

NOTIFICATION OF ADDENDUM

ADDENDUM NO. 1

DATED 10/25/2012

Control	0315-02-044, ETC.
Project	STP 2013(176)
Highway	SH 90
County	GRIMES

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 2013(176) CONTROL: 0315-02-044
COUNTY: GRIMES
LETTING: 11/01/2012
REFERENCE NO: 1025

PROPOSAL ADDENDUMS

- _ PROPOSAL COVER
X BID INSERTS (SH. NO.: 1-13, 4-13, 9-13 through 13-13.)
X GENERAL NOTES (SH. NO.: B,C.)

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

DELETED:

_ SPECIAL SPECIFICATIONS:
ADDED:

DELETED:

X OTHER: SEE CHANGES OUTLINED BELOW.

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

BID INSERTS:

SHEET 1-13:ITEM 100-2002 - QUANTITY CHANGED.

SHEET 4-13:

ITEM 432-2002 ADDED.

ITEM 438-2002 DELETED.

ITEM 454-2006 ADDED.

SHEETS 9-13 THROUGH 13-13:REMOVED ADD ALTERNATE ITEMS NO.1X,2X,3X,4X.

SHEETS 10-13 - 13-13 ELIMINATED.

GENERAL NOTES:

SHEET B: BASIS OF ESTIMATE 0315-03-055:

ITEM 530:AMOUNT AND QUANTITY CHANGED.

SHEET C: BASIS OF ESTIMATE ADDITIVE ALTERNATES 1,2,3,4 REMOVED.

INFORMATION MAY HAVE SHIFTED DUE TO ABOVE CHANGES.

PLAN SET:

THE FOLLOWING PLAN SHEETS HAVE BEEN REPLACED: 1,2,11,11A,11B,11C,11D,
12,12A,13,18,20,21,24,63,89,92,93,94,95,96,97,98.

THE FOLLOWING SHEET HAS BEEN REMOVED: 9,28.

THE FOLLOWING SHEETS HAVE BEEN ADDED: 95A,96A,98A

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	2002	002	PREPARING ROW DOLLARS and CENTS	STA	23.070	1
	100	2003	002	PREPARING ROW(TREE)(5" TO 12" DIA) DOLLARS and CENTS	EA	27.000	2
	100	2004	002	PREPARING ROW(TREE)(12" TO 24" DIA) DOLLARS and CENTS	EA	14.000	3
	100	2011	002	PREPARING ROW(TREE)(24" TO 36" DIA.) DOLLARS and CENTS	EA	3.000	4
	104	2045		REMOVE CONC (MISC) DOLLARS and CENTS	EA	4.000	5
	110	2001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	7,589.000	6
	132	2006		EMBANKMENT (FINAL)(DENS CONT)(TY C) DOLLARS and CENTS	CY	41,587.000	7
	134	2004		BACKFILL (TY A OR B) DOLLARS and CENTS	STA	223.820	8
	160	2001		FURNISHING AND PLACING TOPSOIL (4") DOLLARS and CENTS	STA	222.160	9
	162	2002		BLOCK SODDING DOLLARS and CENTS	SY	3,400.000	10

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	164	2001	002	BROADCAST SEED (PERM) (RURAL) (SANDY) DOLLARS and CENTS	SY	78,221.000	11
	164	2009	002	BROADCAST SEED (TEMP) (WARM) DOLLARS and CENTS	SY	39,112.000	12
	164	2011	002	BROADCAST SEED (TEMP) (COOL) DOLLARS and CENTS	SY	39,112.000	13
	168	2001		VEGETATIVE WATERING DOLLARS and CENTS	MG	782.000	14
	247	2114	033	FL BS (RDWY DEL) (TY D GR 2) (IN VEH) DOLLARS and CENTS	CY	1,687.000	15
	247	2405	033	FL BS (CMP IN PLC)(TY D GR 2)(7") DOLLARS and CENTS	SY	53,792.000	16
	251	2309		REWORK BS MTL (TY D) (4") (DENS CONT) DOLLARS and CENTS	SY	1,928.000	17
	275	2001	003	CEMENT DOLLARS and CENTS	TON	898.000	18
	275	2010	003	CEMENT TREAT (SUBGRADE) (8") DOLLARS and CENTS	SY	59,849.000	19
	316	2706	016	ASPH (TIER II) DOLLARS and CENTS	GAL	40,838.000	20

