

# NOTIFICATION OF ADDENDUM

## ADDENDUM NO. 1

**DATED 5/29/2015**

<b>Control</b>	<b>0521-04-274, ETC.</b>
<b>Project</b>	<b>C 521-4-274, ETC.</b>
<b>Highway</b>	<b>IH 410</b>
<b>County</b>	<b>BEXAR</b>

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 521-4-274

CONTROL: 0521-04-274

COUNTY: BEXAR

LETTING: 06/03/2015

REFERENCE NO: 0526

**PROPOSAL ADDENDUMS**

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

X SPEC LIST (SH. NO.: 3 )  
X SPECIAL PROVISIONS:  
ADDED: 000---008, 000---009, 008---001

DELETED: 000---003, 000---004, 000---005, 000---006, 000---007,  
008---007

\_ SPECIAL SPECIFICATIONS:  
ADDED:

DELETED:

X OTHER: PLAN SHEETS AND OTHER CHANGES

DESCRIPTION OF ABOVE CHANGES  
(INCLUDING PLANS SHEET CHANGES)

\*\*\*\*\* PROPOSAL COVER \*\*\*\*\*

CHANGED PROJECT NUMBER FROM NH 1502(274) TO C 521-4-274 AS STATE FUNDS  
WILL BE UTILIZED FOR THIS PROJECT.

REVISED CONTRACT TO 760 WORKING DAYS.

\*\*\*\*\* BID INSERTS \*\*\*\*\*

REPLACED BID INSERT PROPOSAL SHEETS 3-37 TO 37-37 AS PART OF THIS ADDENDUM

REPLACED E&Q PLAN SHEETS 30, 30A-30H AS PART OF THIS ADDENDUM

REVISED QUANTITIES FOR ITEMS: 400-6004, 403-6001, 416-6001, 416-6008,  
420-6029, 420-6037, 420-6039, 420-6043, 420-6045, 420-6075, 432-6001,  
432-6008, 496-6011, 502-6001, 506-6004, 506-6011, 506-6038, 506-6039,  
508-6001, 512-6005, 512-6009, 512-6010, 512-6029, 512-6033, 512-6034,  
512-6053, 512-6057, 512-6058, 545-6001, 644-6001, 644-6064, 662-6001,  
662-6004, 662-6013, 662-6017, 662-6018, 662-6026, 662-6029, 662-6060,  
DESCRIPTION OF ABOVE CHANGES (CONTINUED)  
(INCLUDING PLANS SHEET CHANGES)

662-6063, 662-6071, 662-6072, 662-6095, 677-6001, 6001-6001, 416-6006,  
416-6007, 416-6010, 420-6068, 442-6009, 442-6010

ADDED BID ITEMS: 416-6012, 420-6031, 420-6100, 434-6035, 434-6043,  
545-6003, 662-6002, 662-6010, 662-6011, 662-6012, 662-6014, 662-6034,  
662-6070, 677-6003, 677-6005, 677-6007, 677-6008, 677-6009, 677-6012,  
677-6013, 677-6014

DELETED BID ITEMS: 506-6003, 662-6073

\*\*\*\*\* GENERAL NOTES \*\*\*\*\*

GENERAL NOTES PROPOSAL SHEETS A-Z, AA-DD AND PLAN SHEETS 29, 29A-29N ARE  
REPLACED AS PART OF THIS ADDENDUM.

SHEETS F & G: ITEM 8 - ADDED VERBIAGE TO INCLUDE LANE CLOSURE ASSESSMENT  
FEES FOR FRONTAGE ROAD AND RAMP CLOSURES; REVISED SPECIAL PROVISION FOR  
LANE CLOSURE ASSESSMENT FEES TO REFERENCE SP008-001 INSTEAD OF SP008-007;  
ADDED THE WORD "ASSESSMENT" TO LANE CLOSURE FEE TABLE TO BE CONSISTENT  
WITH PLAN SHEET 166 TITLE BLOCK; REVISED WORDING TO SHOW 760 WORKING DAYS  
TO SUBSTANTIALLY COMPLETE THE PROJECT

SHEET H: ITEM 110 - ADDED NOTE TO CLARIFY BASE AND ACP REMOVAL IS  
ASSOCIATED WITH THIS ITEM.

SHEET M: ITEM 423 - REVISED NOTE TO SHOW TYPE DS MATERIAL IS REQUIRED IN  
THE REGION OF THE MATS.

GENERAL NOTES SHIFTED FROM PAGE TO PAGE DUE TO THESE REVISIONS.

\*\*\*\*\* SPECIFICATION LIST \*\*\*\*\*

SHEET 3 OF 4: REVISED TRIPLE ZERO SPECIAL PROVISIONS TO CORRESPOND TO  
STATE CONSTRUCTION CONTRACTS VERSUS FEDERAL-AID CONSTRUCTION CONTRACTS;  
ADDED SPECIAL PROVISION 008-001; DELETED SPECIAL PROVISION 008-007

\*\*\*\*\* PLAN SHEETS \*\*\*\*\*

SHEET 1 (TITLE SHEET): REVISED INDEX OF SHEETS NUMBERS; ADDED TDLR  
NUMBER; REVISED SPECIFICATIONS NOTE FROM FEDERAL TO STATE; REVISED PROJECT  
NUMBER FROM FEDERAL TO STATE

SHEET 2 (INDEX OF SHEETS): ADDED SHEET NUMBERS 152A THROUGH 152D

SHEET 4 (INDEX OF SHEETS): ADDED SHEET NUMBERS 1426A THROUGH 1426C

SHEETS 29, 29A-29N (GENERAL NOTES): REFER TO GENERAL NOTES CHANGES AS  
NOTED ABOVE. SHEETS 29B, 29C, AND 29F CONTAIN THE ITEM UPDATES AS NOTED  
ABOVE.

SHEETS 30, 30A-30H (ESTIMATE & QUANTITY): REFER TO BID INSERTS CHANGES AS  
DESCRIPTION OF ABOVE CHANGES (CONTINUED)  
(INCLUDING PLANS SHEET CHANGES)

NOTED ABOVE.

SHEETS 31-34: REVISED ALL QUANTITIES

SHEET 36: CORRECTED QUANTITY FOR ITEM 496-6011 REMOV STR (BRIDGE 500 -  
999 FT LENGTH) AND ADDED NOTES TO CLARIFY REMOVE STRUCTURE ITEM; REMOVED  
ITEM 6001-6001 PORT CHANGE MES SGN (TY I OR II)

SHEET 38: REVISED QUANTITIES FOR PAY ITEM 432-6001 RIPRAP (CONC) (4 IN)

SHEETS 40 & 626: REVISED BID ITEM NUMBERS TO "MASS CONCRETE" PLACEMENT  
FOR CAP, COLUMN, AND FOOTING QUANTITIES; ADDED BID ITEMS AND QUANTITIES  
FOR "TEMPORARY SPL SHORING", STEEL BEAM "ELASTOMERIC BEARING PADS", AND  
416-6001 DRILL SHAFT (18 IN).

SHEET 41: REVISED QUANTITIES FOR SBML ENTRANCE RAMP FROM CULEBRA FOR  
STRUCT EXCAV, TSS, DS (54 IN), DS (60 IN), DS (84 IN), CL C CONC  
(FOOTING) (MASS), CL E CONC (SEAL), CL F CONC (FOOTING) (MASS)

SHEETS 48-52: MODIFIED SHEETS TO INDICATE BRIDGE MOUNTED CLEARANCE SIGNS  
AND BRIDGE RAIL SIGN MOUNTS

SHEET 57: CORRECTED QUANTITIES FOR 644-6001 AND 644-6064

SHEET 58: REVISE BID ITEM AND QUANTITY FOR 420-6068 CL C CONC (SIGN  
COLUMN) CY

SHEET 72: REVISED NOTE 8 TO CLARIFY LANE CLOSURE RESTRICTIONS FOR  
MAINLANES, RAMPS AND FRONTAGE ROADS.

SHEET 97: CHANGED TO RFD TY 4

SHEET 98: ADDED BARRIER FOR BENT CONSTRUCTION AT MILITARY DRIVE;  
INCREASED BARRIER AND WZ PAV MRK QUANTITIES

SHEETS 99 & 110: INCREASED BARRIER AND WZ PAV MRK QUANTITIES; MADE LPCB  
TY T SUBSIDIARY TO ITEM 512

SHEETS 100-101: MADE LPCB TY T SUBSIDIARY TO ITEM 512

SHEET 107: INCREASED BARRIER QUANTITY AND ADDED RFD TY 4

SHEET 108: INCREASED WZ PAV MRK QUANTITY AND ADDED RFD TY 4

SHEET 109: INCREASED WZ PAV MRK AND TSCF QUANTITIES; ADDED RFD TY 4

SHEET 111: ADDED RFD TY 4

SHEET 112: INCREASED BARRIER AND WZ PAV MRK QUANTITIES

SHEETS 113-114: REDUCED BARRIER AND MADE LPCB TY T SUBSIDIARY

SHEET 115: INCREASED BARRIER AND WZ PAV MRK QUANTITIES; ADDED TSCF

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

SHEET 116: REMOVED BARRIER AND CRASH CUSHION; ADDED RFD TY 4

SHEET 117: ADDED SHOULDER CLOSED SIGNS; INCREASED BARRIER AND WZ PAV MRK QUANTITIES; MADE LPCB TY T SUBSIDIARY TO ITEM 512

SHEETS 118 & 131: CORRECTED CALLOUTS AND QUANTITIES

SHEET 118A: REMOVED SIGNS; INCREASED BARRIER AND WZ PAV MRK QUANTITIES

SHEETS 118B, 120-122, 125-127, 129, 133-137: ADDED BARRIER AND WZ PAV MRK QUANTITIES

SHEET 118C: ADDED SHOULDER CLOSED SIGNS; ADDED CONSTRUCTION DETOUR, BARRIER, AND WZ PAV MRKS

SHEETS 119 & 124: ADDED SHOULDER CLOSED SIGNS; ADDED BARRIER AND WZ PAV MRKS

SHEET 123: ADDED BARRIER AND CORRECTED PAVEMENT MARKING QUANTITIES

SHEET 130: CHANGED SIGNS; ADDED BARRIER AND WZ PAV MRK QUANTITIES

SHEET 132: REMOVED SIGNS; ADDED BARRIER AND WZ PAV MRK QUANTITIES

SHEETS 138-140: REPLACED REMOVABLE PAVEMENT MARKINGS WITH NON-REMOVABLE MARKINGS FOR THE MAINLANES

SHEET 143: REMOVED SHORT TERM TABS FROM SHEET BUT KEPT IN THE TCP SUMMARY

SHEETS 144-145: REPLACED REMOVABLE PAVEMENT MARKINGS WITH NON-REMOVABLE MARKINGS FOR THE MAINLANES; KEPT SW3P FROM PHASE 1

SHEETS 146-147, 153, 160-164: ADDED NON-REMOVABLE PAVEMENT MARKINGS

SHEET 148: ADDED LOW PROFILE BARRIER AND NON-REMOVABLE PAVEMENT MARKINGS

SHEET 149: REDUCED BARRIER; ADDED NON-REMOVABLE PAVEMENT MARKINGS AND CONSTRUCTION DETOUR; MADE TEMPORARY DRAINAGE PIPE SUBSIDIARY TO ITEM 512

SHEET 150: ADDED PAVEMENT MARKINGS

SHEET 151: ADDED F-SHAPE BARRIER; REMOVED LOW PROFILE BARRIER AND REMOVABLE PAVEMENT MARKINGS

SHEET 152: REMOVED ITEMS FROM THIS SHEET PAID UNDER IH 410 TCP

SHEETS 152A-152D: NEW SH 151 PHASE 3 SHEET; ADDED WZ PAV MRK QUANTITIES

SHEETS 154 & 159: ADDED NON-REMOVABLE AND REMOVABLE PAVEMENT MARKINGS

SHEETS 155-158: ADDED BARRIER AND NON-REMOVABLE/REMOVABLE PAVEMENT MARKINGS

SHEET 166: REVISED TITLE BLOCK, ADDING THE WORD "ASSESSMENT"; ADDED NOTE DESCRIPTION OF ABOVE CHANGES (CONTINUED)  
(INCLUDING PLANS SHEET CHANGES)

1 TO CLARIFY APPLICABILITY.

SHEETS 262 & 265: ADDED NOTE TO CLARIFY RIPRAP LOCATIONS.

SHEETS 266-267: CORRECTED QUANTITY FOR OBLITERATING ABANDONED ROAD IN QUANTITY BOX AND ADDED PATTERN TO LEGEND.

SHEETS 419-421, 423, 425: REMOVED CALLOUTS FOR RIPRAP.

SHEETS 498-499, 501-505, 613-619: GENERAL NOTE 5 HAS BEEN CHANGED

SHEETS 500 & 620: GENERAL NOTE 5 HAS BEEN CHANGED; REVISED THE CALLOUT "INSTALL TRACC" TO "INSTALL CRASH CUSHION"

SHEET 506: REVISED THE CALLOUT "2-90" DIA X 27' LONG DRILLED SHAFTS" TO "2-92" DIA X 27' LONG DRILLED SHAFTS"; GENERAL NOTE 5 HAS BEEN CHANGED

SHEET 507: REVISED THE CALLOUT "2-90" DIA X 18' LONG DRILLED SHAFTS" TO "2-92" DIA X 18' LONG DRILLED SHAFTS"; GENERAL NOTE 5 HAS BEEN CHANGED

SHEET 512: REVISED BID ITEM NUMBERS TO "MASS CONCRETE" PLACEMENT FOR CAP, COLUMN, AND FOOTING QUANTITIES; ADDED BID ITEMS AND QUANTITIES FOR "TEMPORARY SPL SHORING" AND STEEL BEAM "ELASTOMERIC BEARING PADS"

SHEETS 518-519 & 632-633: REVISED QUANTITIES TABLE FOR DRILLED SHAFT QUANTITIES - BARS F1 AND F2 QUANTITIES REVISED TO SHOW 88 AND 112 BARS

SHEET 621: REVISED THE CALLOUT "2-90" DIA X 18' LONG DRILLED SHAFTS" TO "2-92" DIA X 18' LONG DRILLED SHAFTS"; ADDED CALLOUT "2-18" DIA X 15' LONG DRILLED SHAFTS"; GENERAL NOTE 5 HAS BEEN CHANGED

SHEET 770: FOOTING REINFORCING AND COLUMN DOWEL BARS REVISED.

SHEET 771: DRILLED SHAFT REINFORCING AND COLUMN DOWEL BARS REVISED.

SHEETS 775-776: NOTE ADDED "LIMIT AGGREGATE SIZE TO 1 1/2" MAXIMUM FOR CLASS "C" CONCRETE IN COLUMNS."

SHEET 779: COLUMN VERTICAL REINFORCING AND TIES REVISED.

SHEET 780: COLUMN FLARE REINFORCING AND REINFORCING BAR DETAILS REVISED. QUANTITIES TABLES REVISED TO REFLECT CHANGES IN REINFORCEMENT.

SHEETS 797-798 & 832-833: NOTES RENUMBERED; LAST NOTE REVISED TO READ

"ALL WORK TO BE PERFORMED SHALL BE DONE IN ACCORDANCE WITH ITEM 496, REMOVING STRUCTURES"; ", AND PAYED FOR UNDER" WAS DELETED FROM NOTE.

SHEETS 799 & 834: NOTE 2 REVISED TO READ "ALL WORK TO BE PERFORMED SHALL BE DONE IN ACCORDANCE WITH ITEM 496, REMOVING STRUCTURES"; ", AND PAYED FOR UNDER" WAS DELETED FROM NOTE.

SHEETS 878 & 880: REMOVED NOTE FOR EPOXY COATED STEEL

SHEETS 911 & 916: REVISED FOOTING AND DRILLED SHAFTS OF BENT 2 AND BENT 3  
DESCRIPTION OF ABOVE CHANGES (CONTINUED)  
(INCLUDING PLANS SHEET CHANGES)

SHEETS 912 & 917: REVISED DRILLED SHAFTS OF BENT 4 AND BENT 5

SHEETS 913 & 918: REVISED FOOTING AND DRILLED SHAFTS OF BENT 7

SHEET 915: REVISED QUANTITIES TO UPDATE FOUNDATION CHANGES

SHEET 919: REVISED TYPE A FOOTING DIMENSIONS AND DETAILS

SHEET 920: REVISED TYPE B FOOTING DIMENSIONS AND DETAILS

SHEET 921: REVISED GENERAL NOTE

SHEETS 923-924: REVISED DRILLED SHAFT DETAILS

SHEETS 928-939: REVISED GENERAL NOTE TO "DESIGNED IN ACCORDANCE WITH TXDOT BRIDGE DESIGN MANUAL (2013) AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 6TH EDITION (2012)."

SHEET 940: REVISED CALLOUT OF STIRRUP SPACING.

SHEET 942: REVISED SHEAR REINFORCEMENT OF BENT 2, BENT 3 AND BENT 7.

SHEET 943: REVISED COLUMN REINFORCEMENT DETAILS OF BENT 4.

