inch convex plunger. A protective shroud shall encircle the plunger to deter vandalism. The shroud shall be cast as part of the housing cover. The plunger shall protrude beyond the protective shroud a distance adequate to accommodate the switch travel.

While staking the pole locations, the contractor, along with the engineer, shall verify the location of the push buttons and the direction of the arrows on the signs prior to installation.

The pedestrian push button housings shall be painted black. The contractor shall furnish and install Polara Navigator push button assemblies or engineer approved equal.

Item 730:

Mow non-paved areas within the project prior to placement of permanent vegetation. Mow up to eight (6) cycles per growing season.

Item 5010:

Provide two (2) transportable cellular telephones. Assign each phone to a specific TxDOT employee associated with this project. Provide components such as batteries, cases and cords as needed. Cost of long distance calls not related to the work, or lost phones will be reimbursed by the individual employee to whom the phone is assigned.

Provide cellular phones with a minimum of 1000 anytime minutes of service in the base calling plan. Provide insurance for each phone.

Item 6007, Removing Traffic Signals:

The existing traffic signal poles and cables at FM 423 and Teel Pkwy shall be removed after the temporary signals become fully operational. The equipment shall be salvaged and remain the property of the City of Frisco. The equipment to be salvaged shall consist of poles, signal heads, and controller cabinets and any other equipment as directed by the engineer. This equipment shall be stockpiled at the City of Frisco stockpile facility after giving 48 hours notice.

Timber poles not set in concrete shall be completely removed without cutting off the pole. Timber poles set in concrete shall become the property of the contractor.

The list of material below is for the contractor's information only. It is the responsibility of the contractor to verify all items and quantities listed below.

List of materials / labor
Subsidiary to item 680

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>
250W HPS Luminaire	EA	7
Sign R3-L-L	EA	4
Sign SR3-4	EA	8
Sign R10-10L	EA	4
Sign R10-12	EA	4
Vibration Damper	EA	8
Relocate Street Name Sign	EA	8
Relocate Video Detection Camera	EA	12
Relocate Opticom Detector	EA	8
Install Opticom Cable (Furnished by City)	LF	2420

LIST OF MATERIALS / LABOR
SUBSIDIARY TO Item 681

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>
2" PVC Conduit (Sch 40)	LF	70
4" PVC Conduit (Sch 40)	LF	85
No. 6 AWG Bare Cndr	LF	115
No. 6 AWG Type XHHW, Power	LF	90
No. 8 AWG Type XHHW, Luminaires	LF	3330
Ground Box (Type C) with Apron	EA	1
Traffic Signal Controller Base and Foundation	EA	1
Vehicle Signal Section (12 inch)	EA	101
Ped. Signal Section (2 Indications in 1 Sec)	EA	10
Back Plate (3 Section) (12 inch)	EA	15
Back Plate (4 Section) (12 inch)	EA	4
Back Plate (5 Section) (12 inch)	EA	8
7 Cndr Traffic Signal Cable (14 AWG)(Type A)	LF	2490
10 Cndr Traffic Signal Cable (14 AWG)(Type A)	LF	1045
6 Pair, 18 AWG Cable (Video)	LF	2590
Install Opticom Cable (Furnished by City)	LF	1830
Relocate Existing Street Name Sign	EA	8
Relocate Existing Regulatory Sign	EA	6

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Sign R10-10L "Left Turn Signal"	EA	4
Sign R10-12 "Left Turn Yield on Green Ball"	EA	2
Relocate Existing Video Detection Camera	EA	10
Relocate Existing Opticom Detector	EA	8
Install Controller Cabinet (Furnished by City)	EA	1
Relocate Existing Overhead Type "GC" Elec. Service	EA	1
34' Strain Pole, Type D, with 8' Luminaire Arm	EA	7
Foundation, Type 36-B	LF	105
250W Luminaire	EA	7
1/4" Steel Guy Cable (Bottom Tether)	LF	650
3/8" Steel Guy Cable	LF	4400
1/2" Black Plastic Cable Straps	EA	1250

LIST OF MATERIALS
FURNISHED BY CITY OF FRISCO

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>
Opticom Cable	LF	4250
Controller Cabinet	EA	1