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	316	2707	016	ASPH (TIER III) DOLLARS and CENTS	GAL	16,328.000	21
	316	2718	016	AGGR (TIER II) DOLLARS and CENTS	CY	908.000	22
	316	2719	016	AGGR (TIER III) DOLLARS and CENTS	CY	484.000	23
	351	2034		FLEX PAVEMT STRUCTURE REPAIR(VAR DEPTH) DOLLARS and CENTS	CY	1,867.000	24
	354	2021		PLANE ASPH CONC PAV(0" TO 2") DOLLARS and CENTS	SY	533.000	25
	354	2022		PLANE ASPH CONC PAV(0" TO 3") DOLLARS and CENTS	SY	1,600.000	26
	354	2048		PLANE ASPH CONC PAV (3") DOLLARS and CENTS	SY	581.000	27
	354	2052		PLANE ASPH CONC PAV (0" TO 3 1/2") DOLLARS and CENTS	SY	1,866.000	28
	354	2107		PLANE ASPH CONC PAV (3" TO 4") DOLLARS and CENTS	SY	587.000	29
	400	2005		CEM STABIL BKFL DOLLARS and CENTS	CY	94.000	30

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	430	2235		CL S CONC FOR EXT STR (CULV)(3-10'X10') DOLLARS and CENTS	LF	33.000	31
	432	2002		RIPRAP (CONC)(5 IN) DOLLARS and CENTS	CY	13.100	32
	432	2039		RIPRAP (MOW STRIP)(4 IN) DOLLARS and CENTS	CY	110.000	33
	450	2021	001	RAIL (TY T101RC) DOLLARS and CENTS	LF	266.000	34
	450	2120	001	RAIL (TY SSTR)(SPL) DOLLARS and CENTS	LF	86.000	35
	452	2007		REMOVE RAIL (TY 6) DOLLARS and CENTS	LF	332.000	36
	454	2006		HEADER TYPE EXPANSION JOINT DOLLARS and CENTS	LF	478.000	37
	464	2003	006	RC PIPE (CL III)(18 IN) DOLLARS and CENTS	LF	917.000	38
	464	2005	006	RC PIPE (CL III)(24 IN) DOLLARS and CENTS	LF	378.000	39
	464	2009	006	RC PIPE (CL III)(36 IN) DOLLARS and CENTS	LF	63.000	40
	466	2027		WINGWALL (FW-0)(HW=11 FT) DOLLARS and CENTS	EA	1.000	41

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	466	2055		WINGWALL (PW)(HW=11 FT) and DOLLARS CENTS	EA	1.000	42
	467	2286		SET (TY II)(18 IN)(RCP)(6:1)(P) and DOLLARS CENTS	EA	76.000	43
	467	2288		SET (TY II)(24 IN)(RCP)(6:1)(P) and DOLLARS CENTS	EA	32.000	44
	467	2292		SET (TY II)(36 IN)(RCP)(6:1)(P) and DOLLARS CENTS	EA	6.000	45
	496	2005		REMOV STR (WINGWALL) and DOLLARS CENTS	EA	2.000	46
	496	2016		REMOV STR (PIPE) and DOLLARS CENTS	EA	55.000	47
	500	2001	011	MOBILIZATION and DOLLARS CENTS	LS	1.000	48
	502	2001	033	BARRICADES, SIGNS AND TRAFFIC HAN- DLING and DOLLARS CENTS	MO	10.000	49
	530	2008		DRIVEWAYS (ACP) and DOLLARS CENTS	EA	69.000	50
	540	2011	031	MTL BEAM GD FEN TRANS (THRIE-BEAM) and DOLLARS CENTS	EA	8.000	51

