

# NOTIFICATION OF ADDENDUM

## ADDENDUM NO. 2

**DATED 7/29/2016**

<b>Control</b>	<b>0250-03-046, ETC.</b>
<b>Project</b>	<b>STP 1602(432)</b>
<b>Highway</b>	<b>US 281</b>
<b>County</b>	<b>ERATH, ETC.</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: STP 1602(432)

CONTROL: 0250-03-046

COUNTY: ERATH

LETTING: 08/09/2016

REFERENCE NO: 0729

**PROPOSAL ADDENDUMS**

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- PROPOSAL COVER
- BID INSERTS (SH. NO.: 2-11, 10-11 - 11-11 )
- GENERAL NOTES (SH. NO.: F , L )

- SPEC LIST (SH. NO.:
- SPECIAL PROVISIONS:
- ADDED:

DELETED:

- SPECIAL SPECIFICATIONS:
- ADDED:

DELETED:

OTHER: SEE CHANGES OUTLINED BELOW

DESCRIPTION OF ABOVE CHANGES  
(INCLUDING PLANS SHEET CHANGES)

BID INSERTS:

SHEET 2-11: ITEM 341-6020 IS DELETED  
ITEM 341-6021 IS ADDED

SHEET 10-11: ITEMS 662-6109 AND 662-6111 ARE ADDED.

SHEETS 10-11 - 11-11 INFORMATION MAY HAVE SHIFTED DUE TO THE CHANGES ABOVE  
GENERAL NOTES:

SHEET F: NOTE FOR ITEM 8 IS REVISED

SHEET L: NOTES FOR ITEMS 341 AND 351 ARE REVISED.

PLANS:

THE FOLLOWING SHEETS ARE REPLACED:

15, 15A - 15H, 16, 16A - 16B, 17 - 20, 35

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	37.500	1
	104	6009		REMOVING CONC (RIPRAP)  DOLLARS and CENTS	SY	270.000	2
	110	6001		EXCAVATION (ROADWAY)  DOLLARS and CENTS	CY	84,041.000	3
	132	6004		EMBANKMENT (FINAL)(DENS CONT)(TY B)  DOLLARS and CENTS	CY	32,163.000	4
	150	6002		BLADING  DOLLARS and CENTS	HR	275.000	5
	161	6017		COMPOST MANUF TOPSOIL (4")  DOLLARS and CENTS	SY	235,479.000	6
	164	6003		BROADCAST SEED (PERM) (RURAL) (CLAY)  DOLLARS and CENTS	SY	297,543.000	7
	164	6009		BROADCAST SEED (TEMP) (WARM)  DOLLARS and CENTS	SY	297,543.000	8
	164	6011		BROADCAST SEED (TEMP) (COOL)  DOLLARS and CENTS	SY	297,543.000	9
	168	6001		VEGETATIVE WATERING  DOLLARS and CENTS	MG	10,415.000	10
	247	6044		FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS)  DOLLARS and CENTS	CY	72,203.000	11
	310	6009		PRIME COAT (MC-30)  DOLLARS and CENTS	GAL	81,623.000	12

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	316	6015		ASPH (AC-15P)  DOLLARS and CENTS	GAL	388,176.000	13
	316	6029		ASPH (RC-250)  DOLLARS and CENTS	GAL	108,797.000	14
	316	6177		AGGR(TY-B GR-5 SAC-B)  DOLLARS and CENTS	CY	2,500.000	15
	316	6224		AGGR(TY-PB GR-4 SAC-B)  DOLLARS and CENTS	CY	8,854.000	16
	341	6021		D-GR HMA TY-C SAC-B PG64-22  DOLLARS and CENTS	TON	49,076.000	17
	341	6275		D-GR HMA TY-D SAC-A PG70-28 (LATEX ADD)  DOLLARS and CENTS	TON	51,474.000	18
	351	6004		FLEXIBLE PAVEMENT STRUCTURE REPAIR(8")  DOLLARS and CENTS	SY	1,500.000	19
	354	6029		PLANE ASPH CONC PAV(0" TO 6")  DOLLARS and CENTS	SY	374,228.000	20
	400	6005		CEM STABIL BKFL  DOLLARS and CENTS	CY	841.000	21
	403	6001		TEMPORARY SPL SHORING  DOLLARS and CENTS	SF	12,132.000	22
	420	6051		CL C CONC (CULV)  DOLLARS and CENTS	CY	30.000	23
	432	6001		RIPRAP (CONC)(4 IN)  DOLLARS and CENTS	CY	185.000	24

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	432	6002		RIPRAP (CONC)(5 IN)  DOLLARS and CENTS	CY	419.000	25
	432	6027		RIPRAP (STONE COMMON)(DRY)(24 IN)  DOLLARS and CENTS	CY	1,481.000	26
	462	6045		CONC BOX CULV (3 FT X 2 FT)(EXTEND)  DOLLARS and CENTS	LF	268.000	27
	462	6046		CONC BOX CULV (3 FT X 3 FT)(EXTEND)  DOLLARS and CENTS	LF	214.000	28
	462	6047		CONC BOX CULV (4 FT X 2 FT)(EXTEND)  DOLLARS and CENTS	LF	61.000	29
	462	6048		CONC BOX CULV (4 FT X 3 FT)(EXTEND)  DOLLARS and CENTS	LF	79.000	30
	462	6049		CONC BOX CULV (4 FT X 4 FT)(EXTEND)  DOLLARS and CENTS	LF	117.000	31
	462	6050		CONC BOX CULV (5 FT X 2 FT)(EXTEND)  DOLLARS and CENTS	LF	22.000	32
	462	6053		CONC BOX CULV (5 FT X 5 FT)(EXTEND)  DOLLARS and CENTS	LF	3.000	33
	462	6054		CONC BOX CULV (6 FT X 3 FT)(EXTEND)  DOLLARS and CENTS	LF	32.000	34
	462	6056		CONC BOX CULV (6 FT X 5 FT)(EXTEND)  DOLLARS and CENTS	LF	24.000	35
	462	6057		CONC BOX CULV (6 FT X 6 FT)(EXTEND)  DOLLARS and CENTS	LF	130.000	36