SHEET 944: REVISED COLUMN REINFORCEMENT DETAILS OF BENT 5.

SHEET 946: REVISED TABLE OF COLUMN QUANTITIES.

SHEET 1039: REVISED SPAN LENGTHS TO REFLECT CORRECT SPACING.

SHEETS 1215-1221 & 1223-1232: MODIFIED NOTE TO REMOVE TY A BACKFILL AND SPECIFY TY DS.

SHEET 1222: MODIFIED NOTE TO REMOVE TY A BACKFILL AND SPECIFY TY DS;  
CORRECTED PROFILE VIEW.

SHEETS 1233-1255: MODIFIED NOTE 2 TO SPECIFY TY DS BACKFILL.

SHEET 1334: CORRECTED QUANTITIES FOR BRIDGE MOUNT CLEARANCE ASSEMBLY.

SHEET 1345: CORRECTED QUANTITIES FOR SMALL SIGNS TY P.

SHEET 1402: REVISED QUANTITIES BY REMOVING STANDARD TXDOT OSB, IH 410 OSB #5 (L & R) FROM MISSION REGION QUANTITIES TABLES.

SHEETS 1426A-1426C: ADDED BRIDGE RAIL SIGN MOUNT STANDARD SHEETS.

SHEET 1687: REMOVED GENERAL NOTE NUMBER 5.

SHEETS 1688-1690: REMOVED NOTE AT TOP OF SHEET.

Control	0521-04-274, ETC.
Project	C 521-4-274, ETC.
Highway	IH 410
County	BEXAR

# PROPOSAL TO THE TEXAS TRANSPORTATION COMMISSION

## 2014 SPECIFICATIONS

### WORK CONSISTING OF EXPAND TO 8 LANES/ADD DIRECT CONNECTS @ SH151 BEXAR COUNTY, TEXAS

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

This project is to be completed in 760 working days and will be accepted when fully completed and finished to the satisfaction of the Executive Director or designee.

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

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

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

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

By signing the proposal the bidder certifies:

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

• **Signed:** \*\*

(1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_

**Print Name:**

(1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_

**Title:**

(1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_

**Company:**

(1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_

- Signatures to comply with Item 2 of the specifications.

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

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

## **NOTICE TO CONTRACTORS**

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

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

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	6002		PREPARING ROW DOLLARS and CENTS	STA	241.590	1
	104	6009		REMOVING CONC (RIPRAP) DOLLARS and CENTS	SY	16,906.000	2
	104	6011		REMOVING CONC (MEDIANS) DOLLARS and CENTS	SY	107.000	3
	104	6017		REMOVING CONC (DRIVEWAYS) DOLLARS and CENTS	SY	2,552.000	4
	104	6021		REMOVING CONC (CURB) DOLLARS and CENTS	LF	5,770.000	5
	104	6024		REMOVING CONC (RETAINING WALLS) DOLLARS and CENTS	SY	3,436.000	6
	104	6036		REMOVING CONC (SIDEWALK OR RAMP) DOLLARS and CENTS	SY	104.000	7
	104	6037		REMOVE CONC (RAIL) DOLLARS and CENTS	LF	2,820.000	8
	106	6002		OBLITERATING ABANDONED ROAD DOLLARS and CENTS	SY	2,482.000	9
	110	6001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	49,428.000	10
	132	6003		EMBANKMENT (FINAL)(ORD COMP)(TY B) DOLLARS and CENTS	CY	107,202.000	11
	161	6017		COMPOST MANUF TOPSOIL (4") DOLLARS and CENTS	SY	77,502.000	12

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	162	6001		SPOT SODDING  DOLLARS and CENTS	SY	10,809.000	13
	164	6039		DRILL SEEDING (PERM) (URBAN) (CLAY)  DOLLARS and CENTS	SY	66,693.000	14
	168	6001		VEGETATIVE WATERING  DOLLARS and CENTS	MG	1,550.000	15
	169	6001		SOIL RETENTION BLANKETS (CL 1) (TY A)  DOLLARS and CENTS	SY	66,693.000	16
	247	6467		FL BS (CMP IN PLC)(TY D GR 1-2 OR 5)6"  DOLLARS and CENTS	SY	116,616.000	17
	341	6008		D-GR HMA TY-B PG64-22  DOLLARS and CENTS	TON	33,476.000	18
	341	6010		D-GR HMA TY-B PG70-22  DOLLARS and CENTS	TON	10,757.000	19
	341	6042		D-GR HMA TY-D SAC-B PG70-22  DOLLARS and CENTS	TON	12,180.000	20
1	347	6001		TOM (ASPHALT) PG 76-22  DOLLARS and CENTS	TON	1,360.000	21
1	347	6002		TOM-C (AGGREGATE) SAC-A  DOLLARS and CENTS	TON	18,731.000	22
	354	6022		PLANE ASPH CONC PAV(0" TO 3")  DOLLARS and CENTS	SY	34,143.000	23
	356	6021		PAV JT UNDERSEAL (24")  DOLLARS and CENTS	LF	229.000	24

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	360	6006		CONC PVMT (CONT REINF - CRCP) (12") DOLLARS and CENTS	SY	14,391.000	25
	400	6004		STRUCT EXCAV (BRIDGE) DOLLARS and CENTS	CY	483.000	26
	400	6005		CEM STABIL BKFL DOLLARS and CENTS	CY	1,926.200	27
	401	6001		FLOWABLE BACKFILL DOLLARS and CENTS	CY	474.000	28
	402	6001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	4,561.000	29
	403	6001		TEMPORARY SPL SHORING DOLLARS and CENTS	SF	132,264.000	30
	416	6001		DRILL SHAFT (18 IN) DOLLARS and CENTS	LF	681.000	31
	416	6002		DRILL SHAFT (24 IN) DOLLARS and CENTS	LF	1,392.000	32
	416	6003		DRILL SHAFT (30 IN) DOLLARS and CENTS	LF	840.000	33
	416	6004		DRILL SHAFT (36 IN) DOLLARS and CENTS	LF	7,486.000	34
	416	6006		DRILL SHAFT (48 IN) DOLLARS and CENTS	LF	1,383.000	35
	416	6007		DRILL SHAFT (54 IN) DOLLARS and CENTS	LF	2,462.000	36

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	416	6008		DRILL SHAFT (60 IN)  DOLLARS and CENTS	LF	1,354.000	37
	416	6010		DRILL SHAFT (72 IN)  DOLLARS and CENTS	LF	120.000	38
	416	6012		DRILL SHAFT (84 IN)  DOLLARS and CENTS	LF	242.000	39
	416	6018		DRILL SHAFT (SIGN MTS) (24 IN)  DOLLARS and CENTS	LF	64.000	40
	416	6020		DRILL SHAFT (SIGN MTS) (36 IN)  DOLLARS and CENTS	LF	88.000	41
	416	6021		DRILL SHAFT (SIGN MTS) (42 IN)  DOLLARS and CENTS	LF	998.000	42
	416	6022		DRILL SHAFT (SIGN MTS) (48 IN)  DOLLARS and CENTS	LF	20.000	43
	416	6023		DRILL SHAFT (SIGN MTS) (54 IN)  DOLLARS and CENTS	LF	28.000	44
	416	6026		DRILL SHAFT (HIGH MAST POLE) (60 IN)  DOLLARS and CENTS	LF	418.000	45
	416	6029		DRILL SHAFT (RDWY ILL POLE) (30 IN)  DOLLARS and CENTS	LF	56.000	46
	416	6030		DRILL SHAFT (TRF SIG POLE) (24 IN)  DOLLARS and CENTS	LF	222.000	47
	416	6032		DRILL SHAFT (TRF SIG POLE) (36 IN)  DOLLARS and CENTS	LF	15.000	48

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	416	6089		DRILL SHAFT (92 IN)  DOLLARS and CENTS	LF	126.000	49
	420	6003		CL A CONC (MISC)  DOLLARS and CENTS	SY	320.000	50
	420	6013		CL C CONC (ABUT)  DOLLARS and CENTS	CY	385.200	51
	420	6019		CL C CONC (ABUT)(EXTEND)  DOLLARS and CENTS	CY	267.000	52
	420	6025		CL C CONC (BENT)  DOLLARS and CENTS	CY	108.800	53
	420	6029		CL C CONC (CAP)  DOLLARS and CENTS	CY	1,327.700	54
	420	6031		CL C CONC (CAP)(MASS)  DOLLARS and CENTS	CY	4,967.000	55
	420	6033		CL C CONC (CAP)(EXTEND)  DOLLARS and CENTS	CY	170.500	56
	420	6037		CL C CONC (COLUMN)  DOLLARS and CENTS	CY	1,286.300	57
	420	6039		CL C CONC (COLUMN)(MASS)  DOLLARS and CENTS	CY	5,887.500	58
	420	6043		CL C CONC (FOOTING)  DOLLARS and CENTS	CY	373.000	59
	420	6045		CL C CONC (FOOTING)(MASS)  DOLLARS and CENTS	CY	4,530.500	60

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	420	6066		CL C CONC (RAIL FOUNDATION) DOLLARS and CENTS	CY	1,876.000	61
	420	6068		CL C CONC (SIGN COLUMN) DOLLARS and CENTS	CY	630.000	62
	420	6074		CL C CONC (MISC) DOLLARS and CENTS	CY	8.000	63
	420	6075		CL E CONC (SEAL) DOLLARS and CENTS	CY	20.500	64
	420	6084		CL F CONC (CAP)(MASS) DOLLARS and CENTS	CY	189.400	65
	420	6100		CL F CONC (FOOTING)(MASS) DOLLARS and CENTS	CY	41.700	66
	422	6001		REINF CONC SLAB DOLLARS and CENTS	SF	432,544.000	67
	422	6003		REINF CONC SLAB (EXTEND SLAB) DOLLARS and CENTS	SF	70,487.000	68
	422	6007		REINF CONC SLAB (SLAB BEAM) DOLLARS and CENTS	SF	15,901.000	69
	422	6013		BRIDGE SIDEWALK DOLLARS and CENTS	SF	10,724.000	70
	422	6015		APPROACH SLAB DOLLARS and CENTS	CY	239.900	71
	423	6001		RETAINING WALL (MSE) DOLLARS and CENTS	SF	153,093.000	72

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	425	6009		PRESTR CONC SLAB BEAM (4SB12) DOLLARS and CENTS	LF	524.760	73
	425	6010		PRESTR CONC SLAB BEAM (5SB12) DOLLARS and CENTS	LF	2,623.840	74
	425	6037		PRESTR CONC GIRDER (TX40) DOLLARS and CENTS	LF	7,848.900	75
	425	6039		PRESTR CONC GIRDER (TX54) DOLLARS and CENTS	LF	39,535.110	76
	425	6041		PRESTR CONC GIRDER (TX70) DOLLARS and CENTS	LF	4,314.000	77
	427	6002		CONCRETE PAINT FINISH DOLLARS and CENTS	SF	131,516.000	78
	427	6003		OPAQUE SEALER FINISH DOLLARS and CENTS	SF	118,026.000	79
	429	6009		CONC STR REPAIR (STANDARD) DOLLARS and CENTS	SF	20.000	80
	432	6001		RIPRAP (CONC)(4 IN) DOLLARS and CENTS	CY	195.600	81
	432	6002		RIPRAP (CONC)(5 IN) DOLLARS and CENTS	CY	45.000	82
	432	6005		RIPRAP (CONC) (CL A ) DOLLARS and CENTS	CY	1,146.000	83
	432	6006		RIPRAP (CONC)(CL B) DOLLARS and CENTS	CY	5,393.750	84

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	432	6008		RIPRAP (CONC)(CL B)(RR8&RR9) DOLLARS and CENTS	CY	462.000	85
	432	6022		RIPRAP (STONE COMMON)(DRY)(6 IN) DOLLARS and CENTS	CY	28.500	86
	432	6033		RIPRAP (STONE PROTECTION)(18 IN) DOLLARS and CENTS	CY	2,689.000	87
	432	6045		RIPRAP (MOW STRIP)(4 IN) DOLLARS and CENTS	CY	970.000	88
	434	6003		ELASTOMERIC BEARING (SPECIAL) DOLLARS and CENTS	EA	120.000	89
	434	6009		ELASTOMERIC BEARING (EE7) DOLLARS and CENTS	EA	4.000	90
	434	6017		ELASTOMERIC BEARING (EF7) DOLLARS and CENTS	EA	4.000	91
	434	6035		ELASTOMERIC BEARING (F7) DOLLARS and CENTS	EA	15.000	92
	434	6043		SLIDING ELASTOMERIC BEARING (ES 6) DOLLARS and CENTS	EA	30.000	93
	438	6001		CLEANING AND SEALING EXISTING JOINTS DOLLARS and CENTS	LF	856.000	94
	438	6009		CLEANING EXISTING JOINTS DOLLARS and CENTS	LF	2,712.000	95
	442	6001		STR STEEL (PLATE GIRDER) DOLLARS and CENTS	LB	3,170,103.00	96

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	442	6004		STR STEEL (ROLLED BEAM)  DOLLARS and CENTS	LB	854,479.000	97
	442	6007		STR STEEL (MISC NON - BRIDGE)  DOLLARS and CENTS	LB	1,911.000	98
	442	6009		STR STEEL (DIAPHRAGM & STIFFENER)  DOLLARS and CENTS	LB	469,518.000	99
	442	6010		STR STEEL (SHEAR CONNECTOR)  DOLLARS and CENTS	LB	36,518.000	100
	446	6002		CLEAN & PAINT EXIST STR (SYSTEM II)  DOLLARS and CENTS	LS	2.000	101
	450	6006		RAIL (TY T223)  DOLLARS and CENTS	LF	1,004.300	102
	450	6012		RAIL (TY T411)  DOLLARS and CENTS	LF	706.840	103
	450	6023		RAIL (TY SSTR)  DOLLARS and CENTS	LF	6,558.000	104
	450	6032		RAIL (TY C223)  DOLLARS and CENTS	LF	1,623.600	105
	450	6042		RAIL (TY PR1)  DOLLARS and CENTS	LF	311.000	106
	450	6048		RAIL (HANDRAIL)(TY B)  DOLLARS and CENTS	LF	3,571.000	107
	450	6056		RAIL (TY T223) (MOD)  DOLLARS and CENTS	LF	2,259.000	108

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	450	6061		RAIL (TY T411)(MOD)  DOLLARS and CENTS	LF	678.000	109
	450	6062		RAIL (TY SSTR)(MOD)  DOLLARS and CENTS	LF	31,829.240	110
	450	6064		RAIL (TY SSTR) (W/DRAIN SLOTS) (MOD)  DOLLARS and CENTS	LF	3,918.000	111
	454	6001		SEALED EXPANSION JOINT (4 IN) (SEJ - A)  DOLLARS and CENTS	LF	2,121.990	112
	454	6003		ARMOR JOINT  DOLLARS and CENTS	LF	68.000	113
	454	6004		ARMOR JOINT (SEALED)  DOLLARS and CENTS	LF	613.000	114
	454	6008		HEADER TYPE EXPANSION JOINT  DOLLARS and CENTS	CF	108.000	115
	454	6009		JOINT SEALANT  DOLLARS and CENTS	LF	1,680.000	116
	462	6003		CONC BOX CULV (4 FT X 2 FT)  DOLLARS and CENTS	LF	138.000	117
	462	6004		CONC BOX CULV (4 FT X 3 FT)  DOLLARS and CENTS	LF	164.000	118
	462	6007		CONC BOX CULV (5 FT X 3 FT)  DOLLARS and CENTS	LF	44.000	119
	462	6014		CONC BOX CULV (7 FT X 3 FT)  DOLLARS and CENTS	LF	12.000	120

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	462	6029		CONC BOX CULV (10 FT X 5 FT) DOLLARS and CENTS	LF	60.000	121
	464	6003		RC PIPE (CL III)(18 IN) DOLLARS and CENTS	LF	445.000	122
	464	6005		RC PIPE (CL III)(24 IN) DOLLARS and CENTS	LF	6,954.000	123
	464	6007		RC PIPE (CL III)(30 IN) DOLLARS and CENTS	LF	3,042.000	124
	464	6008		RC PIPE (CL III)(36 IN) DOLLARS and CENTS	LF	981.000	125
	465	6002		MANH (COMPL)(PRM)(48IN) DOLLARS and CENTS	EA	10.000	126
	465	6003		MANH (COMPL)(PRM)(60IN) DOLLARS and CENTS	EA	1.000	127
	465	6004		MANH (COMPL)(PRM)(72IN) DOLLARS and CENTS	EA	1.000	128
	465	6005		JCTBOX(COMPL)(PJB)(3FTX3FT) DOLLARS and CENTS	EA	1.000	129
	465	6006		JCTBOX(COMPL)(PJB)(4FTX4FT) DOLLARS and CENTS	EA	25.000	130
	465	6011		JCTBOX(COMPL)(PJB)(6FTX6FT) DOLLARS and CENTS	EA	4.000	131
	465	6014		INLET (COMPL)(PCO)(3FT)(LEFT) DOLLARS and CENTS	EA	1.000	132

