6	IM 40-1(182)	1
TEXAS	AMA	OLDHAM
0090	03	051	IH 40

,etc.

DESIGN SPEED = 70
ADT = 11,500

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

GENERAL

1. TITLE SHEET
2. INDEX OF SHEETS

FINAL PLANS OF ~~PROPOSED~~
STATE HIGHWAY IMPROVEMENT
OLDHAM COUNTY
HIGHWAY I.H. 40
FEDERAL PROJECT: IM 40-1(182)

FINAL PLANS

CONTRACTORS NAME: **WILLIAMS BROTHERS CONTRUCTION**
CONTRACTORS ADDRESS: **PO BOX 66458 HOUSTON TX 77266**
DATE CONTRACTOR BEGAN WORK: **APRIL 9, 2002**
DATE WORK WAS COMPLETED & ACCEPTED: **NOVEMBER 26, 2003**
FINAL CONTRACT COST: $ **35,531,981.59**

[signature], P.E. 7/16/07

LIMITS: FROM: 6.064 MILES WEST OF U.S. 385
TO: U.S. 385 IN VEGA
CONTROL 0090-03-051
ROADWAY LENGTH: = 32,018.31 FT. = 6.064 MI.
NET LENGTH OF PROJECT = 32,018.31 FT. = 6.064 MI.

LIMITS: FROM: U.S. 385 IN VEGA
TO: POTTER COUNTY LINE
CONTROL 0090-04-057
ROADWAY LENGTH: = 77,344.95 FT. = 14.648 MI.
BRIDGE LENGTH = 399.45 FT. = 0.075 MI.
NET LENGTH OF PROJECT = 77,744.40 FT. = 14.724 MI.

FOR THE CONSTRUCTION OF THE UPGRADING OF A FREEWAY FACILITY CONSISTING OF PLANING, REMOVE EXISTING BASE, ACP, & CONCRETE PAVING.

THESE RECORD DRAWINGS ARE A COMPILATION OF A COPY OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT; MODIFIED BY ADDENDA, CHANGE ORDERS, AND INFORMATION FURNISHED BY THE CONTRACTOR. THE INFORMATION SHOWN ON THESE RECORD DRAWINGS THAT WAS PROVIDED BY THE CONTRACTOR OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS.

CHANGE ORDER

1. ALLOWED FOR THE USE OF RAP IN ITEM 3146 HOT MIX (TY B) ADDED AND ADJUSTED ESTIMATE QUANTITIES FOR ITEM 354, ITEM 512, AND ITEM 662. ADJUSTED ESTIMATE QUANTITY FOR ITEM 677.

2. ALLOWED FOR THE USE OF SALVAGE BASE IN ITEM 247. ADDED ITEM 430 TO COMPENSATE THE CONTRACTOR FOR THE RETROFIT TO THE WINGWALL. ADDED CONCRETE DRIVEWAYS AND DRAINAGE STRUCTURES. ADJUSTED ESTIMATE QUANTITY TO ITEM 9439 AND ADDED ITEM 9440 TO CORRECT CROSS-LOPES ON BRIDGE DECK. ADDED ITEM 3146 HOT MIX (TY D) TO BE USED TO MAINTAIN ADJACENT SERVICE ROADS.

3. COMPENSATION TO ADJUST THE HEIGHT AND WEIGHT OF T101 RAIL AT US 385 BRIDGES. ADDED ITEM 612, AND ITEMS 666 AND 678 FOR 24" PAV MRK.

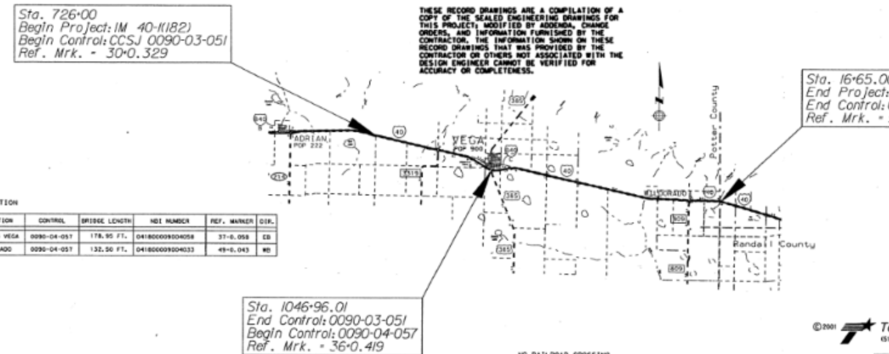
4. TRANSFERED OWNERSHIP OF 5,000 CY OF SALVAGE BASE TO THE CONTRACTOR.