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	462	6060		CONC BOX CULV (7 FT X 5 FT)(EXTEND) DOLLARS and CENTS	LF	145.000	37
	462	6061		CONC BOX CULV (7 FT X 6 FT)(EXTEND) DOLLARS and CENTS	LF	31.000	38
	462	6067		CONC BOX CULV (8 FT X 8 FT)(EXTEND) DOLLARS and CENTS	LF	96.000	39
	462	6078		CONC BOX CULV (10 FT X 10 FT)(EXTEND) DOLLARS and CENTS	LF	22.000	40
	464	6003		RC PIPE (CL III)(18 IN) DOLLARS and CENTS	LF	1,329.000	41
	464	6005		RC PIPE (CL III)(24 IN) DOLLARS and CENTS	LF	2,129.000	42
	466	6151		WINGWALL (FW - 0) (HW=4 FT) DOLLARS and CENTS	EA	1.000	43
	466	6156		WINGWALL (FW - 0) (HW=9 FT) DOLLARS and CENTS	EA	2.000	44
	466	6171		WINGWALL (PW - 1) (HW=10 FT) DOLLARS and CENTS	EA	4.000	45
	466	6172		WINGWALL (PW - 1) (HW=11 FT) DOLLARS and CENTS	EA	1.000	46
	466	6173		WINGWALL (PW - 1) (HW=12 FT) DOLLARS and CENTS	EA	3.000	47
	466	6177		WINGWALL (PW - 1) (HW=16 FT) DOLLARS and CENTS	EA	1.000	48

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	466	6178		WINGWALL (PW - 1) (HW=3 FT) DOLLARS and CENTS	EA	4.000	49
	466	6179		WINGWALL (PW - 1) (HW=4 FT) DOLLARS and CENTS	EA	2.000	50
	466	6180		WINGWALL (PW - 1) (HW=5 FT) DOLLARS and CENTS	EA	2.000	51
	466	6181		WINGWALL (PW - 1) (HW=6 FT) DOLLARS and CENTS	EA	1.000	52
	466	6183		WINGWALL (PW - 1) (HW=8 FT) DOLLARS and CENTS	EA	5.000	53
	466	6184		WINGWALL (PW - 1) (HW=9 FT) DOLLARS and CENTS	EA	4.000	54
	466	6192		WINGWALL (PW - 2) (HW=3 FT) DOLLARS and CENTS	EA	11.000	55
	466	6193		WINGWALL (PW - 2) (HW=4 FT) DOLLARS and CENTS	EA	11.000	56
	466	6194		WINGWALL (PW - 2) (HW=5 FT) DOLLARS and CENTS	EA	7.000	57
	466	6195		WINGWALL (PW - 2) (HW=6 FT) DOLLARS and CENTS	EA	2.000	58
	466	6196		WINGWALL (PW - 2) (HW=7 FT) DOLLARS and CENTS	EA	4.000	59
	466	6197		WINGWALL (PW - 2) (HW=8 FT) DOLLARS and CENTS	EA	7.000	60

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	466	6198		WINGWALL (PW - 2) (HW=9 FT) DOLLARS and CENTS	EA	1.000	61
	467	6106		SET (TY I)(S=3 FT)(HW=3FT)(4:1)(C) DOLLARS and CENTS	EA	13.000	62
	467	6112		SET (TY I)(S=3 FT)(HW= 4 FT)(4:1)(C) DOLLARS and CENTS	EA	3.000	63
	467	6150		SET (TY I)(S= 4 FT)(HW= 5 FT)(4:1) (C) DOLLARS and CENTS	EA	1.000	64
	467	6205		SET (TY I)(S= 6 FT)(HW= 3 FT)(4:1) (C) DOLLARS and CENTS	EA	1.000	65
	467	6362		SET (TY II) (18 IN) (RCP) (6: 1) (C) DOLLARS and CENTS	EA	68.000	66
	467	6395		SET (TY II) (24 IN) (RCP) (6: 1) (P) DOLLARS and CENTS	EA	102.000	67
	496	6007		REMOV STR (PIPE) DOLLARS and CENTS	LF	2,473.000	68
	500	6001		MOBILIZATION DOLLARS and CENTS	LS	1.000	69
	502	6001		BARRICADES, SIGNS AND TRAFFIC HAN- DLING DOLLARS and CENTS	MO	21.000	70
	506	6001	003	ROCK FILTER DAMS (INSTALL) (TY 1) DOLLARS and CENTS	LF	150.000	71
	506	6002	003	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	2,055.000	72