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	465	6015		INLET (COMPL)(PCO)(3FT)(RIGHT) DOLLARS and CENTS	EA	3.000	133
	465	6016		INLET (COMPL)(PCO)(3FT)(BOTH) DOLLARS and CENTS	EA	2.000	134
	465	6030		INLET (COMPL)(PCU)(3FT)(LEFT) DOLLARS and CENTS	EA	4.000	135
	465	6045		INLET (COMPL)(PMBD)(4FT) DOLLARS and CENTS	EA	23.000	136
	465	6048		INLET (COMPL)(POD)(FG)(3FTX3FT) DOLLARS and CENTS	EA	10.000	137
	465	6049		INLET (COMPL)(POD)(FG)(4FTX4FT) DOLLARS and CENTS	EA	1.000	138
	465	6054		INLET (COMPL)(PSL)(SL)(3FTX3FT) DOLLARS and CENTS	EA	22.000	139
	465	6055		INLET (COMPL)(PSL)(SL)(4FTX4FT) DOLLARS and CENTS	EA	21.000	140
	465	6233		INLET (COMP) (TY SIDEWALK BRIDGE) DOLLARS and CENTS	EA	6.000	141
	466	6151		WINGWALL (FW - 0) (HW=4 FT) DOLLARS and CENTS	EA	1.000	142
	466	6154		WINGWALL (FW - 0) (HW=7 FT) DOLLARS and CENTS	EA	1.000	143
	466	6179		WINGWALL (PW - 1) (HW=4 FT) DOLLARS and CENTS	EA	2.000	144

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	466	6181		WINGWALL (PW - 1) (HW=6 FT) DOLLARS and CENTS	EA	2.000	145
	466	6207		WINGWALL (SW - 0) (HW=4 FT) DOLLARS and CENTS	EA	1.000	146
	467	6005		SET (TY I) (24 IN) (3: 1) (C) DOLLARS and CENTS	EA	1.000	147
	467	6006		SET (TY I) (24 IN) (4: 1) (C) DOLLARS and CENTS	EA	11.000	148
	467	6008		SET (TY I) (30 IN) (3: 1) (C) DOLLARS and CENTS	EA	4.000	149
	471	6007		GRATE AND FRAME (BRIDGE DRAIN) DOLLARS and CENTS	EA	52.000	150
	479	6006		ADJUSTING INLET (CAP) DOLLARS and CENTS	EA	8.000	151
	480	6001		CLEAN EXIST CULVERTS DOLLARS and CENTS	EA	1.000	152
	481	6013		PIPE (PVC) (SCH 40) (6 IN) DOLLARS and CENTS	LF	3,255.000	153
	496	6002		REMOV STR (INLET) DOLLARS and CENTS	EA	10.000	154
	496	6003		REMOV STR (MANHOLE) DOLLARS and CENTS	EA	3.000	155
	496	6004		REMOV STR (SET) DOLLARS and CENTS	EA	1.000	156

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	496	6005		REMOV STR (WINGWALL)  DOLLARS and CENTS	EA	18.000	157
	496	6006		REMOV STR (HEADWALL)  DOLLARS and CENTS	EA	6.000	158
	496	6007		REMOV STR (PIPE)  DOLLARS and CENTS	LF	1,597.000	159
	496	6008		REMOV STR (BOX CULVERT)  DOLLARS and CENTS	LF	25.000	160
	496	6010		REMOV STR (BRIDGE 100 - 499 FT LENGTH)  DOLLARS and CENTS	EA	2.000	161
	496	6011		REMOV STR (BRIDGE 500 - 999 FT LENGTH)  DOLLARS and CENTS	EA	2.000	162
	496	6099		REMOVE STR (RAIL)  DOLLARS and CENTS	LF	550.500	163
	500	6001		MOBILIZATION  DOLLARS and CENTS	LS	1.000	164
	502	6001		BARRICADES, SIGNS AND TRAFFIC HAN- DLING  DOLLARS and CENTS	MO	30.000	165
	506	6004	001	ROCK FILTER DAMS (INSTALL) (TY 4)  DOLLARS and CENTS	LF	2,307.000	166
	506	6011	001	ROCK FILTER DAMS (REMOVE)  DOLLARS and CENTS	LF	2,307.000	167
	506	6020	001	CONSTRUCTION EXITS (INSTALL) (TY 1)  DOLLARS and CENTS	SY	10,000.000	168

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	506	6024	001	CONSTRUCTION EXITS (REMOVE) DOLLARS and CENTS	SY	10,000.000	169
	506	6038	001	TEMP SEDMT CONT FENCE (INSTALL) DOLLARS and CENTS	LF	15,062.000	170
	506	6039	001	TEMP SEDMT CONT FENCE (REMOVE) DOLLARS and CENTS	LF	15,062.000	171
	508	6001		CONSTRUCTING DETOURS DOLLARS and CENTS	SY	4,643.000	172
	512	6005		PORT CTB (FUR & INST)(F-SHAPE)(TY 1) DOLLARS and CENTS	LF	30,115.000	173
	512	6009		PORT CTB (FUR & INST)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	20,860.000	174
	512	6010		PORT CTB (FUR & INST)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	1,000.000	175
	512	6029		PORT CTB (MOVE)(F-SHAPE)(TY 1) DOLLARS and CENTS	LF	42,470.000	176
	512	6033		PORT CTB (MOVE)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	12,190.000	177
	512	6034		PORT CTB (MOVE)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	420.000	178
	512	6053		PORT CTB (REMOVE)(F-SHAPE)(TY 1) DOLLARS and CENTS	LF	30,115.000	179
	512	6057		PORT CTB (REMOVE)(LOW PROF)(TY 1) DOLLARS and CENTS	LF	20,860.000	180

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	512	6058		PORT CTB (REMOVE)(LOW PROF)(TY 2) DOLLARS and CENTS	LF	1,000.000	181
	514	6001		PERM CTB (SGL SLOPE) (TY 1) (42 ) DOLLARS and CENTS	LF	1,202.500	182
	514	6003		PERM CTB (SGL SLOPE) (TY 3) (42 ) DOLLARS and CENTS	LF	535.000	183
	514	6011		PERM CTB (SGL SLOPE) (TY 3) (54 ) DOLLARS and CENTS	LF	1,860.000	184
	514	6015		PERM CTB (F-SHAPE) (TY 3) DOLLARS and CENTS	LF	425.000	185
	529	6001		CONC CURB (TY I) DOLLARS and CENTS	LF	31,173.000	186
	529	6015		CONC CURB (TY C1) DOLLARS and CENTS	LF	100.000	187
	529	6016		CONC CURB (TY F1) DOLLARS and CENTS	LF	2,850.000	188
	529	6020		CONC CURB & GUTTER (ARMOR CURB) DOLLARS and CENTS	LF	308.000	189
	530	6017		DRIVEWAYS (CONC) (HES) DOLLARS and CENTS	SY	2,151.000	190
	531	6001		CONC SIDEWALKS (4") DOLLARS and CENTS	SY	11,704.000	191
	531	6004		CURB RAMPS (TY 1) DOLLARS and CENTS	EA	21.000	192

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	531	6005		CURB RAMPS (TY 2)  DOLLARS and CENTS	EA	11.000	193
	531	6006		CURB RAMPS (TY 3)  DOLLARS and CENTS	EA	5.000	194
	531	6009		CURB RAMPS (TY 6)  DOLLARS and CENTS	EA	1.000	195
	531	6010		CURB RAMPS (TY 7)  DOLLARS and CENTS	EA	2.000	196
	531	6013		CURB RAMPS (TY 10)  DOLLARS and CENTS	EA	5.000	197
	531	6017		CURB RAMPS (TY 22)  DOLLARS and CENTS	EA	13.000	198
	540	6001		MTL W-BEAM GD FEN (TIM POST)  DOLLARS and CENTS	LF	19,637.500	199
	540	6006		MTL BEAM GD FEN TRANS (THRIE-BEAM)  DOLLARS and CENTS	EA	28.000	200
	540	6016		DOWNSTREAM ANCHOR TERMINAL SEC- TION  DOLLARS and CENTS	EA	29.000	201
	540	6018		MTL BM GD FEN TRANS (NON - SYM)  DOLLARS and CENTS	EA	21.000	202
	542	6001		REMOVE METAL BEAM GUARD FENCE  DOLLARS and CENTS	LF	11,433.000	203
	542	6002		REMOVE TERMINAL ANCHOR SECTION  DOLLARS and CENTS	EA	37.000	204

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	542	6004		RM MTL BM GD FENCE TRANS (THRIE- BEAM)  DOLLARS and CENTS	EA	32.000	205
	544	6001		GUARDRAIL END TREATMENT (INSTALL)  DOLLARS and CENTS	EA	36.000	206
	544	6003		GUARDRAIL END TREATMENT (REMOVE)  DOLLARS and CENTS	EA	37.000	207
	545	6001		CRASH CUSH ATTEN (INSTL)  DOLLARS and CENTS	EA	32.000	208
	545	6003		CRASH CUSH ATTEN (MOVE & RESET)  DOLLARS and CENTS	EA	34.000	209
	545	6005		CRASH CUSH ATTEN (REMOVE)  DOLLARS and CENTS	EA	1.000	210
	610	6008		REMOVE RD IL ASM (CTB MOUNT)  DOLLARS and CENTS	EA	34.000	211
	610	6009		REMOVE RD IL ASM (TRANS-BASE)  DOLLARS and CENTS	EA	40.000	212
	610	6050		IN RD IL AM (TY SA) 40T-8 (250W) S  DOLLARS and CENTS	EA	7.000	213
	610	6104		IN RD IL (U/P) (TY 1) (150W EQ) LED  DOLLARS and CENTS	EA	38.000	214
	610	6106		IN RD IL (U/P) (TY 2) (150W EQ) LED  DOLLARS and CENTS	EA	8.000	215
	613	6005		HI MST IL POLE (150 FT)( 80 MPH)  DOLLARS and CENTS	EA	19.000	216

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	614	6002		HI MST IL ASM (12-400W)(ASYM)(TY B) DOLLARS and CENTS	EA	19.000	217
	617	6001		TEMP RD IL (RD IL ASM) DOLLARS and CENTS	EA	15.000	218
	618	6023		CONDT (PVC) (SCH 40) (2") DOLLARS and CENTS	LF	1,910.000	219
	618	6025		CONDT (PVC) (SCH 40) (2") (CONC ENCSE) DOLLARS and CENTS	LF	17,650.000	220
	618	6042		CONDT (PVC) (SCH 80) (1 1/4") DOLLARS and CENTS	LF	1,187.000	221
	618	6046		CONDT (PVC) (SCH 80) (2") DOLLARS and CENTS	LF	20,039.000	222
	618	6047		CONDT (PVC) (SCH 80) (2") (BORE) DOLLARS and CENTS	LF	5,110.000	223
	618	6053		CONDT (PVC) (SCH 80) (3") DOLLARS and CENTS	LF	770.000	224
	618	6054		CONDT (PVC) (SCH 80) (3") (BORE) DOLLARS and CENTS	LF	850.000	225
	618	6058		CONDT (PVC) (SCH 80) (4") DOLLARS and CENTS	LF	290.000	226
	618	6059		CONDT (PVC) (SCH 80) (4") (BORE) DOLLARS and CENTS	LF	70.000	227
	618	6062		CONDT (RM) (3/4") DOLLARS and CENTS	LF	626.000	228

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	618	6070		CONDT (RM) (2")  DOLLARS and CENTS	LF	1,747.000	229
	618	6071		CONDT (RM) (2") (BORE)  DOLLARS and CENTS	LF	5,700.000	230
	620	6004		ELEC CONDR (NO.12) INSULATED  DOLLARS and CENTS	LF	3,822.000	231
	620	6007		ELEC CONDR (NO.8) BARE  DOLLARS and CENTS	LF	16,151.000	232
	620	6008		ELEC CONDR (NO.8) INSULATED  DOLLARS and CENTS	LF	37,946.000	233
	620	6009		ELEC CONDR (NO.6) BARE  DOLLARS and CENTS	LF	5,901.000	234
	620	6010		ELEC CONDR (NO.6) INSULATED  DOLLARS and CENTS	LF	20,717.000	235
	620	6012		ELEC CONDR (NO.4) INSULATED  DOLLARS and CENTS	LF	3,841.000	236
	620	6016		ELEC CONDR (NO.2) INSULATED  DOLLARS and CENTS	LF	3,275.000	237
	624	6002		GROUND BOX TY A (122311)W/APRON  DOLLARS and CENTS	EA	17.000	238
	624	6009		GROUND BOX TY D (162922)  DOLLARS and CENTS	EA	9.000	239
	624	6010		GROUND BOX TY D (162922)W/APRON  DOLLARS and CENTS	EA	109.000	240

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	624	6028		REMOVE GROUND BOX  DOLLARS and CENTS	EA	12.000	241
	628	6002		REMOVE ELECTRICAL SERVICES  DOLLARS and CENTS	EA	8.000	242
	628	6012		ELC SRV TY A 120/240 060(NS)SS(T)TP(O)  DOLLARS and CENTS	EA	2.000	243
	628	6045		ELC SRV TY A 240/480 060(NS)SS(E)SP(O)  DOLLARS and CENTS	EA	5.000	244
	628	6076		ELC SRV TY A 240/480 100(NS)SS(E)SP(O)  DOLLARS and CENTS	EA	3.000	245
	628	6133		ELC SRV TY D 120/240 060(NS)GS(N)TP(O)  DOLLARS and CENTS	EA	3.000	246
	628	6228		ELC SRV TY D 120/240 100(NS)GS(N)SP(U)  DOLLARS and CENTS	EA	1.000	247
	636	6001		ALUMINUM SIGNS (TY A)  DOLLARS and CENTS	SF	513.000	248
	636	6002		ALUMINUM SIGNS (TY G)  DOLLARS and CENTS	SF	382.000	249
	636	6003		ALUMINUM SIGNS (TY O)  DOLLARS and CENTS	SF	4,915.000	250
	636	6009		REPLACE EXISTING ALUMINUM SIGNS(TY O)  DOLLARS and CENTS	SF	198.000	251
	644	6001		IN SM RD SN SUP&AM TY10BWG(1)SA(P)  DOLLARS and CENTS	EA	54.000	252

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	644	6004		IN SM RD SN SUP&AM TY10BWG(1)SA(T) DOLLARS and CENTS	EA	205.000	253
	644	6007		IN SM RD SN SUP&AM TY10BWG(1)SA(U) DOLLARS and CENTS	EA	21.000	254
	644	6034		IN SM RD SN SUP&AM TYS80(1)SA(U-1EXT) DOLLARS and CENTS	EA	1.000	255
	644	6051		IN SM RD SN SUP&AM TYS80(2)SA(P-EXAL) DOLLARS and CENTS	EA	6.000	256
	644	6064		IN BRIDGE MNT CLEARANCE SGN ASSM(TY N) DOLLARS and CENTS	EA	12.000	257
	644	6066		IN SM RD SN SUP&AM (RAIL MOUNT) DOLLARS and CENTS	EA	24.000	258
	644	6076		REMOVE SM RD SN SUP&AM DOLLARS and CENTS	EA	267.000	259
	644	6077		REMOVE BRDG MNT CLEARANCE SIGN ASSM DOLLARS and CENTS	EA	5.000	260
	647	6001		INSTALL LRSS (STRUCT STEEL) DOLLARS and CENTS	LB	1,983.000	261
	647	6003		REMOVE LRSA DOLLARS and CENTS	EA	12.000	262
	650	6041		INS OH SN SUP(35 FT CANT)(SPAN ONLY) DOLLARS and CENTS	EA	1.000	263
	650	6048		INS OH SN SUP(40 FT CANT)(SPAN ONLY) DOLLARS and CENTS	EA	1.000	264

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	650	6054		INS OH SN SUP(45 FT BRDG) and DOLLARS CENTS	EA	1.000	265
	650	6069		INS OH SN SUP(60 FT BRDG) and DOLLARS CENTS	EA	2.000	266
	650	6074		INS OH SN SUP(65 FT BRDG) and DOLLARS CENTS	EA	1.000	267
	650	6084		INS OH SN SUP(75 FT BRDG) and DOLLARS CENTS	EA	1.000	268
	650	6091		INS OH SN SUP(80 FT BRDG)(SPAN ONLY) and DOLLARS CENTS	EA	1.000	269
	650	6101		INS OH SN SUP(90 FT BRDG)(SPAN ONLY) and DOLLARS CENTS	EA	5.000	270
	650	6106		INS OH SN SUP(95 FT BRDG)(SPAN ONLY) and DOLLARS CENTS	EA	2.000	271
	650	6111		INS OH SN SUP(100 FT BRDG)(SPAN ONLY) and DOLLARS CENTS	EA	2.000	272
	650	6116		INS OH SN SUP(105 FT BRDG)(SPAN ONLY) and DOLLARS CENTS	EA	1.000	273
	650	6121		INS OH SN SUP(110 FT BRDG)(SPAN ONLY) and DOLLARS CENTS	EA	1.000	274
	650	6203		RELOCATE EXISTING OVERHD SIGN SUP and DOLLARS CENTS	EA	1.000	275
	650	6204		REMOVE OVERHD SIGN SUP and DOLLARS CENTS	EA	4.000	276