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COUNTY : DENTON

TEXAS DEPARTMENT OF TRANSPORTATION

GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

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

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

- ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS
- ITEM 100 PREPARING RIGHT OF WAY (103)
- ITEM 104 REMOVING CONCRETE
- ITEM 105 REMOVING STABILIZED BASE AND ASPHALT PAVEMENT
- ITEM 110 EXCAVATION (132)
- ITEM 132 EMBANKMENT (100) (204) (210) (216) (400)
- ITEM 161 COMPOST (160)
- ITEM 162 SODDING FOR EROSION CONTROL (166) (168)
- ITEM 164 SEEDING FOR EROSION CONTROL (162) (166) (168)
- ITEM 168 VEGETATIVE WATERING
- ITEM 260 LIME TREATMENT (ROAD-MIXED) (105) (132) (204) (210) (216)
(247) (300) (310) (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 (QC/QA) (210) (300) (301) (320)
(520) (585)
- ITEM 360 CONCRETE PAVEMENT (300) (420) (421) (438) (440) (529) (585)
- ITEM 400 EXCAVATION AND BACKFILL FOR STRUCTURES (132) (401) (420)
(421)
- ITEM 402 TRENCH EXCAVATION PROTECTION
- ITEM 416 DRILLED SHAFT FOUNDATIONS (420) (421) (440) (448)
- ITEM 432 RIPRAP (247) (420) (421) (427) (431) (440)
- ITEM 450 RAILING (420) (421) (424) (440) (441) (442) (445) (446) (448)
(540)
- ITEM 462 CONCRETE BOX CULVERTS AND STORM DRAINS (400) (420) (421)
(424) (440) (464) (476)
- ITEM 464 REINFORCED CONCRETE PIPE (400) (476)

- ITEM 465 MANHOLES AND INLETS (400) (420) (421) (440) (471)
- ITEM 466 HEADWALLS AND WINGWALLS (400) (420) (421) (430) (440) (464)
- ITEM 467 SAFETY END TREATMENT (400) (420) (421) (430) (432) (440) (445)
(460) (464)
- ITEM 496 REMOVING STRUCTURES (430)
- ITEM 500 MOBILIZATION (5010)
- ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING
- ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL
CONTROLS (432) (556)
- ITEM 508 CONSTRUCTING DETOURS
- ITEM 512 PORTABLE CONCRETE TRAFFIC BARRIER (420) (421) (424) (440)
(442)
- ITEM 529 CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER (360)
(420) (421) (440)
- ITEM 530 INTERSECTIONS, DRIVEWAYS, AND TURNOUTS (247) (260) (263)
(275) (276) (292) (316) (330) (334) (340) (360) (421) (440)
- ITEM 531 SIDEWALKS (104) (360) (420) (421) (440) (530)
- ITEM 540 METAL BEAM GUARD FENCE (421) (445) (529) (542) (544)
- ITEM 542 REMOVING METAL BEAM GUARD FENCE
- ITEM 544 GUARDRAIL END TREATMENTS
- ITEM 618 CONDUIT (400) (445) (476) (622)
- ITEM 620 ELECTRICAL CONDUCTORS
- ITEM 624 GROUND BOXES (421) (440)
- ITEM 636 ALUMINUM SIGNS (643)
- ITEM 644 SMALL ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421) (440)
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- ITEM 647 LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421) (440)
(441) (442) (445) (643)
- ITEM 662 WORK ZONE PAVEMENT MARKINGS (666) (668) (672) (677)
- ITEM 666 REFLECTORIZED PAVEMENT MARKINGS (316) (318) (662) (677) (678)
- 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 INSTALLATION OF HIGHWAY TRAFFIC SIGNALS (610) (625) (627)
(634) (636) (656)
- ITEM 681 TEMPORARY TRAFFIC SIGNALS (628) (680)
- ITEM 682 VEHICLE AND PEDESTRIAN SIGNAL HEADS
- ITEM 684 TRAFFIC SIGNAL CABLES
- ITEM 686 TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (416) (421) (441)
(442) (445) (449)
- ITEM 687 PEDESTAL POLE ASSEMBLIES (445) (449) (656)
- ITEM 688 PEDESTRIAN DETECTORS AND VEHICLE LOOP DETECTORS (618)
(624) (682) (684)
- ITEM 730 ROADSIDE MOWING
- ITEM 772 POST AND CABLE FENCE

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---007)