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	506	6011	003	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	2,205.000	73
	506	6038	003	TEMP SEDMT CONT FENCE (INSTALL) DOLLARS and CENTS	LF	9,650.000	74
	506	6039	003	TEMP SEDMT CONT FENCE (REMOVE) DOLLARS and CENTS	LF	9,650.000	75
	506	6042	003	BIODEG EROSN CONT LOGS (INSTL) (18") DOLLARS and CENTS	LF	2,625.000	76
	506	6043	003	BIODEG EROSN CONT LOGS (REMOVE) DOLLARS and CENTS	LF	2,625.000	77
	512	6018		PORT CTB (DES SOURCE)(F-SHAPE)(TY 2) DOLLARS and CENTS	LF	4,000.000	78
	512	6030		PORT CTB (MOVE)(F-SHAPE)(TY 2) DOLLARS and CENTS	LF	4,000.000	79
	512	6042		PORT CTB (STKPL)(F-SHAPE)(TY 2) DOLLARS and CENTS	LF	4,000.000	80
	530	6002		INTERSECTIONS (ACP) DOLLARS and CENTS	SY	1,696.000	81
	530	6004		DRIVEWAYS (CONC) DOLLARS and CENTS	SY	804.000	82
	530	6006		DRIVEWAYS (SURF TREAT) DOLLARS and CENTS	SY	8,335.000	83
	530	6009		TURNOUTS (SURF TREAT) DOLLARS and CENTS	SY	604.000	84

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	540	6001		MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	4,562.500	85
	540	6002		MTL W-BEAM GD FEN (STEEL POST) DOLLARS and CENTS	LF	75.000	86
	540	6016		DOWNSTREAM ANCHOR TERMINAL SEC- TION DOLLARS and CENTS	EA	22.000	87
	540	6017		MTL BM GD FEN (LONG SPAN SYSTEM) DOLLARS and CENTS	LF	150.000	88
	542	6001		REMOVE METAL BEAM GUARD FENCE DOLLARS and CENTS	LF	2,902.000	89
	544	6001		GUARDRAIL END TREATMENT (INSTALL) DOLLARS and CENTS	EA	22.000	90
	545	6002		CRASH CUSH ATTEN (DES SOURCE) DOLLARS and CENTS	EA	16.000	91
	545	6003		CRASH CUSH ATTEN (MOVE & RESET) DOLLARS and CENTS	EA	16.000	92
	545	6004		CRASH CUSH ATTEN (STKPL) DOLLARS and CENTS	EA	16.000	93
	560	6007		MAILBOX INSTALL-S (WC-POST) TY 3 DOLLARS and CENTS	EA	88.000	94
	560	6008		MAILBOX INSTALL-D (WC-POST) TY 3 DOLLARS and CENTS	EA	10.000	95
	644	6001		IN SM RD SN SUP&AM TY10BWG(1)SA(P) DOLLARS and CENTS	EA	127.000	96

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	644	6068		RELOCATE SM RD SN SUP&AM TY 10BWG DOLLARS and CENTS	EA	77.000	97
	644	6076		REMOVE SM RD SN SUP&AM DOLLARS and CENTS	EA	112.000	98
	658	6036		INSTL DEL ASSM (D-DW)SZ 1(FLX)GND DOLLARS and CENTS	EA	90.000	99
	658	6048		INSTL OM ASSM (OM-2Z)(FLX)GND DOLLARS and CENTS	EA	73.000	100
	658	6060		REMOVE DELIN & OBJECT MARKER ASSMS DOLLARS and CENTS	EA	73.000	101
	662	6001		WK ZN PAV MRK NON-REMOV (W)4"(BRK) DOLLARS and CENTS	LF	4,439.000	102
	662	6004		WK ZN PAV MRK NON-REMOV (W)4"(SLD) DOLLARS and CENTS	LF	170,038.000	103
	662	6032		WK ZN PAV MRK NON-REMOV (Y)4"(BRK) DOLLARS and CENTS	LF	10,336.000	104
	662	6034		WK ZN PAV MRK NON-REMOV (Y)4"(SLD) DOLLARS and CENTS	LF	154,451.000	105
	662	6060		WK ZN PAV MRK REMOV (W)4"(BRK) DOLLARS and CENTS	LF	75,511.000	106
	662	6063		WK ZN PAV MRK REMOV (W)4"(SLD) DOLLARS and CENTS	LF	484,591.000	107
	662	6095		WK ZN PAV MRK REMOV (Y)4"(SLD) DOLLARS and CENTS	LF	337,368.000	108

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	6109		WK ZN PAV MRK SHT TERM (TAB)TY W DOLLARS and CENTS	EA	13,212.000	109
	662	6111		WK ZN PAV MRK SHT TERM (TAB)TY Y-2 DOLLARS and CENTS	EA	26,152.000	110
	666	6006		REFL PAV MRK TY I (W)4"(DOT)(100MIL) DOLLARS and CENTS	LF	2,660.000	111
	666	6036		REFL PAV MRK TY I (W)8"(SLD)(100MIL) DOLLARS and CENTS	LF	5,123.000	112
	666	6048		REFL PAV MRK TY I (W)24"(SLD)(100MIL) DOLLARS and CENTS	LF	521.000	113
	666	6054		REFL PAV MRK TY I (W)(ARROW)(100MIL) DOLLARS and CENTS	EA	13.000	114
	666	6078		REFL PAV MRK TY I (W)(WORD)(100MIL) DOLLARS and CENTS	EA	13.000	115
	666	6141		REFL PAV MRK TY I (Y)12"(SLD)(100MIL) DOLLARS and CENTS	LF	222.000	116
	666	6300		RE PM W/RET REQ TY I (W)4"(BRK)(100MIL) DOLLARS and CENTS	LF	44,160.000	117
	666	6303		RE PM W/RET REQ TY I (W)4"(SLD)(100MIL) DOLLARS and CENTS	LF	381,121.000	118
	666	6312		RE PM W/RET REQ TY I (Y)4"(BRK)(100MIL) DOLLARS and CENTS	LF	14,776.000	119
	666	6315		RE PM W/RET REQ TY I (Y)4"(SLD)(100MIL) DOLLARS and CENTS	LF	357,037.000	120

PROJECT STP 1602(432)  
 COUNTY ERATH , ETC.