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	540	2013	031	MTL BEAM GD FEN TRANS (T101) DOLLARS and CENTS	EA	4.000	52
	540	2034	031	MTL W-BEAM GD FEN(SPECIAL) DOLLARS and CENTS	LF	450.000	53
	542	2001		REMOVING METAL BEAM GUARD FENCE DOLLARS and CENTS	LF	1,775.000	54
	542	2002		REMOVING TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	12.000	55
	544	2006	001	GDRAIL END TRT(INST)(WOOD POST)(TY III) DOLLARS and CENTS	EA	12.000	56
	560	2004	001	MAILBOX INSTALL-S (WC-POST) TY 3 FND DOLLARS and CENTS	EA	18.000	57
	644	2001		IN SM RD SN SUP&AM TY10BWG(1)SA(P) DOLLARS and CENTS	EA	3.000	58
	644	2056		RELOCATE SM RD SN SUP & AM TY 10BWG DOLLARS and CENTS	EA	52.000	59
	644	2058		RELOCATE SM RD SN SUP & AM TY S80 DOLLARS and CENTS	EA	4.000	60
	644	2060		REMOVE SM RD SN SUP & AM DOLLARS and CENTS	EA	1.000	61
	658	2259		INSTL DEL ASSM (D-SW)SZ (TYC)CTB(BI) DOLLARS and CENTS	EA	6.000	62

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	658	2261		INSTL DEL ASSM (D-SW)SZ (TYC)GF1(BI) DOLLARS and CENTS	EA	21.000	63
	658	2316		INSTL OM ASSM (OM-2Z)(FLX)GND DOLLARS and CENTS	EA	6.000	64
	658	2328		REMOVE DELIN & OBJECT MARKERS ASSMS DOLLARS and CENTS	EA	4.000	65
	662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	43,246.000	66
	662	2030		WK ZN PAV MRK NON-REMOV (Y) 4" (BRK) DOLLARS and CENTS	LF	4,422.000	67
	662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	16,754.000	68
	662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	21,624.000	69
	662	2097		WK ZN PAV MRK REMOV (Y) 4" (BRK) DOLLARS and CENTS	LF	4,422.000	70
	662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	16,754.000	71
	662	2115		WK ZN PAV MRK SHT TERM (TAB) TY Y-2 DOLLARS and CENTS	EA	6,128.000	72
	666	2012		REFL PAV MRK TY I (W) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	43,246.000	73

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	666	2036		REFL PAV MRK TY I (W) 8" (SLD)(100MIL) DOLLARS and CENTS	LF	275.000	74
	666	2048		REFL PAV MRK TY I (W) 24"(SLD)(100MIL) DOLLARS and CENTS	LF	118.000	75
	666	2099		REF PAV MRK TY I(W)18"(YLD TRI)(100MIL) DOLLARS and CENTS	EA	8.000	76
	666	2105		REFL PAV MRK TY I (Y) 4" (BRK)(100MIL) DOLLARS and CENTS	LF	4,422.000	77
	666	2111		REFL PAV MRK TY I (Y) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	16,754.000	78
	672	2012	034	REFL PAV MRKR TY I-C DOLLARS and CENTS	EA	14.000	79
	672	2015	034	REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	571.000	80
	677	2001		ELIM EXT PAV MRK & MRKS (4") DOLLARS and CENTS	LF	64,424.000	81
	1122	2002	001	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	631.000	82
	1122	2003	001	ROCK FILTER DAMS (INSTALL) (TY 3) DOLLARS and CENTS	LF	320.000	83
	1122	2009	001	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	951.000	84

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	1122	2037	001	TEMPORARY SEDIMENT CONTROL FENCE INSTLL and DOLLARS CENTS	LF	16,917.000	85
	1122	2057	001	TEMPORARY SEDIMENT CONTROL FENCE REMOVE and DOLLARS CENTS	LF	16,917.000	86
	3224	2020		D-GR HMA(QCQA) TY-C SAC-A PG64-22 and DOLLARS CENTS	TON	12,877.000	87
	3224	2062		D-GR HMA(QCQA) TY-D PG64-22(LEVEL-UP) and DOLLARS CENTS	TON	8,671.000	88

Project Number: STP 2013(176)

Sheet: 11

Highway: SH 90

Control: 0315-02-044, etc.

County: Grimes

General Notes:

BASIS OF ESTIMATE
0315-03-055

ITEM	DESCRIPTION	COURSE	RATE	AMOUNT	QUANTITY
168	VEGETATIVE WATERING		10 GAL/SY	21,646 SY	216 MG
275	CEMENT	8" (Exist Material) (1)	4% @ 0.015 TON/SY	16,234 SY	244 TON
316	ASPHALT (Tier III)	1 ST	0.25 GAL/SY	16,234 SY	4,059 GAL
316	AGGREGATE (Tier III)	1 ST	1 CY/135 SY	16,234 SY	120 CY
316	ASPHALT (Tier II)	2 ND	0.36 GAL/SY	31,117 SY	11,202 GAL
316	AGGREGATE (Tier II)	2 ND	1 CY/125 SY	31,117 SY	249 CY
3224	D-GR HMA (QCQA) TY D PG 64-22 (LEVEL-UP)	1 ½"	172.50 LB/SY	28,690 SY	2,475 TON
3224	D-GR HMA (QCQA) TY D PG 64-22 (LEVEL-UP)	0" - 1 ½"	86.25 LB/SY	750 SY	32 TON
3224	D-GR HMA (QCQA) TY C SAC-A PG 64-22	2"	230 LB/SY	28,785 SY	3,310 TON
3224	D-GR HMA (QCQA) TY C SAC-A PG 64-22	0" - 2"	115 LB/SY	978 SY	56 TON

Note: Rates are for estimating purposes only. Actual Rates will be determined in the field.

(1) Existing sub-grade material estimated at 125 LBS/CF

BASIS OF ESTIMATE
0315-03-055

* for contractor's information only

ITEM	DESCRIPTION	COURSE	RATE	AMOUNT	QUANTITY
134	BACKFILL		5.4 CY/ STA	60.88 STA	329 CY
166*	FERTILIZER **		0.012 LB/SY	21,646 SY	0.13 TON
530*	Asphalt (Tier II)	2 ND	0.36 GAL/SY	1,220 SY	439 GAL
530*	Aggregate (Tier II)	2 ND	1 CY/125 SY	1,220 SY	10 CY

Note: Rates are for estimating purposes only. Actual Rates will be determined in the field.

** Tonnage represents Nitrogen content only.

BASIS OF ESTIMATE
0315-02-044

ITEM	DESCRIPTION	COURSE	RATE	AMOUNT	QUANTITY
168	VEGETATIVE WATERING		10 GAL/SY	56,575 SY	566 MG
275	CEMENT	8" (Subgrade) (1)	4% @ 0.015 TON/SY	43,615 SY	654 TON
316	ASPHALT (Tier III)	1 ST	0.25 GAL/SY	49,077 SY	12,269 GAL
316	AGGREGATE (Tier III)	1 ST	1 CY/135 SY	49,077 SY	364 CY
316	ASPHALT (Tier II)	2 ND	0.36 GAL/SY	82,321 SY	29,636 GAL
316	AGGREGATE (Tier II)	2 ND	1 CY/125 SY	82,321 SY	659 CY
3224	D-GR HMA (QCQA) TY D PG 64-22 (LEVEL-UP)	1 ½"	172.50 LB/SY	69,210 SY	5,969 TON
3224	D-GR HMA (QCQA) TY D PG 64-22 (LEVEL-UP)	0" - 1 ½"	86.25 LB/SY	4,517 SY	195 TON
3224	D-GR HMA (QCQA) TY C SAC-A PG 64-22	2"	230 LB/SY	76,311 SY	8,776 TON
3224	D-GR HMA (QCQA) TY C SAC-A PG 64-22	2" - 5"	402.5 LB/SY	3,334 SY	671 TON
3224	D-GR HMA (QCQA) TY C SAC-A PG 64-22	5"	575 LB/SY	224 SY	64 TON

Note: Rates are for estimating purposes only. Actual Rates will be determined in the field. (1) Existing sub-grade material estimated at 125 LBS/CF

**BASIS OF ESTIMATE
0315-02-044**

* for contractor's information only

ITEM	DESCRIPTION	COURSE	RATE	AMOUNT	QUANTITY
134	BACKFILL		5.4 CY/ STA	163 STA	880 CY
166*	FERTILIZER **		0.012 LB/SY	56,575 SY	0.34 TON
530*	Asphalt (Tier II)	2 ND	0.36 GAL/SY	2,456 SY	884 GAL
530*	Aggregate (Tier II)	2 ND	1 CY/125 SY	2,456 SY	20 CY

Note: Rates are for estimating purposes only. Actual Rates will be determined in the field.

** Tonnage represents Nitrogen content only.

GENERAL:

Depth of cover over existing cross drainage structures may be insufficient to provide the proposed typical section. In those situations, modifications to the proposed construction operations shall be made to eliminate the possibility of damage to the existing structure.