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	658	6001		INSTL DEL ASSM (D-SW)SZ 1(FLX)GND DOLLARS and CENTS	EA	19.000	277
	658	6003		INSTL DEL ASSM (D-SW)SZ 1(FLX)GND(BR) DOLLARS and CENTS	EA	48.000	278
	658	6004		INSTL DEL ASSM (D-SW)SZ 1(FLX)SRF DOLLARS and CENTS	EA	24.000	279
	658	6013		INSTL DEL ASSM (D-SW)SZ (BRF)CTB DOLLARS and CENTS	EA	100.000	280
	658	6014		INSTL DEL ASSM (D-SW)SZ (BRF)CTB (BI) DOLLARS and CENTS	EA	19.000	281
	658	6015		INSTL DEL ASSM (D-SW)SZ (BRF)GF1 DOLLARS and CENTS	EA	22.000	282
	658	6017		INSTL DEL ASSM (D-SW)SZ (BRF)GF1 (BR) DOLLARS and CENTS	EA	10.000	283
	658	6020		INSTL DEL ASSM (D-SY)SZ 1(FLX)SRF DOLLARS and CENTS	EA	56.000	284
	658	6026		INSTL DEL ASSM (D-SY)SZ (BRF)CTB DOLLARS and CENTS	EA	18.000	285
	658	6027		INSTL DEL ASSM (D-SY)SZ (BRF)CTB (BI) DOLLARS and CENTS	EA	138.000	286
	658	6028		INSTL DEL ASSM (D-SY)SZ (BRF)GF1 DOLLARS and CENTS	EA	20.000	287
	658	6036		INSTL DEL ASSM (D-DW)SZ 1(FLX)GND DOLLARS and CENTS	EA	61.000	288

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	658	6041		INSTL DEL ASSM (D-DY)SZ 1(FLX)GND DOLLARS and CENTS	EA	27.000	289
	658	6048		INSTL OM ASSM (OM-2Z)(FLX)GND DOLLARS and CENTS	EA	40.000	290
	658	6050		INSTL OM ASSM (OM-2Z)(FLX)SRF DOLLARS and CENTS	EA	12.000	291
	658	6061		INSTL DEL ASSM (D-SW)SZ 1(BRF)GF2 DOLLARS and CENTS	EA	24.000	292
	658	6063		INSTL DEL ASSM (D-SW)SZ 1(BRF)GF2(BR) DOLLARS and CENTS	EA	24.000	293
	658	6064		INSTL DEL ASSM (D-SY)SZ 1(BRF)GF2 DOLLARS and CENTS	EA	12.000	294
	658	6067		INSTL DEL ASSM (D-DW)SZ 1(BRF)GF2 DOLLARS and CENTS	EA	20.000	295
	662	6001		WK ZN PAV MRK NON-REMOV (W)4"(BRK) DOLLARS and CENTS	LF	19,600.000	296
	662	6002		WK ZN PAV MRK NON-REMOV (W)4"(DOT) DOLLARS and CENTS	LF	688.000	297
	662	6004		WK ZN PAV MRK NON-REMOV (W)4"(SLD) DOLLARS and CENTS	LF	69,085.000	298
	662	6010		WK ZN PAV MRK NON-REMOV (W)8"(DOT) DOLLARS and CENTS	LF	60.000	299
	662	6011		WK ZN PAV MRK NON-REMOV (W)8"(LNDP) DOLLARS and CENTS	LF	45.000	300

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	6012		WK ZN PAV MRK NON-REMOV (W)8"(SLD) DOLLARS and CENTS	LF	13,568.000	301
	662	6013		WK ZN PAV MRK NON-REMOV (W)12"(LNDP) DOLLARS and CENTS	LF	2,089.000	302
	662	6014		WK ZN PAV MRK NON-REMOV (W)12"(SLD) DOLLARS and CENTS	LF	2,739.000	303
	662	6017		WK ZN PAV MRK NON-REMOV (W)(ARROW) DOLLARS and CENTS	EA	48.000	304
	662	6018		WK ZN PAV MRK NON-REMOV (W)(DBL ARW) DOLLARS and CENTS	EA	37.000	305
	662	6026		WK ZN PAV MRK NON-REMOV (W)(UTURN ARW) DOLLARS and CENTS	EA	19.000	306
	662	6029		WK ZN PAV MRK NON-REMOV(W)(WORD) DOLLARS and CENTS	EA	67.000	307
	662	6034		WK ZN PAV MRK NON-REMOV (Y)4"(SLD) DOLLARS and CENTS	LF	30,538.000	308
	662	6060		WK ZN PAV MRK REMOV (W)4"(BRK) DOLLARS and CENTS	LF	18,050.000	309
	662	6063		WK ZN PAV MRK REMOV (W)4"(SLD) DOLLARS and CENTS	LF	37,927.000	310
	662	6070		WK ZN PAV MRK REMOV (W)8"(LNDP) DOLLARS and CENTS	LF	69.000	311

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	6071		WK ZN PAV MRK REMOV (W)8"(SLD) DOLLARS and CENTS	LF	31,894.000	312
	662	6072		WK ZN PAV MRK REMOV (W)12"(LNDP) DOLLARS and CENTS	LF	123.000	313
	662	6075		WK ZN PAV MRK REMOV (W)24"(SLD) DOLLARS and CENTS	LF	270.000	314
	662	6095		WK ZN PAV MRK REMOV (Y)4"(SLD) DOLLARS and CENTS	LF	61,319.000	315
	662	6109		WK ZN PAV MRK SHT TERM (TAB)TY W DOLLARS and CENTS	EA	3,860.000	316
	666	6006		REFL PAV MRK TY I (W)4"(DOT)(100MIL) DOLLARS and CENTS	LF	988.000	317
	666	6033		REFL PAV MRK TY I (W)8"(LNDP)(100MIL) DOLLARS and CENTS	LF	240.000	318
	666	6036		REFL PAV MRK TY I (W)8"(SLD)(100MIL) DOLLARS and CENTS	LF	35,479.000	319
	666	6039		REFL PAV MRK TY I (W)12"(LNDP)(100MIL) DOLLARS and CENTS	LF	2,680.000	320
	666	6042		REFL PAV MRK TY I (W)12"(SLD)(100MIL) DOLLARS and CENTS	LF	4,657.000	321
	666	6048		REFL PAV MRK TY I (W)24"(SLD)(100MIL) DOLLARS and CENTS	LF	3,543.000	322
	666	6054		REFL PAV MRK TY I (W)(ARROW)(100MIL) DOLLARS and CENTS	EA	87.000	323

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	6057		REFL PAV MRK TY I(W)(DBL ARROW)(100MIL)  DOLLARS CENTS and	EA	50.000	324
	666	6063		REFL PAV MRK TY I(W)(UTURN ARW)(100MIL)  DOLLARS CENTS and	EA	20.000	325
	666	6078		REFL PAV MRK TY I (W)(WORD)(100MIL)  DOLLARS CENTS and	EA	111.000	326
	666	6138		REFL PAV MRK TY I (Y)8"(SLD)(100MIL)  DOLLARS CENTS and	LF	901.000	327
	666	6147		REFL PAV MRK TY I (Y)24"(SLD)(100MIL)  DOLLARS CENTS and	LF	487.000	328
	666	6156		REFL PAV MRK TY I(Y)(MED NOSE)(100MIL)  DOLLARS CENTS and	EA	7.000	329
	666	6159		RE PV MRK TY I(BLACK)4"(SHADOW)(100MIL)  DOLLARS CENTS and	LF	730.000	330
	666	6162		RE PV MRK TY I(BLACK)6"(SHADOW)(100MIL)  DOLLARS CENTS and	LF	3,220.000	331
	666	6224		PAVEMENT SEALER 4"  DOLLARS CENTS and	LF	166,855.000	332
	666	6225		PAVEMENT SEALER 6"  DOLLARS CENTS and	LF	26,290.000	333
	666	6226		PAVEMENT SEALER 8"  DOLLARS CENTS and	LF	36,620.000	334

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	6228		PAVEMENT SEALER 12" DOLLARS and CENTS	LF	7,337.000	335
	666	6230		PAVEMENT SEALER 24" DOLLARS and CENTS	LF	4,030.000	336
	666	6231		PAVEMENT SEALER (ARROW) DOLLARS and CENTS	EA	87.000	337
	666	6232		PAVEMENT SEALER (WORD) DOLLARS and CENTS	EA	111.000	338
	666	6233		PAVEMENT SEALER (MED NOSE) DOLLARS and CENTS	EA	7.000	339
	666	6234		PAVEMENT SEALER (DBL ARROW) DOLLARS and CENTS	EA	50.000	340
	666	6236		PAVEMENT SEALER (UTURN ARROW) DOLLARS and CENTS	EA	20.000	341
	666	6300		RE PM W/RET REQ TY I (W)4"(BRK)(100MIL) DOLLARS and CENTS	LF	8,750.000	342
	666	6303		RE PM W/RET REQ TY I (W)4"(SLD)(100MIL) DOLLARS and CENTS	LF	10,883.000	343
	666	6306		RE PM W/RET REQ TY I (W)6"(BRK)(100MIL) DOLLARS and CENTS	LF	26,290.000	344
	666	6315		RE PM W/RET REQ TY I (Y)4"(SLD)(100MIL) DOLLARS and CENTS	LF	36,759.000	345
	666	6342		REF PROF PAV MRK TY I(W)4"(SLD)(100MIL) DOLLARS and CENTS	LF	55,463.000	346

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	6345		REF PROF PAV MRK TY I(Y)4"(SLD)(100MIL) DOLLARS and CENTS	LF	54,012.000	347
	668	6115		PREFAB PAV MRK TY C (MULTI) (SHIELD) DOLLARS and CENTS	EA	8.000	348
	672	6008		REFL PAV MRKR TY I-R DOLLARS and CENTS	EA	196.000	349
	672	6009		REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	264.000	350
	672	6010		REFL PAV MRKR TY II-C-R DOLLARS and CENTS	EA	4,398.000	351
	677	6001		ELIM EXT PAV MRK & MRKS (4") DOLLARS and CENTS	LF	85,429.000	352
	677	6003		ELIM EXT PAV MRK & MRKS (8") DOLLARS and CENTS	LF	13,568.000	353
	677	6005		ELIM EXT PAV MRK & MRKS (12") DOLLARS and CENTS	LF	2,066.000	354
	677	6007		ELIM EXT PAV MRK & MRKS (24") DOLLARS and CENTS	LF	1,000.000	355
	677	6008		ELIM EXT PAV MRK & MRKS (ARROW) DOLLARS and CENTS	EA	48.000	356
	677	6009		ELIM EXT PAV MRK & MRKS (DBL ARROW) DOLLARS and CENTS	EA	37.000	357
	677	6012		ELIM EXT PAV MRK & MRKS (WORD) DOLLARS and CENTS	EA	67.000	358

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	677	6013		ELIM EXT PAV MRK & MRKS (ENTR GORE) DOLLARS and CENTS	EA	10.000	359
	677	6014		ELIM EXT PAV MRK & MRKS (EXIT GORE) DOLLARS and CENTS	EA	10.000	360
	678	6001		PAV SURF PREP FOR MRK (4") DOLLARS and CENTS	LF	33,264.000	361
	678	6002		PAV SURF PREP FOR MRK (6") DOLLARS and CENTS	LF	3,870.000	362
	678	6004		PAV SURF PREP FOR MRK (8") DOLLARS and CENTS	LF	1,071.000	363
	680	6002		INSTALL HWY TRF SIG (ISOLATED) DOLLARS and CENTS	EA	5.000	364
	682	6018		PED SIG SEC (LED)(COUNTDOWN) DOLLARS and CENTS	EA	58.000	365
	684	6007		TRF SIG CBL (TY A)(12 AWG)(2 CONDR) DOLLARS and CENTS	LF	17,510.000	366
	684	6009		TRF SIG CBL (TY A)(12 AWG)(4 CONDR) DOLLARS and CENTS	LF	17,810.000	367
	684	6014		TRF SIG CBL (TY A)(12 AWG)(9 CONDR) DOLLARS and CENTS	LF	3,470.000	368
	684	6080		TRF SIG CBL (TY C)(14 AWG)(2 CONDR) DOLLARS and CENTS	LF	31,850.000	369
	686	6283		RELOC TRF SG PL AM (S) (STRAIN POLE) DOLLARS and CENTS	EA	1.000	370

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	687	6001		PED POLE ASSEMBLY  DOLLARS and CENTS	EA	37.000	371
	688	6001		PED DETECT PUSH BUTTON (APS)  DOLLARS and CENTS	EA	58.000	372
	688	6003		PED DETECTOR CONTROLLER UNIT  DOLLARS and CENTS	EA	5.000	373
	688	6004		VEH LP DETECT (SAWCUT)  DOLLARS and CENTS	LF	4,000.000	374
	730	6106	003	STRIP MOWING  DOLLARS and CENTS	CYC	9.000	375
	734	6002		LITTER REMOVAL  DOLLARS and CENTS	CYC	27.000	376
	738	6003		CLEANING / SWEEPING (OUTSIDE MAIN LANE)  DOLLARS and CENTS	CYC	27.000	377
	780	6002		CNC CRACK REPAIR (DISCRETE)(INJECT)  DOLLARS and CENTS	LF	20.000	378
1	3002	6001		MEMBRANE UNDERSEAL  DOLLARS and CENTS	GAL	115,809.000	379
	6001	6001		PORTABLE CHANGEABLE MESSAGE SIGN  DOLLARS and CENTS	DAY	200.000	380
	6008	6001		EQUIPMENT CABINET (CCTV)(POLE)  DOLLARS and CENTS	EA	1.000	381
	6010	6001		CCTV FIELD EQUIPMENT (ANALOG)  DOLLARS and CENTS	EA	3.000	382

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	6027	6003		CONDUIT (PREPARE)  DOLLARS and CENTS	LF	2,930.000	383
	6028	6002		INSTALL DMS (FOUNDATION MTD CABI- NET)  DOLLARS and CENTS	EA	2.000	384
	6029	6001	001	RADAR VEHICLE SENSING DEVICE  DOLLARS and CENTS	EA	5.000	385
	6071	6001		FIB OPT CBL (SM) 6 STRAND  DOLLARS and CENTS	LF	3,485.000	386
	6071	6012		FIB OPT CBL (SM) 144 STRAND  DOLLARS and CENTS	LF	13,205.000	387
	6082	6001		LED LANE CONTROL SYSTEM  DOLLARS and CENTS	EA	4.000	388
	6082	6002		LCS CABINET FOUNDATION  DOLLARS and CENTS	EA	4.000	389
	6093	6001		REMOVE EXISTING VIVIDS  DOLLARS and CENTS	EA	1.000	390
	6093	6004		REMOVE EXISTING COMMUNICATION CABINET  DOLLARS and CENTS	EA	2.000	391
	6093	6005		REMOVE EXISTING CCTV FIELD EQUIP- MENT  DOLLARS and CENTS	EA	3.000	392
	6093	6010		REMOVE EXIST FIB OPT DMS SYS(TY-2)  DOLLARS and CENTS	EA	1.000	393

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	6093	6011		REMOVE EXIST FIB OPT DMS SYS(TY-3) DOLLARS and CENTS	EA	3.000	394
	6093	6012		REMOVE EXIST RVSD DOLLARS and CENTS	EA	4.000	395
	6093	6015		RELOCATE EXIST CCTV FIELD EQUIPMENT DOLLARS and CENTS	EA	3.000	396
	6093	6018		REMOV EXIST WIRELESS ETHRNET RADIO LNK DOLLARS and CENTS	EA	6.000	397
	6093	6019		RELOC EXIST WIRELESS ETHRNET RADIO LNK DOLLARS and CENTS	EA	3.000	398
	6095	6001		CAMERA POLE STRUCTURE-54FT DOLLARS and CENTS	EA	1.000	399
	6096	6002		INS LED WW SGN W/BASIC SOL PWR KIT DOLLARS and CENTS	EA	6.000	400
	6101	6001		WIRELESS ETHERNET RADIO (LOCAL) LINK DOLLARS and CENTS	EA	1.000	401
	6102	6001		REMOVE HIGH MAST ILLUMINATION DOLLARS and CENTS	EA	1.000	402
	7028	6001		SANITARY SEWER (ADJUST MANHOLE) DOLLARS and CENTS	EA	3.000	403
	7039	6001		ADJUST EXISTING VALVE BOX DOLLARS and CENTS	EA	1.000	404

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
				ALTERNATE NO. 1A  DOLLARS and CENTS			
	316	6414		AGGR (TY-B GR-5)  DOLLARS and CENTS	CY	3,364.000	405
	316	6425		ASPH (AC-15P, CHFRS2P OR CRS2P)  DOLLARS and CENTS	GAL	115,809.000	406
	347	6001		TOM (ASPHALT) PG 76-22  DOLLARS and CENTS	TON	1,360.000	407
	347	6002		TOM-C (AGGREGATE) SAC-A  DOLLARS and CENTS	TON	18,731.000	408
				ALTERNATE NO. 1B  DOLLARS and CENTS			
	348	6003		TBWC (ASPHALT)(PG 76-22)  DOLLARS and CENTS	TON	1,060.000	409
	348	6007		TBWC (MEMBRANE)  DOLLARS and CENTS	GAL	115,809.000	410
	348	6009		TBWC (AGGREGATE)(TY C)  DOLLARS and CENTS	TON	19,029.000	411

County: Bexar

Highway: IH 410

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

===== **Basis of Estimate** =====

Item	Description	Depth	Area
0247-6467	Flex Base (Ty D GR1-2 or 5)	6"	116,616 SY

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

Type	Location	Depth	Area (*)	Rate	Quantity (*)
Ty D (PG 70-22)	IH 410 NB & SB Mainlanes	2"	43,714 sy	110 lbs/sy	4809 Tons
Ty D (PG 70-22)	IH 410 NB & SB Frt & Ramps	2"	26,869 sy	110 lbs/sy	2956 Tons
Ty D (PG 70-22)	SH 151 EB & WB ML & Ramps	2"	28,439 sy	110 lbs/sy	3128 Tons
Ty D (PG 70-22)	SH 151 Turnarounds	2"	10,064 sy	110 lbs/sy	1107 Tons
Ty B (PG 70-22)	IH 410 NB & SB Mainlanes	3"	39,004 sy	110 lbs/sy	6436 Tons
Ty B (PG 70-22)	SH 151 EB & WB Mainlanes	3"	26,064 sy	110 lbs/sy	4301 Tons
Ty B (PG 64-22)	IH 410 NB & SB Mainlanes	4"	37,836 sy	110 lbs/sy	8324 Tons
Ty B (PG 64-22)	SH 151 EB & WB Mainlanes	4"	26,661 sy	110 lbs/sy	5865 Tons
Ty B (PG 64-22)	IH 410 NB & SB Frt & Ramps	6"	35,646 sy	110 lbs/sy	11763 Tons
Ty B (PG 64-22)	SH 151 Ramps & Turnarounds	6"	13,059 sy	110 lbs/sy	4309 Tons
Ty B (PG 64-22)	CRCP Bond Breaker	4"	14,391 sy	110 lbs/sy	3166 Tons

(\*) Areas and quantities are based on rounded values. See plans for bid quantities.