Proposal Sheet  
 TxDOT  
 FORM 234-B I-61-5M

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	672	6007		REFL PAV MRKR TY I-C  DOLLARS and CENTS	EA	2,796.000	121
	672	6009		REFL PAV MRKR TY II-A-A  DOLLARS and CENTS	EA	4,157.000	122
	677	6001		ELIM EXT PAV MRK & MRKS (4")  DOLLARS and CENTS	LF	740,786.000	123
	6001	6001		PORTABLE CHANGEABLE MESSAGE SIGN  DOLLARS and CENTS	DAY	527.000	124

**Project Number:** STP 1602(432)

**Sheet A**

**County:** ERATH,ETC

**Control:** 0250-03-046,ETC

**Highway:** US 281

\*\*\*\* Specification Data \*\*\*\*

**Basis of Estimate**

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Item	Description	Rate	Unit
166	Fert (16-8-8)	600 lb./acre**	ton
168	Vegetative Watering	169,400 gal./acre	1,000 gal.
210	Roll (Med Pneum Tire) (Ty B) Surf Treat	1 Hr/2000 sq.yd/crse**	hr.
310	Asph Mat'l (MC-30, or EC-30) (Flex Base)	0.3 gal./sq. yd.*	gal.
341	Hot Mix (All Types)	115 lb./(sq. yd.-in.)	ton

\* Based On 50% Asphalt Residue.

\*\* Non-Pay, for Contractor's Information Only.

**Compaction Requirements for Base Courses:**

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(Percent Of Density As Determined By Compaction Ratio Test TEX-113-E)

ITEM	MATERIAL	COURSE	MIN DENSITY
247	Flex Base	All	100 %

**Surface Treatment Data:**

\*\*\*\*\*

One Course on Subgrade or Flex Base

Asph Type RC-250  
Rate 0.4 gal./sq. yd.

Aggr Type B Grade 5  
Rate 1 cu. yd./110 sq. yd.

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One Course on Existing Pavement (Seal Coat)

Asph Type AC-15P  
Rate 0.40 gal./sq. yd.

Aggr Type PB  
Grade 4  
Rate 1 cu. yd./110 sq. yd.

Note: The rates of asphalt and aggregate application are for estimating purposes only and may be varied as directed.

**Special Notes:**

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Calculating, Recording and Reporting Test Data - Use appropriate TxDOT Excel templates to calculate and record all test data. These forms are available on the TxDOT website at <http://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html> under the "Site Manager Forms" heading. Submit test results by email or CD within 24 hours of test completion.

Single lane closures, except as otherwise shown in the plans, will be restricted to off-peak hours as defined in the following table:

Peak Hours		Off-Peak Hours	
6 to 9 AM Monday through Friday	3 to 7 PM Monday through Friday	9 AM to 3 PM and 7 PM to 6 AM Monday through Friday	All day Saturday and Sunday

Work that requires closure of multiple travel lanes in the same direction, except as otherwise shown in the plans, will be performed at night between the hours of 9 PM and 6 AM.

Lane closure hours may only be modified in writing by the Area Engineer.

Existing storm sewers and utilities are shown from the best available information. Verify the location of all underground facilities prior to starting work.

For dimensions of right of way not shown on the plans, see right of way map on file at the TxDOT District Office.

**County:** ERATH,ETC

**Control:** 0250-03-046,ETC

**Highway:** US 281

Provide all-weather surface for temporary ingress and egress to adjacent property, as directed. Materials, labor, equipment and incidentals necessary to provide temporary ingress and egress will not be paid for directly, but will be subsidiary to the various bid items.

Where necessary, the governing slopes indicated herein may be varied from the limits shown, to the extent approved.

On superelevated curves the shoulders will have the same cross-slope as the pavement, unless otherwise indicated.

On superelevated curves where the grade line is in a sag or on flat grades, overlay the shoulders to the extent necessary to prevent trapping of water on the high side.

All driveway openings will be determined by the Engineer and will conform with Texas Department of Transportation "Regulations for Access Driveways to State Highways" adopted September 1953, and revised June 2004.

Locations and lengths of all private entrances are approximate only. The actual locations, lengths, lines, and grades are to be established in the field.

Take care that existing curb and curb and gutter is not discolored or damaged during construction operations. In the event of discoloration or damage, clean or repair as directed.

Remove the grass from the crown of shoulders or pavement edges by blading or other approved methods. Payment for this work will not be made directly but will be subsidiary to the various items of the contract.

Locations shown for drainage structures refer to the control points of structures as follows:

- 1) Manholes, Inlets, and Junction Boxes—Locations are at the centroid of the structure; when two structure types are specified, location is at the centroid of the top structure. Bottom structure may be positioned as required to align with top structure, storm drain pipes and other adjacent structures.
  