ITEM 5 “CONTROL OF THE WORK”

Earthwork cross-sections are available at the Engineer’s office at 2012 Tabor Road Bryan, Texas for inspection by prospective bidders. These cross-sections are for non-construction purposes only, and it is the responsibility of the prospective bidder to validate the data for this project. A free computer diskette, a computer transfer of files, or a PDF that contains the earthwork information may be obtained from the Engineer’s office. If copies of the actual cross-sections, instead of or in addition to, these files are desired, a set of cross-sections will be available at the Engineer’s office for borrowing by copying companies for the purpose of making copies for the bidder at the bidder’s expense.

ITEM 7 “LEGAL RELATIONS AND RESPONSIBILITIES”

State contract mowers will mow the right of way during the growing season. The Contractor will be notified by the Engineer one week in advance of the anticipated time when mowers will be in the limits of the project. Clean the right of way to such a condition that allows the mowing contractors to safely mow.

In the event of the declaration of a hurricane watch, warning, other severe weather warning or national or state emergency that requires the roadways in the vicinity be used as evacuation routes, cease all work that requires the Contractor’s, sub-contractors’ or material suppliers’ vehicles to enter the stream of traffic on these primary or secondary evacuation routes. This work includes material hauling and delivery, and mobilization or demobilization of equipment. The following roadways are recognized evacuation routes in the Bryan District:

Project Number: STP 2013(176)

Sheet: 11A

Highway: SH 90

Control: 0315-02-044, etc.

County: Grimes

Primary Evacuation Routes: IH 45, US 290, SH 6, SH 36

Secondary Evacuation Routes: US 79, US 84, SH 7, SH 30, SH 21, SH 105.

Other routes may be designated.

ITEM 8 “PROSECUTION AND PROGRESS”

At the end of each work day, remove all grade differentials transverse to centerline.

At the end of each work day, provide 100 foot minimum grade tapers longitudinal to the centerline to transition differences in the profile grade line or roadway grade.

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

By noon of each Wednesday, provide the Engineer a written outline of the daily work schedule for the following week. Include in the outline the times and places for proposed traffic control changes, lane and shoulder closures, and moving operations or other operations that affect traffic on the roadway. Unless otherwise authorized by the Engineer, prosecute the work on this project in accordance with the following sequence of work:

1. Set advance signing and barricades.
2. Blade topsoil along one side of roadway, creating a berm.
3. Install SW3P devices.
4. Remove and temporarily relocate mailboxes and signs.
5. Remove existing pavement markings and place temporary work zone markings.
6. Excavate/place embankment to build subgrade one side of roadway.
7. Cement treat new subgrade and place flex base.
8. Place 1st OCST over widened pavement.
9. Adjust driveways and place drive pipes.
10. Blade back topsoil to original position and place temporary seed.
11. Blade topsoil along second side of roadway, creating a berm.
12. Remove/replace existing temporary work zone markings.
13. Excavate/place embankment to build subgrade second side of roadway.
14. Lime treat new subgrade and place flex base.
15. Place 1st OCST over widened pavement.
16. Adjust driveways and place drive pipes.
17. Blade back topsoil to original position and place temporary seed.
18. Perform pavement repairs as directed.
19. Place mailboxes and signs at final positions.
20. Place 2nd OCST over entire roadway width.
21. Place 1 ½” HMA level-up.
22. Place 2” (TYP) HMA.
23. Backfill pavement edges.
24. Place pavement markings and markers.
25. Final cleanup.

Some of these operations may be performed simultaneously.

The following standard details have been modified:

Project Number: STP 2013(176)

Sheet: 11B

Highway: SH 90

Control: 0315-02-044, etc.

County: Grimes

T101RC(MOD),
RETROFIT DETAILS FOR MBGF TRANSITION TO EXISTING T201(MOD) RAIL

ITEM 100 “PREPARING RIGHT OF WAY”

Prevent ashes from burned vegetation to be transported into any stream. During burn bans obtain written approval from the Commissioners Court prior to burning brush. If burning is not allowed, all trees and brush will be disposed of by shredding, logging or other methods approved by the Engineer. Create a windrow, stockpile, or topdress biomass on disturbed areas along the project at locations approved by necessary permits and the Engineer. Preparation of Right of Way includes tree removal, tree trimming, and brush removal. Trees and limbs shall be marked for removal and approval received from the Engineer, before any removal and trimming take place.