===== **Surface Treatment Data** =====

**BASE BID**

Item	Description	Depth	Area (*)	Rate	Quantity (*)
0347-6001	TOM (Asphalt) PG 76-22	0.75 in	463,012 sy	115 lbs/sy/in @ 6.5%	1298 Tons
0347-6002	TOM-C (Aggregate) SAC-A	0.75 in	463,012 sy	115 lbs/sy/in @ 93.5%	18670 Tons
3002-6001	Membrane Underseal	0.75 in	463,012 sy	0.25 gal/sy	115,753 Tons

County: Bexar

Highway: IH 410

===== Surface Treatment Data (cont.) =====

**ALTERNATE BID 1A**

Item	Description	Depth	Area (*)	Rate	Quantity (*)
0316-6425	Asph (AC-15P, CHFRS2P OR CRS2P)		463,012 sy	0.25 gal/sy	115,753 gal
0316-6414	Aggr (Ty-B, Gr-5)	n/a	463,012 sy	1cy/140 sy	3307 cy
0347-6001	TOM (Asphalt) PG 76-22	0.75 in	463,012 sy	115 lbs/sy/in @ 6.5%	1298 Tons
0347-6002	TOM-C (Aggregate) SAC-A	0.75 in	463,012 sy	115 lbs/sy/in @ 93.5%	18670 Tons

**ALTERNATE BID 1B**

Item	Description	Depth	Area (*)	Rate	Quantity (*)
0348-6003	TBWC (Asphalt) (PG 76-22)	0.75 in	463,012 sy	115 lbs/sy/in @ 5%	998 Tons
0348-6007	TBWC (Membrane)	0.75 in	463,012 sy	0.25 gal/sy	115,753 gal
0348-6009	TBWC (Aggregate)(Ty C)	0.75 in	463,012 sy	115 lbs/sy/in @ 95%	18,969 Tons

(\*) Areas and quantities are based on rounded values. See plans for bid quantities.

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The following State, District, Local and/or Utility Standards have been modified: RAC-R (MOD), SSTR (MOD), T411 (MOD), SGEb (MOD), TYPE 223 (MOD), IGMS (MOD), IGND (MOD), IGTS (MOD), Fabric Joint Underseal at Expansion and Construction Joints (MOD) and JTFPCP-04 (MOD).

Steel Wrapped or Asbestos Utility Lines:

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

1. Contact the Engineer.
2. Remove the minimum amount of pipe needed to perform the proposed work.
3. Cover and secure the ends of the pipe with a double layer of 6 mil plastic. If the pipe is damaged, cover the entire pipe.
4. Move the pipe to an approved temporary site within the project.

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5. The Engineer will determine the owner (utility company) of the pipe and will coordinate removal from the project. The contractor will load the pipe onto the removal vehicles but will NOT be responsible for removing the pipe from the project.

6. Removal of the pipe from the trench is subsidiary to the work that created the need for the removal (excavation for structures, roadway, a new line, tie-ins, etc.). The work performed in handling the pipe after it has been removed from the trench (covering with plastic, hauling to the temporary site and later loading on to the disposal vehicles will be paid for through the Force Account procedure.

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

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

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

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

Any materials removed and not reused and determined to be salvageable shall be stored within the project limits at an approved location or delivered undamaged to the storage yard as directed. Properly dispose unsalvageable materials in accordance with local, state, and federal regulations. Deface traffic signs so that they will not reappear in public as signs.

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

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

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

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

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taper. The cost of elevation adjustment will be part of the manhole and valve work, and asphalt tapers are part of the ACP work.

Excavation within 5 feet of an existing CPS pole will require pole bracing. Contact CPS Energy Utility Coordination to request pole bracing (John Offer, [jeoffer@cpsenergy.com](mailto:jeoffer@cpsenergy.com)). The estimated duration for the pole bracing process is approximately 6 to 8 weeks.

#### Hurricane Evacuation

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

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

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

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

If a sanitary sewer overflow (SSO) occurs:

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

#### --Item 5--

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

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

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

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

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

#### Prevention of Migratory Bird Nesting

It is anticipated that migratory birds, a protected group of species, may try to nest on bridges, culverts, vegetation, or gravel substrate, at any time of the year. The preferred nesting season for migratory birds is from February 15 through October 1. When practicable, schedule construction operations outside of the preferred nesting season. Otherwise, nests containing migratory birds must be avoided and no work will be performed in the nesting areas until the young birds have fledged.

#### Structures

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

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

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

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

**--Item 6--**

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

**--Item 7--**

The project's total disturbed area is 67 acres. The disturbed area in all project locations and Contractor project specific locations (PSL's), within 1/4 mile of the project limits, will further establish the authorization requirements for storm water discharges. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. Obtain any required authorization from the TCEQ for any PSL's on or off the ROW. When the total area disturbed on the project and PSL's within 1/4 mile of the project exceeds 5 acres, provide a copy of the Contractor NOI for PSL's to the Engineer (to the appropriate MS4 operator when the project is on an off-state system route).

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

**--Item 8--**

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

Create and maintain a CPM schedule.

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

Provide a Project Schedule Summary Report.

IH 410 Lane Closure assessment fees for mainlane, frontage road and ramp closures on IH410 and SH151 will be assessed as outlined in SP 008-001 and as shown on the Lane Closure Assessment Fee Table in the plans.

An incentive for substantial completion will be paid in accordance with section 8.9.1.2 of special provision 008-006. A disincentive for substantial completion will be assessed in accordance with section 8.9.2 of special provision 008-006.

A Lane Closure Assessment Fee, of \$4,400 per hour, will be assessed as per the Lane Closure Assessment Fee Table in the plans and as per SP 008-001, for any of the following ramp closures.

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Lane closure restrictions for the following ramps are the same as shown in the Lane Closure Assessment Fee Table for the IH 410 and SH 151 mainlanes.

1. SH151 Westbound Entrance Ramp from IH410 is closed.
2. SH151 Eastbound Exit Ramp to IH410 is closed.
3. IH410 Northbound Entrance Ramp from SH151 is closed.
4. IH410 Southbound Exit to SH151 is closed.
5. More than one ramp is closed on IH410 simultaneously.
6. More than one ramp is closed on SH151 simultaneously.

### **Substantial Completion of Work**

The contractor has 760 working days to substantially complete this project. Working days will be computed and charged in accordance with Article 8.3.1.2:6-Day work week.

The daily road user cost for substantial completion of the project is \$12,987.00 per day.

The Road User Cost liquidated damages for substantial completion is \$12,987.00 per day.

The maximum number of working days for computing the incentive credit for the substantial completion of the project is 154 days.

### **--Item 9--**

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

Complete the daily tracking form provided by the department and submit invoices that agree with the tracking form for payment at the end of each month approved services were provided.

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

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

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

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

**--Item 100--**

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

Trim and remove brush and trees as needed for construction operations. Obtain approval for proposed method of tree and brush trimming and removal. Vertical flailing equipment is not allowed. Treat damaged or cut branches, roots and/or stumps of all oak trees with a commercial tree wound dressing. Disinfect all pruning tools with a solution of 70% alcohol before moving from one tree to another. Unless otherwise approved remove all resulting vegetative debris from the ROW within 24 hours. The Engineer can stop all construction operations if the dressing, cut and removal requirements are not followed.

**--Item 110--**

Where excavation extends beyond a right of way fence, remove and replace the fence to a comparable condition. This work shall be considered subsidiary to the bid item. Removal of existing base and ACP material will be included with this item.

**--Item 132--**

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

**--Item 162--**

Furnish and place Bermuda grass sod.

**--Item 164--**

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

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

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

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**--Item 168--**

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

**--Item 247--**

There is no minimum PI requirement for this project.

**--Item 302--**

Previously tested aggregates found to contain excessive quantities of dust (more than 0.5 percent passing the No. 40 sieve) during precoating, stockpiling or hauling operations, may be rejected. Use Test Method Tex-200-F, Part I for testing.

The Engineer will utilize the Ignition Oven Method (Tex 236-F) for aggregate gradation, with the option of utilizing belt or vacuum extraction gradation in the event the ignition oven malfunctions.

**--Item 316--**

When using latex asphalt, avoid drifting of asphalt onto traffic and adjacent properties.

Asphalt season will be year around, but meet sections 316.4.4.1 through 4.4.3.

Clean all concrete curbs, islands, medians, etc. that get coated with asphalt.

**--Item 320--**

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

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

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

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**--Item 341 & 347--**

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

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

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

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

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

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

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

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

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

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

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impervious cover and sufficient strength to support the testing equipment. Portable structures shall be support blocked for stability and shall be tied down.

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

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

**Minimum Roadway Placement Temperature**

**--Item 341--**

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

Table 1  
Minimum Pavement Surface Temperatures

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

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

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**--Item 354—**

Retain planed material.

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

**--Item 401--**

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

**--Item 420--**

Mass concrete will be measured in place.

Restrict large aggregate size to ¾" maximum for class "C" concrete used in aesthetic details requiring form liners.

Columns for the NBML Entrance Ramp from W. Military Drive and SBML Entrance Ramp from Culebra Road shall have an aesthetic theme as shown for the Mission Region in the "San Antonio District Urban Design Themes for Bexar and Outlying Counties."

Columns for the EBNB & SBWB Direct Connectors have an aesthetic theme as shown for the Mission Region in the "San Antonio District Urban Design Themes for Bexar and Outlying Counties".

**--Item 421--**

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

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

**--Item 422--**

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

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

**--Item 423--**

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

Use the approved Concrete Block Retaining wall systems listed at:

[http://www.dot.state.tx.us/business/contractors\\_consultants/bridge/retaining\\_wall.htm](http://www.dot.state.tx.us/business/contractors_consultants/bridge/retaining_wall.htm)

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

[http://www.dot.state.tx.us/business/contractors\\_consultants/bridge/retaining\\_wall.htm](http://www.dot.state.tx.us/business/contractors_consultants/bridge/retaining_wall.htm)

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

When proprietary wall systems are used, arrange to have a qualified representative of the retaining wall manufacturer on site during installation. The manufacturer's representative must be on site for the first day of installation. In areas where construction deviates from the standard installation as detailed on the construction plans the manufacturer's representative must be present and actively involved in training and educating contractor on nonstandard wall installation. Non-standard wall installation includes but is not limited to any cutting and rerouting of reinforcement around obstructions, placement of mats, panels (panel connection bars) and flowable fill at drainage inlets and skewed bridge abutments and like structures. The manufacturer's representative will be present each time a change is made to the installation crew. The representative will ensure that the retaining wall is installed per the details presented in the construction drawings and as per the propriety wall system requirements.

MSE Walls including Soil Nail Walls for temporary shoring. We will require Proof Nail and Nail Verification Tests.

On site investigation of soils to confirm data in plans is to be performed before erection of temporary or permanent walls.

Horizontal and vertical nail spacing not to exceed 4' horizontal and vertical on temp or permanent soil nail walls.

For MSE walls Type DS material is to be specified in the region of the mats.

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For MSE walls we need to provide alternative for soil reinforcement to attach to the back of the precast inlets.

Shotcrete nozzleman should have a minimum of 2 years of previous structural shotcreting experience and be certified by the American Concrete Institute (ACI). Submit a copy of ACI Shotcrete nozzleman certificate and resume supporting previous experiences to the engineer prior to beginning work.

Salvage the existing retaining wall panels that contain aesthetic details (cactus) at the intersection of SH 151 and Potranco (Retaining Wall 151-RW 13). Coordinate with the Engineer and the West Bexar County Maintenance supervisor to schedule delivery of these panels to the old NW maintenance office, located at the San Antonio District complex.

**--Item 432--**

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

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

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

Class "A" concrete riprap designated for use in waterways. Class "B" concrete riprap has been designated for use in all other areas.

**--Item 449--**

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

**--Item 450--**

The Type SSTR rail for the NBML Entrance Ramp from W. Military Dr. and SBML Entrance Ramp from Culebra Rd. shall have an aesthetic theme as shown in the SSTR (MOD) Aesthetics Mission Region detail sheet.

RAIL(TY SSTR)(MOD) item applies to all roadway (non-bridge) SSTR on IH410, IH410 Military bridge widening SSTR, and direct connector SSTR. Use TYPE SSTR (MOD) standard for structural details, and SSTR (MOD) Aesthetics Mission Region detail sheet for aesthetic information. IH410 roadway and direct connector SSTR(MOD) will be constructed as Type I as per standard details, and Military bridge widening will be constructed as Type 2 as per standard details.

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**--Item 454--**

The list of approved Header Type Expansion Joints can be found at:

[http://www.txdot.gov/txdot\\_library/publications/producer\\_list.htm](http://www.txdot.gov/txdot_library/publications/producer_list.htm) title is "Elastomeric Concrete".

The top of the armor joint for the NBML and SBML over Leon Creek bridges shall be flush with the top of the reinforced concrete deck as shown in the section "SHOWN WITHOUT 2" OVERLAY AT JOINT LOCATION" on Standard Sheet AJ.

**--Item 462--**

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

The following structures shall be cast-in-place:

Str. 2 (2 barrels) on SH 151. See structure layouts for location of cast in place and precast barrels for Str. 2.

The following structures shall be pre-cast:

Str. 6 & Str. 8 on IH410. Str. 2 (2 barrels) on SH151. See structure layouts for location of cast in place and precast barrels for Str. 2.

**--Item 465--**

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

**--Item 496--**

The Contractor will submit a demolition plan for all structures to be replaced and/or removed in accordance with Item 496.

**--Item 500--**

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

**--Item 502--**

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

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

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

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

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

There are traffic signals at the intersection of SH151/Hunt Ln, SH151/Potranco Rd, SH151/Ingram Rd, IH410/Military Dr and IH410/Culebra. Keep the signals in operation except when necessary for specific installation operations.

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

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

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

For closures not listed in the TCP; the lane closures are limited to between the hours of 9 PM to 5 AM, and at least one lane has to remain open at all times.

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

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

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

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

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Use 2 number of rumble strip arrays.

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

**--Item 504--**

Furnish one field office type B.

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

**--Item 506--**

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

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

**--Item 512--**

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

**--Item 514--**

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

**--Item 529--**

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

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

**--Item 531--**

The curb ramp truncated domes will be terra cotta.

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

**--Item 540--**

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

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

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

**--Item 542--**

Salvage all undamaged/acceptable radius guardrail and deliver to the TxDOT maintenance section yard.

**--Item 545--**

See the Crash Cushion Summary Sheet.

**--Item 585--**

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

**--Item 610--**

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

For instructions on submitting shop drawings electronically go to:

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

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

Ballast/capacitors removed from the light assembly, will remain the property of the State. Assume all ballast/capacitors contain Polychlorinated Biphenyl (PCB), unless a notation appears on the outside of the unit that specifies it does not contain PCB's. All ballast/capacitors with PCB's shall be placed in

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55 gallon open top drum in accordance with Department of Transportation (DOT) specifications. Place six (6) inches of sawdust or other absorbent material in the bottom of the drum. Furnish and place a DOT approved PCB warning label on the outside of the drum. Do not fill a drum more than  $\frac{3}{4}$  of capacity. Avoid rupturing the ballast/capacitor(s). If a ballast/capacitor is ruptured, use proper procedures, specialist trained staff and personal protective equipment for the clean-up operations.