- 3) Headwalls—Locations are to the outside face of the headwall at the centerline of the pipe or box structure. For pipe headwalls with Type "P" or "C" safety end treatment, locations are on the centerline of the pipe structure at the limit of payment for pipe.

Plugging of pipes or culverts will not be paid for directly, but will be subsidiary to the various bid items, unless otherwise shown on the plans.

**County:** ERATH,ETC

**Control:** 0250-03-046,ETC

**Highway:** US 281

Provide temporary drain openings at all low points or other drainage structures, as required, at the Contractor's expense.

Remove any obstructions to existing drainage due to the contractor's operations, as required, at the Contractor's expense.

Install all required concrete riprap flumes immediately following the construction of ditches in which they are to be placed. In addition, apply all erosion control measures as shown on the plans or as directed, immediately following construction of channels to their required line, grade, and section.

The following standard detail sheets have been modified:

SCP (MOD)

TS2 (PL - 1) - 12 (MOD)

TS2 (PL - 2) - 12 (MOD)

A minimum cover of 6 inches will be required on all driveway pipes.

#### **Item 5. Control of the Work**

When supplementary bridge plans, shop drawings, shop details, erection drawings, working drawings, forming plans, or other drawings are required, the drawings will be prepared and submitted on sheets 8-1/2 by 11 inches, 17 by 22 inches, or full size drawings reduced to half scale if completely legible. If, in the opinion of the Engineer, the drawings are not completely legible, they will be prepared and submitted on sheets 22 by 34 inches, with a 1-1/2 inch left margin, and 1/2 inch top, right, and bottom margins.

All sheets submitted will have a title in the lower right hand corner. The title must include the sheet index data shown on the lower right corner of the project plans, name of the structure or element or stream, sheet numbering for the shop drawings, name of the fabricator and the name of the Contractor.

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

**County:** ERATH,ETC

**Control:** 0250-03-046,ETC

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**Item 7. Legal Relations and Responsibilities**

Do not initiate activities in a project specific location (PSL) associated with a U.S. Army Corps of Engineers (USACE) permit area that has not been previously evaluated by the USACE as part of the permit review of this project. Such activities include, but are not limited to haul roads, equipment staging areas, borrow and disposal sites. “Associated” as defined here means materials are delivered to or from the PSL. The permit area includes all waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. The contractor will be responsible for all consultations with the USACE regarding activities, including project specific locations (PSLs) that have not been previously evaluated by the USACE. Provide the Department with a copy of all consultations or approvals from the USACE prior to initiating activities.

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

Document and coordinate with the USACE, if required, prior to any excavation hauled from or embankment hauled into a USACE permit area by either (1) or (2) below.

- (1) Restricted Use of Materials for Previously Evaluated Permit Areas.** Document both the project specific location (PSL) and its authorization. Maintain copies for review by the Department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:

  - a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in Item 110 is used for permanent or temporary fill (Item 132, Embankment) within a USACE permit area;
  - b. Suitable embankment (Item 132) from within the USACE permit area is used as fill within a USACE evaluated area; and,
  - c. Unsuitable excavation or excess excavation [“Waste”] (Item 110) that is disposed of at a location approved by the Engineer within a USACE evaluated area.
- (2) Contractor Materials from Areas Other than Previously Evaluated Areas.** Provide the Department with a copy of all USACE coordination or approvals prior to initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to haul roads, equipment staging areas, borrow and disposal sites:

  - a. Item 132, Embankment, used for temporary or permanent fill within a USACE permit area; and,

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- b. Unsuitable excavation or excess excavation [“Waste”] (Item 110, Excavation) that is disposed of outside a USACE evaluated area.

The total area disturbed for this project is 58.5 acres. The disturbed area in this project, all project locations in the Contract, and the Contractor project specific locations (PSLs), within 1 mile of the project limits, for the Contract will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the right of way. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the right of way to the Engineer and to the local government that operates a separate storm sewer system.

#### **Item 8. Prosecution and Progress**

The number of working days for final acceptance will be 367 working days after the substantial completion of the project.

#### **Item 100. Preparing Right of Way**

36 STA of Preparing Right of Way shall be used only as directed.

Measurement for this item will be along the centerline of the project with the limits of measurements as shown on the plans.

Blade and windrow outside construction limits, grass, weeds, and topsoil to grass roots depth. Blade windrows over the slopes after excavation and embankment operations are completed. This work is subsidiary to Item 100.

Perform “Preparing Right of Way” operations in the usual manner within the limits of the excavation and fill areas. Remove only such trees, brush, weeds, etc. as designated by the Engineer.

The removal of trees and vegetation shall be subsidiary to Item 100. Remove trees only as directed. Preserve all remaining trees.

Removal of existing concrete pavement will be in accordance with Item 104, “Removing Concrete” except that this work will not be paid for directly, but will be subsidiary to Item 100, “Preparing Right of Way.”

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**Item 104. Removing Concrete**

When associated with a structure to be removed, removal of riprap as required, approach slabs, and shoulder drains are to be included in the unit price bid for Item 496, "Removing Structures."

**Item 105. Removing Treated and Untreated Base and Asphalt Pavement**

Removal of stabilized base and asphalt pavement will be paid under Item 110 Excavation.

Cement, lime, and/or lime fly-ash treated base material to be removed on this project will become the property of the Contractor.