ITEM 132 “EMBANKMENT”

Provide Embankment material for areas within the limits of the Pavement Structure that meet one of the following requirements:

- Sources outside the ROW provide material with a plasticity index between 10 and 30.
- Sources within the ROW provide material with a plasticity index between 5 and 35

When PI greater than 35 is encountered in the top 1’ of subgrade, remove and replace with PI less than 25 materials. The high PI subgrade is located approximately at 3.5 to 3.6 miles north of SH 30 and 3.9 to 4.0 miles north of SH 30.

ITEM 134 “BACKFILLING PAVEMENT EDGES”

Furnish Type A or B material meeting one of the following requirements:
Item 132, Type B with a minimum PI of 15 and maximum PI of 35;
Item 247, Type D, Grade 3;
Reclaimed Asphalt Pavement (RAP) with 95% of the RAP passing the 2-in.sieve.

ITEM 160 “TOPSOIL”

All slopes requiring topsoil will be tracked immediately upon final grading to prevent erosion. Tracking consists of operating a tracked vehicle or equipment up and down the slopes leaving track marks perpendicular to the direction of the slope. Tracking slopes to prevent erosion will not be measured or paid for directly, but will be subsidiary to pertinent Items. Salvage approximately 6,400 cubic yards of topsoil from areas shown on plans. Maximum salvage depth is 4 in. Apply 4 in. layer of topsoil to designated areas.

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Sheet: 11B

Highway: SH 90

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County: Grimes

Topsoil may be obtained from the right of way at sites of proposed excavation and embankment.

ITEM 162 “SODDING FOR EROSION CONTROL”

Furnish and place block sod, using Bermudagrass sod.

ITEM 166 “FERTILIZER”

Fertilize all areas of project that are being seeded or sodded.

ITEM 168 “VEGETATIVE WATERING”

Vegetative watering is required for all areas of the project that are being seeded or sodded at the rate shown in the “Basis of Estimate”.

ITEM 247 “FLEXIBLE BASE”

Place flexible base in equal lifts of 4 to 8 in. in depth unless otherwise approved by the Engineer.

ITEM 275 “CEMENT TREATMENT (ROAD MIXED)”

Cease stabilization when the sulfate content is greater than 3,000 ppm or when the organic content is greater than 1%. Additional testing will be performed to determine the target cement content when these conditions are encountered.

ITEM 316 “SURFACE TREATMENTS”

Remove vegetation and blade pavement edges.

When placing surface treatment on base material, prepare surface by sweeping or other approved methods. Before applying bituminous material, lightly sprinkle the surface with water. When directed, sweep the surface after sprinkling with water. Do not apply bituminous material when water is puddling on the surface.

Sweep excess aggregate no sooner than 2 hours after rolling or as directed.

Vehicles used to haul aggregate from the stockpile to the chip spreader will not be overloaded.

Any damage to the roadway caused by the vehicles will be repaired by the Contractor at his expense and subsequent loads will be reduced so as not to cause further damage.

Transverse variance rates shall be used as directed. The nozzles outside the wheel paths will output up to 20% more asphalt by volume than the nozzles over the wheel paths.

Project Number: STP 2013(176)

Sheet: 11C

Highway: SH 90

Control: 0315-02-044, etc.

County: Grimes

The Contractor may be required to furnish and set string line to insure straight and uniform alignment as directed by the Engineer. The Contractor may use other methods subject to approval of the Engineer.

Surface treat driveways before the roadway is surface treated (second course only).

Cure surface treatments placed with a cutback asphalt binder for 21 days before placing subsequent surface courses unless otherwise directed by the engineer.

Cure surface treatments placed with an emulsion asphalt binder for 7 days before placing subsequent surface courses unless otherwise directed by the engineer.

Air and surface temperature for asphalt material application will be in accordance with the specification and the manufacturer's recommendation. However, the engineer may limit the use of an asphalt material due to the time of year.

ITEM 351 "REPAIRING EXISTING FLEXIBLE PAVEMENT STRUCTURE"

Take ownership of salvaged asphalt concrete pavement.

Use of a motor grader will not be permitted for asphalt concrete pavement.

ITEM 354 "PLANING AND TEXTURING PAVEMENT"

Take ownership of reclaimed asphalt material.

Schedule the work so that a seal coat is placed no more than two weeks after milling has been performed on any pavement surface, unless otherwise approved by the Engineer. The Engineer may require the seal coat to be placed sooner than two weeks in cases when base materials are exposed or when the pavement structure is showing signs of distress.