WAGE RATES

SPECIAL PROVISION "PARTNERING" (000---002)
SPECIAL PROVISION "SMALL BUSINESS ENTERPRISE IN STATE FUNDED
CONSTRUCTION" (000---010)
SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000--1232)
SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000--1002)
SPECIAL PROVISION "DEPARTMENT DIVISION MAILING AND PHYSICAL ADDRESS"
(000---011)
SPECIAL PROVISION TO ITEM 1 (001---005)
SPECIAL PROVISION TO ITEM 3 (003---026)
SPECIAL PROVISION TO ITEM 4 (004---008)
SPECIAL PROVISION TO ITEM 5 (005---004)
SPECIAL PROVISION TO ITEM 6 (006---030)
SPECIAL PROVISIONS TO ITEM 7 (007---213) (007---297)
SPECIAL PROVISIONS TO ITEM 8 (008---007) (008---049) (008---082)
SPECIAL PROVISION TO ITEM 9 (009---012)
SPECIAL PROVISION TO ITEM 100 (100---002)
SPECIAL PROVISION TO ITEM 161 (161---001)
SPECIAL PROVISION TO ITEM 164 (164---002)
SPECIAL PROVISION TO ITEM 166 (166---001)
SPECIAL PROVISION TO ITEM 247 (247---020)
SPECIAL PROVISION TO ITEM 260 (260---001)
SPECIAL PROVISION TO ITEM 360 (360---003)
SPECIAL PROVISION TO ITEM 420 (420---002)
SPECIAL PROVISION TO ITEM 421 (421---024)
SPECIAL PROVISION TO ITEM 440 (440---001)
SPECIAL PROVISION TO ITEM 441 (441---002)
SPECIAL PROVISION TO ITEM 442 (442---005)
SPECIAL PROVISION TO ITEM 465 (465---001)
SPECIAL PROVISION TO ITEM 500 (500---004)
SPECIAL PROVISION TO ITEM 502 (502---033)
SPECIAL PROVISION TO ITEM 506 (506---010)
SPECIAL PROVISION TO ITEM 512 (512---001)
SPECIAL PROVISION TO ITEM 620 (620---001)
SPECIAL PROVISION TO ITEM 730 (730---003)

SPECIAL SPECIFICATIONS:

ITEM 5010 TRANSPORTABLE CELLULAR TELEPHONES
ITEM 6007 REMOVING TRAFFIC SIGNALS
ITEM 6010 COMMUNICATION CABLE

GENERAL: THE ABOVE-LISTED SPECIFICATION ITEMS ARE THOSE UNDER WHICH
----- PAYMENT IS TO BE MADE. THESE, TOGETHER WITH SUCH OTHER
PERTINENT ITEMS, IF ANY, AS MAY BE REFERRED TO IN THE ABOVE-
LISTED SPECIFICATION ITEMS, AND INCLUDING THE SPECIAL
PROVISIONS LISTED ABOVE, CONSTITUTE THE COMPLETE SPECIFI-
CATIONS FOR THIS PROJECT.

SPECIAL PROVISION

008---049

Prosecution and Progress

For this project, Item 008, "Prosecution and Progress," of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of the Item are waived or changed hereby.

Article 8.2. Progress Schedules, Section B. Construction Contracts is voided and replaced by the following:

B. Construction Contracts. Before starting work on a construction Contract, prepare and submit a progress schedule based on the sequence of work and traffic control plan shown in the Contract. Prepare the progress schedule using the Critical Path Method (CPM). Include all planned work activities and sequences and show Contract completion within the number of working days specified. Incorporate major material procurements, known utility relocations, and other activities that may affect the completion of the Contract in the progress schedule. Show a beginning date, ending date, and duration in number of working days for each activity. Do not use activities exceeding 20 working days, except for agreed upon activities. Show an estimated production rate per working day for each work activity.

Create and maintain the CPM schedule using computer software fully compatible with version 3.1 of Primavera Systems, Inc., Primavera Project Planner (P3), or SureTrak Project Scheduler. Save the schedule in Primavera or SureTrak format or as directed. Show the sequence and interdependence of activities required for complete performance of the work. Ensure all work sequences are logical and show a coordinated plan of the work. Show a predecessor and successor for each activity. Clearly and accurately identify the critical path. Provide a legend for all abbreviations.

Describe each activity on the schedule using:

- A logical activity number utilizing an alphanumeric designation system tied to the sequence of work and traffic control plans;
- A concise description of the work represented by the activity; and
- An activity duration in whole working days.

Code the activities so that organized plots of the schedule may be produced. Calculate activity durations by dividing the quantity of work for each individual activity by the estimated production rate.

Before the start of construction operations, submit one print or plot of the schedule, signed by an individual authorized to bind the firm, and one electronic backup copy of the project schedule (saved on 3.5 in. computer disk or compact disc, or sent to the Engineer via electronic mail).

Submit an updated progress schedule monthly, unless otherwise shown in the contract or as directed. Update the progress schedule by adding actual progress made during the previous updated period, including approved changes to the sequence of work and the traffic control plan. Submit electronic backups of schedule updates and revisions, saved on either a 3.5 in. computer disk, compact disc or sent to the Engineer via electronic mail. If an updated progress schedule indicates the Contract will not be completed within the number of working days specified, notify the Engineer in writing whether the Contractor will revise the progress schedule to meet the number of working days specified or exceed the number of working days specified.

Notify the Engineer in writing of major changes in the project schedule. Include in the notification reasons for the change, a description of the change, and how the change will be incorporated into the schedule. Major changes are those that may affect compliance with the Contract requirements or that change the critical path or controlling Item of work. The Engineer reserves the right to reject these proposed changes.