**Item 110. Excavation**

Excavation quantities include stabilized base and asphalt pavement. Removal of stabilized base and asphalt pavement will be paid for under Item 110 Excavation.

Cross-sections for pay quantity determination of earthwork may be developed photogrammetrically.

Review proposed waste sites to determine if any site is located in a "Base Floodplain" or "Floodway" as defined by the Federal Emergency Management Agency (FEMA).

If waste material from this project is placed in a base floodplain as defined by FEMA, a permit will have to be obtained from the local community responsible for enforcing National Flood Insurance Program (NFIP) regulations. The Contractor is responsible for ensuring that the owner of the property receiving the waste has obtained the necessary permit.

**Items 110, 112, and 132. Excavation, Subgrade Widening, and Embankment**

Any excavated sulfate-laden material will be acceptable for use in fill areas. Do not place within previously specified section boundaries of subgrade to be treated with either lime or cement.

Off-Site Borrow Sources. In addition to meeting pertinent specification requirements, test off-site borrow sources for sulfate content. Test soils for soluble sulfates in accordance with Test Method Tex-145 and Tex-146-E and provide documentation that supports compliance with previously stated requirements. The Engineer will perform additional testing for sulfates of this material upon delivery to the project. Only material that is placed within one foot vertically or laterally of subgrade treatment will require testing for sulfates. Remove and replace failing material (sulfate concentrations >7,000 PPM by dry weight).

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**Item 132. Embankment**

Do not provide Type B embankment material with a Plasticity Index (PI) higher than 35.

Furnish test results per Test Procedures Tex-104, 105, and 106-E (PIs), Tex-113 or 114-E (M-D Curves), and Tex-145 and/or Tex-146-E (Sulfates) for each material sample provided by the Engineer. Perform field density tests (Tex-115-E, Part I) at a frequency for each worked section to produce passing results prior to testing by the Engineer per Tex-115-E, Part I.

When embankment is placed as a bridge header bank, test each lift for compliance with density requirements, near the center of each travel lane at the following locations:

1. At the “beginning of bridge” or “end of bridge” station (if abutment is on retaining wall, location may be adjusted by not more than 5 feet.)
2. At 25-foot intervals for a distance of 150 feet in advance of the “beginning of bridge” station.
3. At 25-foot intervals for a distance of 150 feet after the “end of bridge” station.

Density tests must be conducted by a department-certified independent testing laboratory. Results of tests will be furnished to TxDOT within 24 hours after testing; a final copy of all test reports must be signed and sealed by a Professional Engineer in the State of Texas and furnished within five (5) working days after testing. Areas which do not meet minimum density requirements will be removed, re-compacted, and re-tested for compliance at the contractor’s entire expense. Testing and reporting of test results will not be paid for directly, but will be subsidiary to this item.

Construct embankments for bridge header banks to final subgrade elevation prior to excavation for abutment caps and placement of foundation course at approach slabs. Payment for structural excavation and/or excavation for placement of foundation course will not be paid for directly, but will be subsidiary to the pertinent bid items.

At all locations where guardrail is shown to flare, widen the embankment as necessary to accommodate the guardrail.

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**Item 161. Compost**

Place approximately 4" of compost manufactured topsoil (CMT) on all cut and fill slopes (except drainage channels where flexible channel liners are indicated), at other locations shown on the plans, or as directed.

Where "blended on-site" CMT is specified, produce the compost manufactured topsoil by incorporating 1" of compost with 3" of furnished topsoil as shown on the plans.

Where "pre-blended" CMT is specified, amend suitable soil material, as directed, with 25% compost, by volume, to produce the compost manufactured topsoil. Place the compost manufactured topsoil in a loose layer approximately 4" thick, as shown on the plans.

Compost locations are to be directed by the Engineer to replace disturbed top soil.

**Item 164. Seeding for Erosion Control**

Apply seeding required between December 1 and January 31 using seed types and mixtures as shown in Item 164.2.1, Table 3. If, in the opinion of the Engineer, this does not provide an effective vegetative cover, apply "straw or hay mulch" as specified in Article 164.3.2, "Straw or Hay Mulch Seeding" as soon as possible. After February 1 apply warm season seeding in order to establish a permanent protective vegetative cover.

Temporary Cool Season Seeding shall include the mixture shown in Table 3 and also the permanent seed mixture. The furnishing and placing of this additional seed will not be paid for directly but will be considered subsidiary to Temporary Cool Season Seeding.

**Item 166. Fertilizer**

Fertilize all areas of project to be seeded or sodded.

**Item 168. Vegetative Watering**

Furnish and install an approved rain gauge at the project site, as directed. Furnishing and installation of the rain gauge will not be paid for directly, but will be subsidiary to Item 168.

Apply vegetative watering for an establishment period of thirteen weeks following application of seed or installation of sod, at a rate of 1/2 inch of water depth per week (approximately 13,030 gallons per acre). During the first four weeks after seeding, apply water twice per week, on non-consecutive days, each at half the weekly application rate. For the remainder of the establishment period, apply vegetative watering once per week during the months of January through June or September through December, at the weekly application rate; apply watering

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twice per week, on non-consecutive days during the months of July and August, each at one-half the weekly application rate.