Existing raised pavement markers in the proposed work area are to be removed prior to planning operations. This item will be considered subsidiary.

Construct a fine milling pattern by adjusting the speed of the drum and the machine, as approved by the Engineer.

Protect bridge structures when perform milling on the bridges.

ITEM 464 "REINFORCED CONCRETE PIPE"

Seal joints using cold applied plastic asphalt sewer compound or cold applied preformed plastic gaskets. When cohesionless material is used for backfill, wrap the joints prior to backfilling with sand proof tape following the manufacturer's recommendations or with an equivalent material and method.

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ITEM 502 “BARRICADES, SIGNS AND TRAFFIC HANDLING”

In lieu of placing channelizing devices on centerline for one-lane, two-way traffic control, the Contractor may provide the Pilot Car Method. Operate the pilot vehicle in coordination with the flagging operations and other controls at the end of the one-lane sections in accordance with appropriate TCP. Mount a G20-4 sign at a conspicuous location on the rear of the vehicle. Traffic delays caused by one-lane, two-way traffic control, will not be allowed to exceed 5 minutes unless approved by the Engineer. Centerline channelizing devices will not be required. Place "Pavement Ends" (CW8-3), "Slow Down On Wet Road" (CW8-5T), "No Centerline Stripe", and "Loose Gravel" signs before pulverization of the existing pavement .

During one-way operations, station flaggers at all county roads and any other locations, such as private businesses, that may have traffic entering the work area.

Removal of ground mounted temporary signs and supports as specified on standard sheet BC(5), shall include the immediate backfilling of support holes with Type B embankment material and the compaction of the backfill material.

Prior to beginning pulverization operations, place an approved channelizing device along both sides of the travelway the entire length of the operation in accordance with the BC standards. Do not remove the channelizing devices until permanent edge striping is placed.

ITEM 560 “MAILBOX ASSEMBLIES”

Use “OM-2VP, CLASS 1” object markers for mailbox supports.

Notify the postmaster prior to installation for approval of type and temporary and permanent locations.

Retain and re-use newspaper holders removed or relocated during construction for placement on new mailbox assemblies in accordance with mailbox standard sheets.

ITEM 666 “REFLECTORIZED PAVEMENT MARKINGS”

Furnish Type II drop-on glass traffic beads conforming to DMS-8290 for use with Type I marking materials.

Unless authorized by the Engineer, the Contractor will not place the pavement markings on the resurfaced roadway until it has cured for 3 days.

All striping limits must be approved by the Engineer before striping operations may begin.

Use an acrylic sealer on concrete pavement.

ITEM 672 “RAISED PAVEMENT MARKERS”

Use flexible bituminous adhesive for applications on all pavement types.

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Sheet: 11D

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Control: 0315-02-044, etc.

County: Grimes

ITEM 3224 “DENSE GRADED HOT MIX ASPHALT (QC/QA)”

Hamburg Wheel Test Requirements			
<u>High-Temperature Binder Grade</u>	<u>Test Method</u>	<u>Laboratory Mixture Design or Trial Batch</u>	<u>Production and Placement Test¹</u>
		Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F	Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F
PG 64 or lower	Tex-242-F	7,000	7,000
PG 70	Tex-242-F	15,000	15,000
PG 76 or higher	Tex-242-F	20,000	20,000

¹. The Engineer may accept if no more than 1 of the 5 most recent Hamburg Wheel tests is below the specified number of passes and the failing test is no more than 2,000 passes below the specified number of passes.

Use aggregate that meets the SAC requirement of class A.

Aggregates used on shoulders and ramps are required to meet SAC requirements.

Add one (1.0) percent hydrated lime, commercial, or lime slurry lime, based on the total aggregate weight, as mix enhancer for all mixture types. Provide hydrated lime or commercial lime slurry in accordance with DMS-6350, “Lime and Lime Slurry”. Add hydrated lime or commercial lime slurry in accordance with Item 301.4.B.

Apply tack coat through a distributor spray bar in accordance with Article 316.3(A) Distributor. If residual from emulsion tack is not tacky, then the Engineer can require the use of PG binder.

Do not use more than 2% flyash in mixture.

Hamburg wheel tests will be performed by the engineer when there are changes in the RAP sources or properties.

RAP used for temporary driveways will not be allowed in HMA.