No direct compensation will be made for fulfilling these requirements, as this work is considered subsidiary to the items of the Contract.

SPECIAL PROVISION

008---007

Prosecution and Progress

For this project, Item 008, "Prosecution and Progress," of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 8.3. Computation of Contract Time for Completion. The first sentence of the first paragraph is voided and replaced by the following:

Working day charges will begin 90 calendar days after the date of the written authorization to begin work, or the first day of construction activity if work is initiated within the 90 day period.

SPECIAL PROVISION**008---082****Prosecution and Progress**

For this project, Item 008, "Prosecution and Progress," of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 8.5. Failure to Complete Work on Time is supplemented by the following:

The Contractor will be assessed a daily "intersection rental charge" for each intersection shown in the plans with rental charges during intersection construction. The number of days assessed will be calculated from the time the number of "free intersection impact days" has been exceeded at each location until "substantial completion" of each intersection at the rate shown in the plans. The daily "intersection rental charge" will be assessed not as a penalty, but for added expense incurred by the traveling public and by the Department. If the "intersection impact days" are less than the "free intersection impact days", shown in the plans, the contractor will be due a credit equivalent to the number of unused "Free Intersection Impact Day(s)" at the daily intersection rental charge rate. "The incentive will be based on the original days allowed to complete the work for each intersection. Time charges for the completion incentive will not be adjusted for weather, weekends, holidays, suspension of contract time; unforeseen utility, right of way, or railroad issues, or any other unforeseeable event not under the control of the Department. Time charges for the completion incentive may be adjusted by the Engineer when work, under the control of the Department such as extension of limits or changes in scope not related to the issues in the previous paragraph, is added that changes the duration of the intersection work in accordance with the schedule required to meet Article 8.1, "Prosecution of Work.". Time charges for the completion incentive will also be adjusted for catastrophic events such as a declared state of emergency or natural disaster, if the event directly affects the Contractor's operations as determined by the Engineer."

Submit a schedule of the daily activities for each intersection for acceptance by Engineer, a minimum of one week in advance of work for each intersection.

Unless otherwise approved by the Engineer; construction of each intersection shall comply with the parameters set out in the Traffic Control sheets of the plans. Unless otherwise approved; any night work will be done during the times specified in the plans.

Intersection rental charges assessed as a result of failing to substantially complete the work are in addition to any contract administrative liquidated damages that may be assessed.

For the purposes of this Special Provision; the following definitions shall apply:

Intersection: A public or private driveway or street intersection including the mainlane pavement “leave-out” and “cross-overs” adjacent to the driveway or street intersection construction as shown in the Traffic Control Plans for the stage or phase of construction.

Day: For the purposes of “intersection impact days” only, any calendar day based on 7 days per week.

Substantial Completion: Substantial completion for each intersection is defined as occurring when:

- all project work (or the work for a specified phase of the project) requiring lane or shoulder closures or obstructions is completed, and traffic is following the lane arrangement as shown on the plans for the finished intersection (or the specified phase of work), and
- all pavement construction, resurfacing, traffic control devices, and pavement markings shall be in their final position (or as called for on the plans for the specified phase of work) at this time. (The Engineer may make an exception for permanent pavement markings provided the lack of markings does not cause a disruption to traffic flow or an unsafe condition for the traveling public, and work zone pavement markings are in place.)

During intersection construction: Any construction activities required for each intersection; beginning with the diversion of traffic until “substantial completion.” Construction activities does not include setting beginning and ending barricades. Minor single-lane, off-peak lane closure for required work such as: storm sewer pipe construction, signal work, colored textured concrete, saw-cutting, is not considered “intersection construction.”

Intersection impact day(s): The number of day(s) “during intersection construction.”

Free intersection impact day(s): The number of days allowed for the intersection to be constructed. If the contractor chooses to begin construction on an intersection during the night time (30 minutes after sunset, unless otherwise shown on the plans), the time charges for the “free intersection impact days” will begin on the following day.

Intersection rental charge(s): The estimated per intersection daily cost of interference and inconvenience to the road users and the Department for construction of intersections.

SPECIAL SPECIFICATION

5010

Transportable Cellular Telephones

- 1. Description.** Provide transportable cellular telephones (TCTs).
- 2. Equipment.** Furnish TCTs after the receipt of the work order to begin work and before beginning physical work on the project. Provide the number of TCTs specified on the plans. Repair or replace non-operational TCTs within 48 hr. after notification by the Engineer. Provide an operational manual for each TCT. Terminate TCT service upon completion of the project.

Provide a detailed invoice upon request.
- 3. Measurement and Payment.** The work performed, materials furnished, equipment, labor, tools and incidentals will not be measured or paid directly, but will be subsidiary to pertinent Items.