Average weekly rainfall rates for the District are:

January—0.39"	April—0.86"	July—0.48"	October—0.68"
February—0.46"	May—1.00"	August—0.47"	November—0.46"
March—0.48"	June—0.63"	September—0.74"	December—0.37"

**Item 247. Flexible Base**

(TY A, GR 4) Furnish crushed stone, gravel, or crushed gravel aggregate conforming to the following requirements:

Gradation:

<u>Retained on</u> <u>Sieve Size</u>	<u>Percent (%)</u> <u>by Weight</u>
1-3/4 in.	0-5
7/8 in.	5-35
No. 4	40-75
No. 40	65-85

Plasticity Index (PI)	12 max., 4 min.
Liquid Limit	45 max.
Wet Ball Mill	50 max.
Wet Ball Mill, %	20 max.
Increase Passing the No. 40	

Place material in two or more equal lifts unless otherwise directed.

Do not add field sand to modify the final material to meet the requirements.

Build and maintain a 5,000 cu. yd. stockpile of approved material before and during hauling operations.

**Item 301. Asphalt Antistripping Agent**

Furnish a liquid antistripping agent unless otherwise directed.

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**Item 316. Surface Treatments**

PG 64-22, PG 58-22 or CRS-2 may be substituted for AC-10, with written approval. CRS-2 may not be used with precoated aggregates. Provide and apply CRS-2 with greater than 50% asphalt residue. Apply CRS-2 at a rate approximately 50% higher than specified for AC-10, or as directed.

Remove vegetation and blade pavement edges as directed.

Furnish aggregate meeting a Surface Aggregate Classification rating of "A" Provide a transverse variance rate of 10% . Provide an equal amount of asphaltic material between the wheelpaths as outside the wheelpaths.

Provide a minimum of 3 pneumatic rollers as specified under Article 316.3.3, "Rollers."

The asphalt application season for this project is May 1st to Sept 30th.

The type and rate of asphalt will be used as directed by the Engineer.

**Item 341. Dense-Graded Hot-Mix Asphalt**

In Table 1, the Micro-Deval abrasion test is not required.

RAP aggregate must meet the requirements of Table 1.

Provide aggregate with a Surface Aggregate Classification (SAC) value of A.

Provide a PG 70-28 asphalt for the surface course and/or levelup course. Provide the PG 70-28 asphalt with either of the following modification alternatives:

- PG 52-28 modified with 3% solids by dry weight of SBR Latex polymer at the Hot Mix plant.
- AC-10 modified with 3% solids by dry weight of SBR Latex polymer at the Hot Mix plant.

When the asphalt is modified at the Hot Mix Plant, provide the PG 58-28 or AC-10 refinery certification.

Grade Substitution per Table 5 is not allowed.

Furnish results to the Engineer to evaluate the results of the PG 70-28 asphalt/SBR Latex blend but not for acceptance.

Provide a PG 64-22 asphalt for the base course.

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Furnish a CSS-1P with greater than 50% asphalt residue for the tack coat on this project.

RAP and RAS are not permitted in any surface mixes on this project.

Substitute binders are not allowed on this project.

A pre-paving meeting with the Engineer is not required for this project.

Use only the Superpave Gyrotory Compactor (SGC) to design the mixture.

Use the Boil Test, Test Procedure Tex-530-C, and provide only mixes that produce zero percent (0%) stripping for design verification and during production.

For Table 10, the Minimum Number of Passes required for the High-Temperature Binder Grade of PG 70-28 is Reduced by 5,000 pass for all mixes used in areas other than the surfaces.

Include the approved mix design number on each delivery ticket.

Use a Material Transfer Device (MTD) unless otherwise directed.

Shoulders, ramps, crossovers, and other areas listed on the Plan sheets or as directed are not subject to in-place air void determination for this project.

Temporary detours are subject to in-place air void determination for this project.

Use Surface Test Type A for this project.

**Item 351. Flexible Pavement Structure Repair**

Use the rates for the addition of cement as shown above in Item 275.

Use MC-30 or EC-30 for the prime coat.

Flexible pavement structure repair will done with 8” Ty B HMAc in 2 lifts.

**Item 400. Excavation and Backfill for Structures**

Class B bedding will be permitted in lieu of Class C bedding.

Recycled flex base and RAP are allowed individually or combined for use as granular material and backfill in Class B and C bedding at the discretion of the Engineer. These materials must meet the requirements of Table 1. The Engineer may require the mixing of one or both of these materials with the local soil to provide a cohesive material for compaction and stability of the backfill around the pipe or box culvert.

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**Item 421. Hydraulic Cement Concrete**

For Class P and S Concrete Only: For concrete plants equipped with 2 aggregate bins or no calibrated metering system, blend manufactured and natural sand at the aggregate source only. For concrete plants equipped with a minimum of 3 bins and a calibrated metering system, blending of the separate sands on-site is permitted to meet gradation and AIR requirements.

Strength/cylinder testing equipment must be equipped with a printer for an electronic print out of all test results.

Air entrainment requirements are waived for all classes of concrete except all Class S and all Class P Concrete.

Concrete will not be rejected for low air content. Adjustment to the dosage of air entrainment will be as directed or allowed by the Engineer.

Include the approved mix design number on each delivery ticket.

**Item 432. Riprap**

Provide weep holes as directed.

The quantities for riprap at the location indicated may be varied to the extent necessary to ensure proper functioning for the purpose intended.

All concrete riprap will be 5" (.42') in thickness, unless otherwise shown on the plans, or directed by the engineer where the following conditions exist. Use 4" concrete riprap where the front slope is steeper than 3:1 and back slope is steeper than 2:1.