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

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

All existing illumination, within the project limits, will remain operational until the last possible moment, as directed. Contractor to maintain temporary illumination.

**--Item 613--**

Use an electrically conducting protective thread lubricant compound (Crouse-Hinds TL-2, 0Z/Gedney STL, Thomas & Betts Kopr-Shield) for the pipe joint compound to coat the threads of the anchor bolts, prior to installation of nuts.

**--Item 614--**

Fabricate high mast ring assemblies in accordance with shop drawings approved by the Department. Submit shop drawings for each project, or use pre-approved standard shop drawings.

For project specific shop drawings, furnish seven sets of drawings of the complete assembly in accordance with Item 441, "Steel Structures". Deliver shop drawings to the Director of Traffic Operations Division, Texas Department of Transportation, 125 East 11<sup>th</sup> Street, Austin, Texas 78701-2483.

To be eligible to use pre-approved standard shop drawings, the shop drawing must be submitted and approved by the Department prior to use on the project. Deviation from the pre-approved standard

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shop drawing will require resubmission of the shop drawings. The Engineer may approve, in writing, the use of updated standard drawings in cases where the standard drawings have been updated and the updated version has been approved by the Department.

For pre-approval and updates to previously approved standard shop drawings, furnish seven sets of drawings of the complete assembly in accordance with Item 441, "Steel Structures" to the Director of Traffic Operations Division, Texas Department of Transportation, 125 East 11<sup>th</sup> Street, Austin, Texas 78701-2483.

Copies of the standard shop drawings are on file with Traffic Operations Division, Bridge Division, and the Materials Section of Construction Division. Additional shop drawings for high mast illumination assemblies built in accordance with these drawings are not required. Pre-approved shop drawing manufacturers and assembly model numbers can be found on the Materials Products list of the Construction Divisions (CST) web site.

Category is Roadway Illumination and Electrical Supplies.

**--Item 618--**

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

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

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

**--Item 620--**

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

Provide 10 amp time delay fuses.

**--Item 628--**

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

**--Item 644--**

The wedge anchor system shown on State Standard Sheet SMD (TWT) is not allowed.

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**--Item 658--**

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

**--Item 666 & 8251--**

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

**--Item 672--**

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

**--Item 677--**

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

**--Item 680--**

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

SH151/Hunt Ln., SH151/Potranco Rd., SH151/Ingram Rd., IH410/Military Dr. and IH410/Culebra Rd.

The locations shown on the plans for pedestrian poles, conduit, ground boxes and other items may be adjusted to better fit field conditions as approved.

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

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

**--Item 682--**

Provide all pedestrian signal heads from the same manufacturer.

Cover all signal faces until placed in operation.

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

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**--Item 684--**

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

**--Item 686 & 687--**

Pedestrian poles may be from a different manufacturer.

**--Item 688--**

The sealant used for vehicle loop wire must be approved.

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

The pedestrian push button shall be wired with a 2/C#12 cable in lieu of a #12 A.W.G. XHHW wire.

**--Item 730--**

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

**--Item 734 & 738--**

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

**--Item 4001--**

For Asphaltic-Plug Expansion Joint System, the following suppliers are approved:

FlexAble Bridge Joint System  
Deery American Corporation.  
PO Box 4099  
Grand Junction, CO 81502  
Attn: San Kearn  
800-227-4059

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Matrix 502 Asphalt Plug  
D.S. Brown Co.  
300 E. Cherry St.  
North Baltimore, OH 45872  
419-257-3561

Thorma-Joint  
Dynamic Surface Applications, Ltd.  
373 Village Road  
Pennsdale, PA 17756  
Attn: Mike Stachowicz  
800-491-5663 Ext. 1

Wabo-Expandex  
BASF  
3011 Heatherpark Drive  
Kingwood, TX 77345  
Attn: Mark Huff  
713-392-4833

**TMS General Notes**

“TMS” is abbreviation for Traffic Management System.

Within the project limits there is existing TMS conduit and manholes containing a 216 strand Fiber Optic cable which is the communication path (back to TransGuide) for the TMS equipment on IH 410 of the construction limits. A portion of this fiber optic cable and supporting 6 strand fiber optic cables will be removed with construction. In order to keep the video and communication coverage operational during construction, the relocation of two (2) existing Wireless Ethernet Radio systems and a new temporary Wireless Ethernet Radio link installation will be necessary. This temporary installation will maintain video and communication coverage during the duration of the construction phase or until the permanent communication path is made operational. Therefore, the contractor’s attention is directed to the “Temporary Traffic Management System Layouts”. All equipment shown on these layouts must be installed and made operational with the TransGuide system BEFORE any existing Traffic Management equipment is taken out of service. It is the contractor’s responsibility to keep the temporary TMS equipment fully operational until all permanent TMS equipment is installed and operational with the TransGuide system, or as directed by the Engineer. The contractor must provide 4 weeks warning if any modifications are necessary that impact the operation of the temporary system. If modifications are necessary, the contractor is required to provide design plans showing the modifications and to make any field modifications necessary. Any plans and field modifications will be done at no cost to TxDOT, regardless of the number of times modifications are necessary to keep the temporary system operational at all times during construction.

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Salvage and deliver to TransGuide maintenance the metal lids from all existing TMS manholes removed during construction. Contact the maintenance manager at (210)731-5109 24 hrs in advance to schedule delivery. Delivery is subsidiary to the various bid items.

Coordinate the installation of permanent TMS equipment, conduit, manholes, ground boxes, etc. with the roadway construction phasing so as to prohibit any open cuts across new construction.

All references to the TRANSGUIDE mainframe are references to the TRANSGUIDE computer network.

Provide a submittal compliance matrix with all TMS submittals.

Perform all TMS Prototype approval, Design approval, and Demonstration tests within the State of Texas.

Not previously used TMS equipment:

Test any TMS Equipment which has not previously been proven to be fully operational and fully compatible with the existing TRANSGUIDE software and hardware in the following manner:

Conduct tests for each type of TMS equipment, as directed by the Engineer, to determine compatibility of the equipment with the existing TRANSGUIDE Lone Star software and hardware. Prior to field installation, test one complete unit with all components to ensure that it is fully compatible with the existing TRANSGUIDE system. Mount the equipment to a trailer and connect in the field to an existing Fiber Hub. Make all hardware connections and configuration (in the operations center and in the field) and provide all incidentals (cable, connectors, etc.) to make the unit operational. Test all aspects of the system to show full functionality of the equipment and to show full compatibility with the TRANSGUIDE software and hardware. Failure to perform to the requirements of any test will be considered as a defect, and the equipment will be subject to rejection by the Engineer. Rejected equipment may be offered again for retest provided all noncompliance's have been corrected and retested by the Contractor and evidence thereof submitted to the Engineer. Testing is considered subsidiary to the particular bid item, with no payment made.

Partial payments:

The contractor will receive partial payments for the following TMS items unless otherwise approved by the Engineer.

Radar Vehicle Sensing Device  
CCTV Field Equipment  
Fiber Optic Dynamic Message Sign System (TY-2)  
Lane Control Signal System  
Install Wrong Way Driver Sign  
Wireless Ethernet Radio (WER)

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Partial Payments Consist Of The Following:

**Materials On Hand:** The Contractor's paid amount is based on the invoices for the material received and stored in his/her yard.

**Field Installation:** When the Contractor has completed the installation of the Radar Vehicle Sensing Device (RVSD), the department will pay up to 80% of the bid item.

**Stand-Alone Test:** When the Radar Vehicle Sensing Device (RVSD) has passed the stand-alone test, the department will pay up to 95% of the bid item.

When the Radar Vehicle Sensing Device (RVSD) has passed the test portion of the Final Acceptance Test, the Department will pay the final 5% of the bid item.

**Field Installation for CCTV Field Equipment, Fiber Optic Dynamic Message Sign System and LED Lane Control System:** When the Contractor has completed the support structure, mounted the CCTV camera, installed the Fiber Optic Dynamic Message Sign System, installed the LED Lane Control System, the department will pay up to 80% of the bid item.

**Stand-Alone Test:** When the CCTV Field Equipment, Fiber Optic Dynamic Message Sign System and LED Lane Control System has passed the stand-alone test, the department will pay up to 95% of the bid item.

When the CCTV Field Equipment, Fiber Optic Dynamic Message Sign System and LED Lane Control System have passed the test portion of the final acceptance test, the Department will pay the final 5% of the bid item.

**Field Installation:** When the Contractor has completed the installation of the LED Wrong Way Sign System, the department will pay up to 80% of the bid item.

**Stand-Alone Test:** When the LED Wrong Way Sign System has passed the stand-alone test, the department will pay up to 95% of the bid item.

When the LED Wrong Way Sign System has passed the test portion of the Final Acceptance Test, the Department will pay the final 5% of the bid item.

**Field Installation:** When the Contractor has completed the installation of the Wireless Ethernet Radio (WER) System, the department will pay up to 80% of the bid item.

**Stand-Alone Test:** When the Wireless Ethernet Radio (WER) System has passed the stand-alone test, the department will pay up to 95% of the bid item.

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When the Wireless Ethernet Radio (WER) System has passed the test portion of the Final Acceptance Test, the Department will pay the final 5% of the bid item.

**TMS Submittals:**

Include in all TMS submittals the respective bid item (specification number and descriptive code). Indicate compliance on a paragraph by paragraph basis. Ensure that the statements claiming compliance reference the appropriate documentation and the referenced documentation supporting this claim is included with the submittal. Provide referenced documentation that contains the same numbering system as referenced in the submittal. For example, submittal item XXXX-XXXX, article 2.3, Paragraph 3, Meets Requirements (See Attachment “B”). The supporting documentation for Item XXXX-XXXX, article 2.3, Paragraph 3, would be titled as Attachment “B”. Provide submittals with the same numbering system as stated in the specification. Failure to submit accordingly will result in rejection by the Engineer.

A TMS submittal will be considered as incomplete and therefore rejected, if it contains items listed as “being furnished by others”. It is the responsibility of the Contractor to make sure the submittal addresses all items of the specification.

Provide the following TMS submittals (to be received by TxDOT San Antonio Traffic Management office) within the designated time. The time frame is in calendar days.

Item Description	Submitted By Contractor W/I Days After Authorization To Begin Work	Returned By State W/I Days
Equipment & Interconnect Wiring Schematic	30	30
LED LCS System	30	30
*CCTV Field Equipment	30	30
*CCTV Equipment Cabinet	30	30
*Camera Pole Structure	30	30
Radar Vehicle Sensing Device (RVSD)	30	30
Wireless Ethernet Radio (WER) Equipment	30	30
Fiber Optic Cable (Single Mode)	60	30
Final Acceptance Plan	90	30

Submit those items designated with the (\*), if any, together as a Package.

Submit the Final Acceptance Plan in electronic form.

The Contractor may submit items sooner if needed for construction, but no later than the dates stated above.

Provide, to the Engineer, as-built plans in MicroStation format (.dgn files) of the TMS portion of this project when the project is complete. TxDOT will provide the .dgn files of the TMS plan sheets.

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Update these files with all TMS items as **ACTUALLY CONSTRUCTED** in the field. Cost to provide as-built plans as described above is subsidiary to the various bid items with no direct payment.

Customize all training specifically for the TRANSGUIDE system; generic training will not be accepted on this project. Training materials and labor are subsidiary to the various Bid Items with no direct payment.

TMS equipment and conduit locations are approximate; the precise location is to be determined in the field, therefore the Contractor should not scale equipment off of plan sheets. Plan sheets are to be used for visual location (vicinity). Equipment locations may have to be adjusted due to conflicts with utilities or other structures, as approved by the Engineer. Do not obstruct the natural flow of water with Traffic Management equipment. In low water areas, place Traffic Management equipment on high side of ditch.

Replace or repair any existing to remain Traffic Management Equipment, conduit, cables, etc. damaged during construction, subsidiary to the various bid items with no direct payment. Replace all pavements, sidewalk, curb, rip-rap or any item damaged during construction, subsidiary to the various bid items with no direct payment.

Stencil structure numbers on all new TMS structures for permanent identification as directed by the Engineer.

Ensure that all TMS equipment furnished and installed is completely compatible with existing hardware and software located within the TRANSGUIDE operations center (i.e. TRANSGUIDE central software). TRANSGUIDE is unique and complicated. The Contractor should contact the Traffic Management Engineer for details on the system network architecture.

All new TMS equipment and any existing TMS equipment that is relocated will be incorporated into the existing Network Management System, subsidiary to the various bid items.

Security against theft and vandalism of all Traffic Management equipment is the full responsibility of the Contractor until the date of final acceptance of the project by the Engineer.

Maintenance of all Traffic Management equipment furnished and installed on this project is the full responsibility of the Contractor until date of final acceptance of the project by the Engineer. All required documentation must be turned in before TxDOT will accept project for maintenance.

Submit a layout of equipment and interconnect wiring schematic for the TRANSGUIDE Control Center and field network equipment for approval by the Engineer prior to ordering materials. Consider all interconnect wiring within the TRANSGUIDE Control Center and all interconnect wiring for all equipment in the plans and described within the specifications as subsidiary to the various Bid Items with no direct payment.

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Consider the adjusting and/or removal of sign panels on OSB structures to mount TMS Dynamic Message Signs and LED LCS Heads as subsidiary to the various Bid Items with no direct payment, as directed by the Engineer.

Perform all TMS electrical work and provide all TMS electrical materials in accordance with the National Electrical Code.

The location of utilities (including TMS), either underground or overhead, if shown within the right of way are approximate and must be verified by the Contractor before beginning construction operations. TRANSGUIDE will provide the approximate location of TMS equipment; however, it is the responsibility of the Contractor to determine the depth of the Traffic Management conduit.

In accordance with the Underground Facility Damage Prevention Act (One Call Bill) the phone number for a utility locator is 1-800-545-6005. It is the Contractor's responsibility to make arrangements for utility locators as needed.

TxDOT (Traffic Management)	(210)731-5109
TxDOT (Sign Lighting)	(210)615-6995
TxDOT (Traffic Signal)	(210)615-5975

In preparing holes for TMS posts and/or foundations, use care so as not to rupture existing drainage structures, sprinkler systems, electrical conduits and public utilities.

Place small signs on ramps and frontage roads at a lateral clearance of 8 feet to 12 feet from the edge of pavement or as directed by the Engineer.

When installing TMS cabinet foundations where rip-rap presently exists, use care in breaking out existing rip-rap. Do not break out area greater than is required for placement of the foundations. Replace broken out rip-rap with class "B" concrete to the exact slope, pattern and thickness of the existing rip-rap in accordance with item 432, subsidiary to the various bid items with no direct payment.

Work on TMS equipment that integrates into the operational system only between the hours of 12:00 am (midnight) and 4:00 am when the work requires an interface with the TRANSGUIDE operational system. Notify the TransGuide maintenance manager (210-731-5109) 48 hrs prior to this work. The contractor is fully responsible for all necessary cross connects, provisioning and cabling in the TRANSGUIDE computer room and fiber network cabinets, subsidiary to the various bid items.

Notify the TransGuide maintenance manager (210-731-5109) one week in advance of any new fiber to existing fiber splicing operations, and of any fiber optic cable cuts as shown in plans.

Contractor shall connect all field wiring and make traffic signal controllers fully operational with the TransGuide system or as directed by the Engineer, subsidiary to the various bid items.

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**--Item 421 & 427--**

Finish all TMS concrete structures with a Grade I Class B, Type I finish or as approved by the Engineer.

**--Item 465—**

Install 50 feet of trunkline fiber optic cable (single mode) inside all manholes or as shown on plans, racked to the side of manhole. Provide rack and hooks to support the cable, subsidiary to the various bid items with no direct payment. Partial construction of manholes will not be permitted unless adequate protection is provided by the contractor.

Protect all TMS equipment with metal beam guard fence, downstream anchor terminal and guard rail end treatment. Install metal beam guard fence with downstream anchor terminal and guard rail end treatment immediately after the creation of the TMS obstruction. Failure to do so will result in stoppage of all other work on the project until the installation of guard fence is complete.

Do not install metal beam guard fence for TMS equipment until the exact location of the TMS equipment to be protected has been determined. Obtain prior approval from the engineer before the metal beam guard fence is installed and prior to ordering materials. Due to field conditions the quantity may be reduced. The engineer's approval does not relieve the contractor of his/her responsibility for correctness. Any adjustments to TMS equipment or metal beam guard fence with GET and DAT will be at no cost to the department.

**---Item 618---**

Make all TMS underground conduit bends of 45 degrees or more in PVC systems, including bends into ground boxes, with rigid metal conduit, subsidiary to the various bid items with no direct payment. Ensure that grounding is in accordance with ED sheets.

Steel case all TMS PVC bores whenever shown on plans, subsidiary to the item "conduit" with no direct payment for labor or materials.

Install a permanent pull cord all new TMS conduit and innderducts which do not contain cables. Provide pull cords that have a minimum tensile strength of 1250 lbs. and are flat with footage markings for determining length installed. Provide pull cords that are water-resistant and resistant to environmental conditions within conduit. Pull cords installed will be considered incidental to the various bid items with no direct payment made for labor and materials.

Install a single 1/C #14 AWG insulated wire (tracer wire) in TMS conduit that does not contain copper cables or contains fiber optic cable only and no copper cables, for the purposed of locating that conduit after installation, subsidiary to the item "conduit".

TMS layout sheets may show multiple TMS cabinets at a particular location, however the conduit & cable which interconnects the equipment is not shown and is not included in the quantities unless stated otherwise on plan sheets.

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When installing TMS conduit in areas where riprap presently exists, use care and do not break out more riprap than is necessary for placement of conduit. Replace riprap with concrete to the exact slope, pattern and thickness of existing riprap, subsidiary to the various bid items with no direct payment.

Install TMS concrete encased conduit (except for Multi-duct conduit system) with a minimum of 2 inches of encasement Provide a template at 5 foot intervals to ensure that the conduit remains in its original position as approved by the engineer. Templates are considered subsidiary to the item "conduit" with no direct payment.

TMS bore lengths shown on plan sheets are approximate. Length of bore is measured starting 3 foot min. from each edge of pavement, curb and gutter, or any unforeseen existing utility, and balance of conduit run is measured as trenched conduit.

Conduit required in the temporary TMS phase will be considered as subsidiary. Due to unknown factors when determining best line of sight for the Wireless network, lengths of conduit will be determined in the field.

Accessories required for conduit mounted to bridge will be subsidiary to item 618 and work will be done as specified in the ED standard sheets or as directed by the engineer. Conduit install in sidewalks or bridge deck will be installed as specified in plans or as directed by the engineer.

**--Item 620--**

Wire nuts for TMS installation are not permitted.

In locations where TMS service conductors are routed through ground boxes with other cables, install a section of flexible PVC conduit in the ground box. Route the service conductors through this conduit to keep it separated from other cables. Isolate all other cables in the ground box in the same manner. Furnishing and installing the flexible PVC conduit is subsidiary to the various bid items with no direct payment.

To ensure immediate identification, consistently color code and permanently identify all TMS power conductors, twisted wire pair cables, shielded cables, control cables, and fiber optic cables in all manholes, ground boxes, and at all termination points and splices. Submit a chart or list identifying all cables and conductors in a logical and sequential manner.

Install all TMS conductors and cables continuous and without splices from terminal point to terminal point unless otherwise shown on the plans.

The TMS plans show the conduits numbered and specified cables in specific conduits. The purpose of these notes is to instruct the contractor on how to group the cables in the conduits and not to specify the exact conduit to carry the cables. The numbering system is arbitrary and may be set by the contractor.

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Provide an electrical conductor insulated ground in accordance with the National Electrical Code for any TMS conduit containing electrical conductors (insulated).

Test all TMS circuits to be clear of faults, grounds or open circuits.

**--Item 624—**

Place concrete aprons around all TMS ground boxes installed in sodded areas or as directed/approved by the Engineer.

Complete construction of TMS ground boxes within 48 hours after beginning construction for that ground box.

Provide TMS ground boxes as shown as state standard ED sheets. Construct the cover of polymer concrete. Legibly imprint the cover with the letters "TMS" – "Danger High Voltage" in minimum 1 inch letters.

**--Item 628—**

Construct the TMS electrical services as shown on the TMS Electrical Service Data sheets.

**--Item 6005--TESTING, TRAINING, DOCUMENTATION, FINAL ACCEPTANCE, AND WARRANTY**

The 60 day test will begin only when all TMS equipment installation, cabling, wiring, testing, field work, TRANSGUIDE operations center work, etc. for the entire project is completed and acceptable to TxDOT. Partial testing is not allowed.

**--Item 6010 -- CCTV FIELD EQUIPMENT**

CCTV Field Equipment standard manufacturers' warranty will not begin until the Final Acceptance Test begins. Any CCTV Field Equipment not having 100% of the standard manufacturer's warranty remaining when Final Acceptance testing begins will be rejected by TxDOT.

Ensure that all underground coaxial cable is RG-11 (double shielded) or as recommended by the manufacturer of the CCTV Field Equipment.

Furnish and install CCTV communication/power cables recommended or supplied by the manufacturer of CCTV Field Equipment.

If no recommendation for communication/power cables is made by manufacturer of CCTV Field Equipment, the following cable to conduit assignment will be followed:

Conduit #1: Install coaxial drop cable and CCTV control cable.

Conduit #2: Install CCTV power cable.

**County:** Bexar

**Highway:** IH 410

If the CCTV Field Equipment power cable carries 24 VDC, then the power cable may be installed in the same conduit with the coaxial drop cable. If the CCTV control cables carry 115 VAC, then the control cables must be installed with the 115 VAC power cable in conduit #2.

In cases where the CCTV Field Equipment and conduit are to be mounted on an existing or proposed structure, review the structure and submit the mounting details to the engineer for approval.

**--Item 6071--FIBER OPTIC CABLE (SINGLE MODE)**

This project requires the placement of fiber optic cable. In situations where the new fiber optic cable placed by the contractor is spliced to existing TxDOT fiber optic cable, it is the responsibility of the contractor to ensure that the new fiber optic cable is compatible with the existing TxDOT fiber optic cable. Splicing fiber optic cable of different manufacturers may result in signal degradation as measured through splice loss and DB loss per mile. The contractor must supply documentation of the compatibility of the fiber types with the fiber optic cable submittals. If testing of the new fiber optic cable after installation shows evidence of signal degradation outside of tolerable specifications due to the use of different fiber types, the contractor is responsible for replacing the newly installed fiber optic cable with material that results in signal quality with specifications. A TxDOT representative will be present while the contractor is splicing fibers from two different manufacturers.

The contractor is responsible for testing any existing Fiber Optic cable strands that will be used for the communication links back to TransGuide or to an Aggregation Point (any existing fiber back to TransGuide or to an Aggregation Point to which new fiber will be spliced) for new or relocated TMS equipment, identifying which fibers can be used and ensuring that the Fiber Optic cable meets requirements stated in Fiber Optic Cable specification for dB loss.

If any existing TMS fiber optic cable (that is to remain or to be re-used) is damaged during construction, it will be repaired within 48 hours after detection of damage. The Contractor will be required to test the fiber and provide such tests to the Engineer for determining suitability for splicing. If no splice is permitted, the Contractor will replace the entire run (approx. 15,000 ft or actual length) at no direct cost to the Department. All fiber provided, tested and spliced will be in accordance with special specification "Fiber Optic Cable (Single Mode)".

Install 50 feet of slack of "trunkline" fiber optic cable in each manhole that fiber passes through, racked to side of manholes using support hooks. Rack and hooks are subsidiary to the item manhole with no direct payment.

Use ST connectors where fiber optic cables terminate in TMS equipment.

All fiber optic cable splices and connectors are subsidiary to the item "Fiber Optic Cable (Single Mode)", with no direct payment.

**County:** Bexar

**Highway:** IH 410

**--Item 6093 -- EXISTING TRAFFIC MANAGEMENT EQUIPMENT**

Contractor is made aware that along with other TMS equipment being relocated. The contractor must examine the existing drill shaft foundations and pole base plates and provide new drill shaft foundations that have the same bolt pattern as existing foundations.

Provide all conduit and cables from Dynamic Message Signs to DMS controllers and LCS heads to LCS controller, subsidiary to this item with no direct payment unless otherwise shown in the plans. Submit to the Engineer for approval the mounting details of the Dynamic Message Signs, LCS heads and conduit that are to be installed on existing or proposed structures.

Provide all conduits, cables and accessories required for the installation of relocated Wireless Ethernet Radio System.

Galvanize all structural steel, bolts, nuts and washers after fabrication.

Provide structural steel that conforms to A.S.T.M. Specification A-36. Provide clamp bolts that have square heads and hexagon nuts and conform with A.S.T.M. Specification A-307 and with dimensions in accordance with ANSI B 18.2.1.

Provide aluminum post clamps made of cast aluminum alloy 356-T6. Provide aluminum bolts made of alloy 2024-T4.

Perform all work in accordance with the National Electrical Code.

Conduct Lane Control System (LCS) testing at night with full closure or as approved by the Engineer.

Numbers assigned on the plans for Fiber Hubs are strictly for identification within the construction plans and are not to be used for programming the TMS equipment. Contact TransGuide automation for equipment numbers.

No portable notebook computers are required for the TMS portion of this project.

**--Item 6095--CAMERA POLE STRUCTURE**

The camera pole may be twelve (12) sided.

CONTROL : 0521-04-274, ETC  
PROJECT : C 521-4-274, ETC  
HIGHWAY : IH 410  
COUNTY : BEXAR

TEXAS DEPARTMENT OF TRANSPORTATION

**GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS**

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

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF  
----- TRANSPORTATION NOVEMBER 1, 2014.  
STANDARD SPECIFICATIONS ARE INCORPORATED  
INTO THE CONTRACT BY REFERENCE.

ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS  
ITEM 100 PREPARING RIGHT OF WAY (103)  
ITEM 104 REMOVING CONCRETE  
ITEM 106 OBLITERATING ABANDONED ROAD  
ITEM 110 EXCAVATION (132)  
ITEM 132 EMBANKMENT (100) (160) (204) (210) (216) (260) (400)  
ITEM 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 169 SOIL RETENTION BLANKETS  
ITEM 247 FLEXIBLE BASE (105) (204) (210) (216) (520)  
ITEM 316 SEAL COAT (210) (300) (302)  
ITEM 341 DENSE-GRADED HOT-MIX ASPHALT (300) (301) (320) (520) (585)  
ITEM 347 THIN OVERLAY MIXTURES (TOM) (300) (301) (320) (520) (585)  
ITEM 348 THIN BONDED FRICTION COURSES (210) (300) (301) (320) (342)  
(520) (585)  
ITEM 354 PLANING AND TEXTURING PAVEMENT  
ITEM 356 FABRIC UNDERSEAL (300) (316) (520)  
ITEM 360 CONCRETE PAVEMENT (421) (422) (438) (440) (529) (585)  
ITEM 400 EXCAVATION AND BACKFILL FOR STRUCTURES (110) (132) (401)  
(402) (403) (416) (420) (421) (423)  
ITEM 401 FLOWABLE BACKFILL (421) (7027)  
ITEM 402 TRENCH EXCAVATION PROTECTION  
ITEM 403 TEMPORARY SPECIAL SHORING (410) (411) (423)  
ITEM 416 DRILLED SHAFT FOUNDATIONS (405) (420) (421) (423) (440) (448)  
ITEM 420 CONCRETE SUBSTRUCTURES (400) (404) (421) (422) (426) (427)  
(440) (441) (448) (7027)  
ITEM 422 CONCRETE SUPERSTRUCTURES (420) (421) (424) (438) (440) (448)  
(454) (782)

ITEM 423 RETAINING WALLS (110) (132) (216) (400) (416) (420) (421) (424)  
 (440) (445)  
 ITEM 425 PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS (409)  
 (420) (421) (424) (426) (427) (434) (440) (442) (445)  
 ITEM 427 SURFACE FINISHES FOR CONCRETE (420)  
 ITEM 429 CONCRETE STRUCTURE REPAIR (421) (431) (440) (780)  
 ITEM 432 RIPRAP (247) (420) (421) (431) (440)  
 ITEM 434 BRIDGE BEARINGS (420) (441) (442) (445) (446) (449)  
 ITEM 438 CLEANING AND SEALING JOINTS  
 ITEM 442 METAL FOR STRUCTURES (441) (445) (446) (447) (448)  
 ITEM 446 FIELD CLEANING AND PAINTING STEEL (441) (445)  
 ITEM 450 RAILING (420) (421) (422) (424) (440) (441) (442) (445) (446)  
 (448)  
 ITEM 454 BRIDGE EXPANSION JOINTS (429) (442) (785)  
 ITEM 462 CONCRETE BOX CULVERTS AND DRAINS (400) (402) (403) (420)  
 (421) (422) (424) (440) (464) (476)  
 ITEM 464 REINFORCED CONCRETE PIPE (400) (402) (403) (467) (476)  
 ITEM 465 JUNCTION BOXES, MANHOLES, AND INLETS (400) (420) (421) (424)  
 (440) (476)  
 ITEM 466 HEADWALLS AND WINGWALLS (400) (420) (421) (432) (440) (464)  
 ITEM 467 SAFETY END TREATMENT (400) (420) (421) (432) (440) (442) (445)  
 (460) (464)  
 ITEM 471 FRAMES, GRATES, RINGS, AND COVERS (441) (445) (448) (465)  
 ITEM 479 ADJUSTING MANHOLES AND INLETS (400) (421) (465) (471)  
 ITEM 480 CLEANING EXISTING CULVERTS  
 ITEM 481 PIPE FOR DRAINS (400)  
 ITEM 496 REMOVING STRUCTURES  
 ITEM 500 MOBILIZATION  
 ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING  
 ITEM 504 FIELD OFFICE AND LABORATORY  
 ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL  
 CONTROLS (161) (432) (556)  
 ITEM 508 CONSTRUCTING DETOURS  
 ITEM 512 PORTABLE CONCRETE TRAFFIC BARRIER (420) (421) (424) (440)  
 (442)  
 ITEM 514 PERMANENT CONCRETE TRAFFIC BARRIER (400) (416) (420) (421)  
 (424) (440) (442) (448)  
 ITEM 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) (441) (445) (529)  
 ITEM 542 REMOVING METAL BEAM GUARD FENCE  
 ITEM 544 GUARDRAIL END TREATMENTS  
 ITEM 545 CRASH CUSHION ATTENUATORS (421)  
 ITEM 610 ROADWAY ILLUMINATION ASSEMBLIES (416) (421) (432) (441) (442)  
 (445) (449) (614) (616) (618) (620) (622) (624) (628)  
 ITEM 613 HIGH MAST ILLUMINATION POLES (416) (421) (432) (441) (442)  
 (445) (449) (618)  
 ITEM 614 HIGH MAST ILLUMINATION ASSEMBLIES (441) (442) (445) (613)  
 (616) (620) (628)  
 ITEM 617 TEMPORARY ROADWAY ILLUMINATION (416) (610) (613) (614) (618)  
 (620) (621) (622) (624) (627) (628)

ITEM 618 CONDUIT (400) (476)  
 ITEM 620 ELECTRICAL CONDUCTORS (610) (628)  
 ITEM 624 GROUND BOXES (420) (421) (432) (440) (618) (620)  
 ITEM 628 ELECTRICAL SERVICES (441) (445) (449) (618) (620) (627) (656)  
 ITEM 636 SIGNS (643)  
 ITEM 644 SMALL ROADSIDE SIGN ASSEMBLIES (421) (440) (441) (442) (445)  
 (636) (643) (656)  
 ITEM 647 LARGE ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (416) (421)  
 (440) (441) (442) (445) (636)  
 ITEM 650 OVERHEAD SIGN SUPPORTS (416) (420) (421) (441) (442) (445)  
 (449) (618) (636) (654)  
 ITEM 658 DELINEATOR AND OBJECT MARKER ASSEMBLIES (445)  
 ITEM 662 WORK ZONE PAVEMENT MARKINGS (666) (668) (672) (677)  
 ITEM 666 RETROREFLECTORIZED PAVEMENT MARKINGS (316) (318) (502) (662)  
 (677) (678)  
 ITEM 668 PREFABRICATED PAVEMENT MARKINGS (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 HIGHWAY TRAFFIC SIGNALS (416) (610) (618) (624) (625) (627)  
 (628) (636) (656) (682) (684) (686) (688)  
 ITEM 682 VEHICLE AND PEDESTRIAN SIGNAL HEADS  
 ITEM 684 TRAFFIC SIGNAL CABLES  
 ITEM 686 TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL) (416) (421) (441)  
 (442) (445) (449)  
 ITEM 687 PEDESTAL POLE ASSEMBLIES (445) (449) (656) (682)  
 ITEM 688 PEDESTRIAN DETECTORS AND VEHICLE LOOP DETECTORS (618)  
 (624) (682) (684)  
 ITEM 730 ROADSIDE MOWING  
 ITEM 734 LITTER REMOVAL  
 ITEM 738 CLEANING AND SWEEPING HIGHWAYS  
 ITEM 780 CONCRETE CRACK REPAIR

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

SPECIAL LABOR PROVISIONS FOR STATE PROJECTS (000---008)  
 WAGE RATES  
 SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000---001)  
 SPECIAL PROVISION "NONDISCRIMINATION" (000---002)  
 SPECIAL PROVISION "SMALL BUSINESS ENTERPRISE IN STATE FUNDED  
 CONSTRUCTION" (000---009)  
 SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000---010)  
 SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000---057)  
 SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000---075)  
 SPECIAL PROVISION TO ITEM 6 (006---001)  
 SPECIAL PROVISION TO ITEM 7 (007---001)  
 SPECIAL PROVISIONS TO ITEM 8 (008---001) (008---003) (008---006)  
 SPECIAL PROVISION TO ITEM 506 (506---001)  
 SPECIAL PROVISION TO ITEM 730 (730---003)

SPECIAL PROVISION TO SPECIAL SPECIFICATION ITEM 6029 (6029--001)

SPECIAL SPECIFICATIONS:

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- ITEM 3002 SPRAY APPLIED UNDERSEAL MEMBRANE
- ITEM 6001 PORTABLE CHANGEABLE MESSAGE SIGN
- ITEM 6008 ITS FIELD EQUIPMENT CABINET
- ITEM 6010 CCTV FIELD EQUIPMENT
- ITEM 6027 PREPARATION OF EXISTING CONDUITS, GROUND BOXES, OR  
MANHOLES
- ITEM 6028 INSTALLATION OF DYNAMIC MESSAGE SIGN SYSTEM
- ITEM 6029 RADAR VEHICLE SENSING DEVICE (RVSD)
- ITEM 6071 FIBER OPTIC CABLE
- ITEM 6082 LED LANE CONTROL SYSTEM
- ITEM 6093 EXISTING TRAFFIC MANAGEMENT EQUIPMENT
- ITEM 6095 CAMERA POLE STRUCTURE
- ITEM 6096 WRONG WAY DRIVER SIGN(S) AND RADAR EQUIPMENT
- ITEM 6101 WIRELESS ETHERNET RADIO (LOCAL) LINK
- ITEM 6102 HIGH MAST ILLUMINATION
- ITEM 7027 NATURAL GAS PIPELINE
- ITEM 7028 SANITARY SEWER
- ITEM 7039 WATER MAINS AND SERVICE LINES

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

# Special Provision to Item 000

## Special Labor Provisions for State Projects



### 1. GENERAL

This is a "Public Works" Project, as provided under Government Code Title 10, Chapter 2258, "Prevailing Wage Rates," and is subject to the provisions of the Statute. No provisions in the Contract are intended to be in conflict with the provisions of the Statute.