An 8 inch (.67 ft.) by 18 inch (1.5 ft.) toe wall is required at the exposed edges of all concrete riprap, unless otherwise directed.

Locations and lengths of riprap flumes shown on the plans are approximate. Actual lengths and locations are to be determined in the field.

When synthetic fiber reinforcement concrete option is chosen provide the following:

- At all construction joints (vertical or horizontal) provide #3 bars 24 in. long and placed on 18 in. centers along joint length. Bars should be centered in concrete cross section.

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- At all toe wall locations #3 L-bars will be required on 18 in. centers with a length 2 times the depth of the toe wall. Place three #3 bars the length of the toe wall and equally spaced on the L-bars.

Welded Wire Reinforcement (WWR) may be used for construction joint and toe wall reinforcing with the approval of the Engineer.

**Item 464. Reinforced Concrete Pipe**

All bends and connections in pipe must be prefabricated.

Concrete collar is required at all connections to existing pipe.

**Item 466. Headwalls and Wingwalls**

Do not use precast headwalls/wingwalls.

**Item 502. Barricades, Signs, and Traffic Handling**

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 typically not be foreseen in the project's 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.

Permanent signs may be installed when construction in an area is complete and they will not conflict with the traffic control plan for the remainder of the job.

Existing signs are to remain as long as they do not interfere with construction and they do not conflict with the traffic control plan.

Any sign not detailed in the plans but called for in the layout will be as shown in the current "Standard Highway Sign Designs for Texas".

When traffic is obstructed, arrange warning devices in accordance with the latest edition of the "Texas Manual on Uniform Traffic Control Devices".

Cover or remove any work zone signs when work or condition referenced is not occurring.

Pilot Car is required for one lane two-way operations.

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Additional advance warning barricades and signs shall be added beyond the long traffic queue /backup and adjusted when needed as directed by the Engineer. This shall be considered subsidiary.

**Item 506. Temporary Erosion, Sedimentation, and Environmental Controls**

The SW3P for this project will consist of using the following items as directed:

- a. Temporary rock filter dams
- b. Temporary sediment control fence
- c. Biodegradable Erosion Control Logs

Remove accumulated sediment or replace SW3P controls when the capacity has been reduced by 50% or when the depth of sediment at the control structure exceeds one foot.

The core material for Biodegradable Erosion Control Logs shall be compost meeting the requirements of Item 161. If logs cannot be filled with compost then two logs filled with straw may be used and placed parallel to each other with a void the size of the logs specified in the plans. The void shall then be filled with compost. This method of erosion control will be paid for by the linear feet of biodegradable erosion control log along the length of compost placed. Placement of the straw logs will be considered subsidiary.

This item shall be placed at locations designated by the Engineer.

**Items 530 And 531. Intersections, Driveways and Turnouts, and Sidewalks**

The furnishing and installation of the sand cushion in proposed sidewalks, sidewalk ramps, and driveways will not be paid for directly but will be subsidiary to this bid item.

**Item 540. Metal Beam Guard Fence**

The locations and lengths of guard fence shown on the plans are approximate. Actual lengths and locations are to be determined in the field.

The tops of timber posts will be domed. Beveled tops will not be permitted for timber or steel posts.

When holes for timber posts are drilled below bottom of proposed grade, backfill the excessive depth with an acceptable sand. The furnishing and installation of the sand backfill will not be paid for directly but will be subsidiary to this Item.

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When guardrail posts are placed in a finished surface, backfill the top 4 inches with an asphaltic material, domed to carry water away from the posts or as shown on the plans. The furnishing and installation of the asphaltic material backfill will not be paid for directly but will be subsidiary to this Item.

**Item 542. Removing Metal Beam Guard Fence**

Remove existing metal beam guard fence only when authorized.

**Item 585. Ride Quality For Pavement Surfaces.**

Localized roughness penalty will apply on this project.

The Engineer will be present during the time of testing.

Provide a disk containing the profile data immediately following the testing.

**General Notes – Pavement Markings:**

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**Item 666. Reflectorized Pavement Markings with Retroreflective Requirements**

Collection of retroreflectivity readings using a mobile retroreflectometer is the preferred method. If retroreflectivity readings are collected using a portable or handheld unit, then measurement is defined as a collective average of at least 20 readings taken along a 200-foot test section. A minimum of three measurements will be required per mile of roadway. Measurements collected on a centerline stripe will be averaged separately for stripe in each direction of travel. A TxDOT inspector must witness the calibration and collection of all retro-reflectivity data.

**Item 6001. Portable Changeable Message Signs**

All portable changeable message signs and arrow panels are to be provided with a photoelectric device to allow for automatic dimming of operations to approximately 50% of their normal brightness when ambient light drops to approximately five footcandles, and then increase back again for daytime operations.

1 electronic portable changeable message sign unit(s) will be required. Individual or collective use of signs will be required by Engineer when deemed necessary to supplement the traffic control plan.

Each sign shall be programmed in its permanent memory the following 15 messages:

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1. Exit Closed Ahead
2. Use Other Routes
3. Right Lane
4. Left Lane
5. Closed Ahead
6. Two Lane
7. Detour Ahead
8. Thru Traffic
9. Prepare To Stop
10. Merging Traffic
11. Expect 15 Minute Delay
12. Max Speed \*\* MPH
13. Merge Right
14. Merge Left
15. No Exit Next \*\* Miles