The Texas Transportation Commission has ascertained and indicated in the special provisions the regular rate of per diem wages prevailing in each locality for each craft or type of worker. Apply the wage rates contained in the specifications as minimum wage rates for the Contract.

### 2. MINIMUM WAGES, HOURS AND CONDITIONS OF EMPLOYMENT

All workers necessary for the satisfactory completion of the work are within the purview of the Contract.

Whenever and wherever practical, give local citizens preference in the selection of labor.

Do not require any worker to lodge, board or trade at a particular place, or with a particular person as a condition of employment.

Do not charge or accept a fee of any from any person who obtains work on the project. Do not require any person who obtains work on the project to pay any fee to any other person or agency obtaining employment for the person on the project.

Do not charge for tools or equipment used in connection with the duties performed, except for loss or damage of property. Do not charge for necessary camp water.

Do not charge for any transportation furnished to any person employed on the project.

The provisions apply where work is performed by piece work, station work, etc. The minimum wage paid will be exclusive of equipment rental on any shipment which the worker or subcontractor may furnish in connection with his work.

Take responsibility for carrying out the requirements of this specification and ensure that each subcontractor working on the project complies with its provisions.

Any form of subterfuge, coercion or deduction designed to evade, reduce or discount the established minimum wage scales will be considered a violation of the Contract.

The Fair Labor Standards Acts (FLSA) established one and one-half (1-1/2) pay for overtime in excess of 40 hours worked in 1 week. Do not consider time consumed by the worker in going to and returning from the place of work as part of the hours of work. Do not require or permit any worker to work in excess of 40 hours in 1 week, unless the worker receives compensation at a rate not less than 1-1/2 times the basic rate of pay for all hours worked in excess of 40 hours in the workweek.

The general rates of per diem wages prevailing in this locality for each class and type of workers whose services are considered necessary to fulfill the Contract are indicated in the special provisions, and these rates govern as minimum wage rates on this Contract. A penalty of \$60.00 per calendar day or portion of a calendar day for each worker that is paid less than the stipulated general rates of per diem wages for any work done under the Contract will be deducted. The Department, upon receipt of a complaint by a worker,

will determine within 30 days whether good cause exists to believe that the Contractor or a subcontractor has violated wage rate requirements and notify the parties involved of the findings. Make every effort to resolve the alleged violation within 14 days after notification. The next alternative is submittal to binding arbitration in accordance with the provisions of the Texas General Arbitration Act (Art. 224 et seq., Revised Statutes).

Notwithstanding any other provision of the Contract, covenant and agree that the Contractor and its subcontractors will pay each of their employees and contract labor engaged in any way in work under the Contract, a wage not less than what is generally known as the "federal minimum wage" as set out in 29 U.S.C. 206 as that Statute may be amended from time to time.

Pay any worker employed whose position is not listed in the Contract, a wage not less than the per diem wage rate established in the Contract for a worker whose duties are most nearly comparable.

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### 3. RECORD AND INSPECTIONS

Keep copies of weekly payrolls for review. Require subcontractors to keep copies of weekly payrolls for review. Show the name, occupation, number of hours worked each day and per diem wage paid each worker together with a complete record of all deductions made from such wages. Keep records for a period of 3 years from the date of completion of the Contract.

Where the piece-work method is used, indicate on the payroll for each person involved:

- Quantity of piece work performed.
- Price paid per piece-work unit.
- Total hours employed.

The Engineer may require the Contractor to file an affidavit for each payroll certifying that payroll is a true and accurate report of the full wages due and paid to each person employed.

Post or make available to employees the prevailing wage rates from the Contract. Require subcontractors to post or make available to employees the prevailing wage rates from the Contract.

# Special Provision to Item 000

## Small Business Enterprise in State Funded Projects



### 1. DESCRIPTION

The purpose of this Special Provision is to carry out the Texas Department of Transportation's policy of ensuring that Small Business Enterprise (SBE) has an opportunity to participate in the performance of contracts. If the SBE goal is greater than zero, Article A of this Special Provision shall apply to this Contract; otherwise, Article B of this Special Provision applies. The percentage goal for SBE participation in the work to be performed under this contract will be shown in the proposal.

### 2. DEFINITIONS

Small Business Enterprise (SBE) is a firm (including affiliates) certified by the Department whose annual gross receipts do not exceed the U.S. Small Business Administration's size standards for 4 consecutive years. Firms certified as Historically Underutilized Businesses (HUBs) by the Texas Comptroller of Public Accounts and as Disadvantaged Business Enterprises (DBEs) by the Texas Uniform Certification Program automatically qualify as SBEs.

#### 2.1. Article A - SBE Goal is Greater than Zero.

2.1.1. **Policy.** The Department is committed to providing contracting opportunities for small businesses. In this regard, it is the Department's policy to develop and maintain a program in order to facilitate contracting opportunities for small businesses. Consequently, the requirements of the Department's Small Business Enterprise Program apply to this contract as follows:

2.1.1.1. The Contractor shall make a good faith effort to meet the SBE goal for this contract.

2.1.1.2. The Contractor and any Subcontractors shall not discriminate on the basis of race, color, national origin, age, disability or sex in the award and performance of this contract. These nondiscrimination requirements shall be incorporated into any subcontract and purchase order.

2.1.1.3. After a conditional award is made to the low bidder, the Department will determine the adequacy of a Contractor's efforts to meet the contract goal, as is outlined under Section 2, "Contractor's Responsibilities." If the requirements of Section 2 are met, the contract will be forwarded to the Contractor for execution.

The Contractor's performance, during the construction period of the contract in meeting the SBE goal, will be monitored by the Department.

2.1.2. **Contractor's Responsibilities.** These requirements must be satisfied by the Contractor. A SBE Contractor may satisfy the SBE requirements by performing at least 25% of the contract work with its own organization as defined elsewhere in the contract.

2.1.2.1. The Contractor shall submit a completed SBE Commitment Agreement Form for each SBE they intend to use to satisfy the SBE goal so as to arrive in the Department's Office of Civil Rights (OCR) in Austin, Texas not later than 5:00 p.m. on the 10th business day, excluding national holidays, after the conditional award of the contract. When requested, additional time, not to exceed 7 business days, excluding national holidays, may be granted based on documentation submitted by the Contractor.

2.1.2.2. A Contractor who cannot meet the contract goal, in whole or in part, shall document the good faith efforts taken to meet the SBE goal. The Department will consider as good faith efforts all documented explanations

that are submitted and that describe a Contractor's failure to meet a SBE goal or obtain SBE participation, including:

- 2.1.2.2.1. Advertising in general circulation, trade association, and/or minority/women focus media concerning subcontracting opportunities,
- 2.1.2.2.2. Dividing the contract work into reasonable portions in accordance with standard industry practices,
- 2.1.2.2.3. Documenting reasons for rejection or meeting with the rejected SBE to discuss the rejection,
- 2.1.2.2.4. Providing qualified SBEs with adequate information about bonding, insurance, plans, specifications, scope of work, and the requirements of the contract,
- 2.1.2.2.5. Negotiating in good faith with qualified SBEs, not rejecting qualified SBEs who are also the lowest responsive bidder, and;
- 2.1.2.2.6. Using the services of available minorities and women, community organizations, contractor groups, local, state and federal business assistance offices, and other organizations that provide support services to SBEs.
- 2.1.2.3. The good faith effort documentation is due at the time and place specified in Subarticle 2.(a). of this Special Provision. The Director of the DBE & SBE Programs Section will evaluate the Contractor's documentation. If it is determined that the Contractor has failed to meet the good faith effort requirements, the Contractor will be given an opportunity for reconsideration by the Department.
- 2.1.2.4. Should the bidder to whom the contract is conditionally awarded refuse, neglect or fail to meet the SBE goal and/or demonstrate to the Department's satisfaction sufficient efforts to obtain SBE participation, the proposal guaranty filed with the bid shall become the property of the State, not as a penalty, but as liquidated damages to the Department.
- 2.1.2.5. The Contractor must not terminate a SBE subcontractor submitted on a commitment agreement for a contract with an assigned goal without the prior written consent of the Department.
- 2.1.2.6. The Contractor shall designate a SBE contact person who will administer the Contractor's SBE program and who will be responsible for submitting reports, maintaining records, and documenting good faith efforts to use SBEs.
- 2.1.2.7. The Contractor must inform the Department of the representative's name, title and telephone number within 10 days of beginning work.
- 2.1.3. **Eligibility of SBEs.**
- 2.1.3.1. The Department certifies the eligibility of SBEs.
- 2.1.3.2. The Department maintains and makes available to interested parties a directory of certified SBEs.
- 2.1.3.3. Only firms certified at the time of letting or at the time the commitments are submitted are eligible to be used in the information furnished by the Contractor required under Section 2.(a) above.
- 2.1.3.4. Certified HUBs and DBEs are eligible as SBEs.
- 2.1.3.5. Small Business Size Regulations and Eligibility is referenced on e-CFR (Code of Federal Regulations), Title 13 – Business Credit and Assistance, Chapter 1 – Small Business Administration, Part 121 – Small Business Size Regulations, Subpart A – Size Eligibility Provisions and Standards.
- 2.1.4. **Determination of SBE Participation.** SBE participation shall be counted toward meeting the SBE goal in this contract in accordance with the following:

- 2.1.4.1. A Contractor will receive credit for all payments actually made to a SBE for work performed and costs incurred in accordance with the contract, including all subcontracted work.
- 2.1.4.2. A SBE Contractor or subcontractor may not subcontract more than 75% of a contract. The SBE shall perform not less than 25% of the value of the contract work with its own organization.
- 2.1.4.3. A SBE may lease equipment consistent with standard industry practice. A SBE may lease equipment from the prime contractor if a rental agreement, separate from the subcontract specifying the terms of the lease arrangement, is approved by the Department prior to the SBE starting the work in accordance with the following:
- 2.1.4.3.1. If the equipment is of a specialized nature, the lease may include the operator. If the practice is generally acceptable with the industry, the operator may remain on the lessor's payroll. The operator of the equipment shall be subject to the full control of the SBE, for a short term, and involve a specialized piece of heavy equipment readily available at the job site.
- 2.1.4.3.2. For equipment that is not specialized, the SBE shall provide the operator and be responsible for all payroll and labor compliance requirements.
- 2.1.5. **Records and Reports.**
- 2.1.5.1. The Contractor shall submit monthly reports, after work begins, on SBE payments, (including payments to HUBs and DBEs). The monthly reports are to be sent to the Area Engineer's office. These reports will be due within 15 days after the end of a calendar month.
- These reports will be required until all SBE subcontracting or supply activity is completed. The "SBE Progress Report" is to be used for monthly reporting. Upon completion of the contract and prior to receiving the final payment, the Contractor shall submit the "SBE Final Report" to the Office of Civil Rights and a copy to the Area Engineer. These forms may be obtained from the Office of Civil Rights and reproduced as necessary. The Department may verify the amounts being reported as paid to SBEs by requesting, on a random basis, copies of invoices and cancelled checks paid to SBEs. When the SBE goal requirement is not met, documentation supporting Good Faith Efforts, as outlined in Section 2.(b) of this Special Provision, must be submitted with the Final Report.
- 2.1.5.2. SBE subcontractors and/or suppliers should be identified on the monthly report by SBE certification number, name and the amount of actual payment made to each during the monthly period. **These reports are required regardless of whether or not SBE activity has occurred in the monthly reporting period.**
- 2.1.5.3. All such records must be retained for a period of 3 years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the Department.
- 2.1.6. **Compliance of Contractor.** To ensure that SBE requirements of this contract are complied with, the Department will monitor the Contractor's efforts to involve SBEs during the performance of this contract. This will be accomplished by a review of monthly reports submitted by the Contractor indicating his progress in achieving the SBE contract goal and by compliance reviews conducted by the Department.
- A Contractor's failure to comply with the requirements of this Special Provision shall constitute a material breach of this contract. In such a case, the Department reserves the right to employ remedies as the Department deems appropriate in the terms of the contract.
- 2.2. **Article B - No SBE Goal.**
- 2.2.1. **Policy.** It is the policy of the Department that SBEs shall have an opportunity to participate in the performance of contracts. Consequently, the requirements of the Department's Small Business Enterprise Program apply to this contract as specified in Section 2-5 of this Article.

- 2.2.2. **Contractor's Responsibilities.** If there is no SBE goal, the Contractor will offer SBEs an opportunity to participate in the performance of contracts and subcontracts.
- 2.2.3. **Prohibit Discrimination.** The Contractor and any subcontractor shall not discriminate on the basis of race, color, national origin, religion, age, disability or sex in the award and performance of contracts. These nondiscrimination requirements shall be incorporated into any subcontract and purchase order.
- 2.2.4. **Records and Reports.**
- 2.2.4.1. The Contractor shall submit reports on SBE (including HUB and DBE) payments. The reports are to be sent to the Area Engineer's office. These reports will be due annually by the 31<sup>st</sup> of August or at project completion, whichever comes first.
- These reports will be required until all SBE subcontracting or supply activity is completed. The "SBE Progress Report" is to be used for reporting. Upon completion of the contract and prior to receiving the final payment, the Contractor shall submit the "SBE Final Report" to the Office of Civil Rights and a copy to the Area Engineer. These forms may be obtained from the Office of Civil Rights and reproduced as necessary. The Department may verify the amounts being reported as paid to SBEs by requesting copies of invoices and cancelled checks paid to SBEs on a random basis.
- 2.2.4.2. SBE subcontractors and/or suppliers should be identified on the report by SBE Certification Number, name and the amount of actual payment made.
- 2.2.4.3. All such records must be retained for a period of 3 years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the Department.

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## Special Provision to Item 8

### Prosecution and Progress

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Item 8, "Prosecution and Progress," of the Standard Specifications, is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 8.6., "Failure to Complete Work on Time,"** is supplemented by the following:

**8.6.1. Lane Closure Assessment Fees.**

Monetary assessment, as shown on the plans, will be made against the Contractor for any lane closure or obstruction that overlaps into the peak hour traffic for each hour or portion thereof, per lane, regardless of the length of lane closure or obstruction.

**8.6.1.1. Definition of Terms.** For this Contract the following definitions apply:

**8.6.1.1.1 Hour.** Any continuous 60 min. period or portion of a continuous 60 min. period beginning at that point when a lane(s) is closed or obstructed by the Contractor's operations.

**8.6.1.1.2 Assessment Fee.** The amount shown in the proposal, representing the average hourly cost of interference and inconvenience to the road user for each lane closed or obstructed during peak hour traffic.

**8.6.1.1.3 Closure or Obstruction.** When the Contractor's operations result in a useable lane width of the travelway or shoulder less than that specified in the plan documents.

**8.6.1.1.4 Peak Hour Traffic Times.** Schedule of days and times described in the General Notes, when lane closures or obstructions are not allowed.

**8.6.1.2 Fee Calculation and Collection.** The assessment fee will be deducted from the amount due the Contractor on the monthly construction estimate, and thus retained by the Department. The Engineer will determine the time of overlap of lane closure(s) or obstruction(s) for calculating the assessment fee. The assessment fee is based on road user costs and is assessed not as a penalty, but for added expense incurred by the traveling public.

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