5. ADJUSTED ESTIMATE QUANTITY FOR ITEM 247. ADDED ITEM 420 CL C CONC (MISC) FOR THE BRIDGE ON US 385 AND GORE AREAS AROUND THE RAMPS.

6. ALLOWED CONTRACTOR TO USE CTB STOCKPILED IIN ADRIAN. ADDED ITEM 9100 TO REPAIR A SECTION OF SOFT SUBGRADE.

7. ADDED ITEM 9442 REPAIR PAVEMENT TERMINUS TO REPAIR TERMINUS AT STA 367+26.73.

8. ADJUSTED ESTIMATE QUANTITY FOR ITEMS 105, REWORK BASE ITEMS. ADDITIONAL WORK WAS MOVED FROM ONE ITEM TO ANOTHER.



BRIDGE INFORMATION

COUNTY	LOCATION	CONTROL	BRIDGE LENGTH	NBI NUMBER	REF. MARKER	DIR.
OLDHAM	US 385 VEGA	0090-04-057	178.95 FT.	041800009004058	37-0.058	EB
OLDHAM	DILDORADO	0090-04-057	132.50 FT.	041800009004033	49-0.043	WB

NO RAILROAD CROSSING
NO EXCEPTIONS

EQUATIONS:

03 EB 936+02.30 BK = 936+80.00 FWD = -77.7'
04 EB 1075+83.86 BK = 1075+96.16 FWD = -12.29'
04 WB 704+18.91 = 1152+75 (Reverse Stationing)
04 WB 263+57.40 BK = 263+48.9 FWD = 8.5'
04 WB 29+67.40 BK = 45+52.10 FWD = -1584.70'

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, MARCH 1, 1993 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, DECEMBER, 1993).

CONCURRENCE: | APPROVED FOR LETTING:

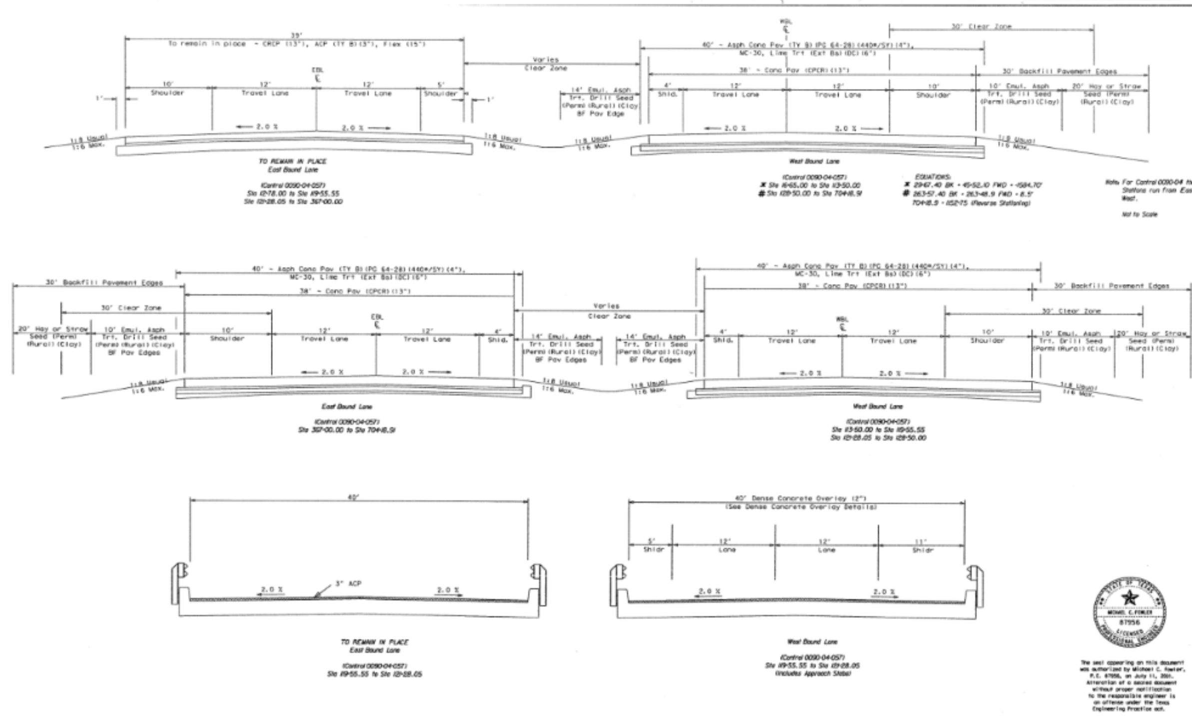
DIRECTOR, TRAFFIC OPERATIONS DIVISION

SUBMITTED FOR LETTING: 11/5/01
AREA ENGINEER

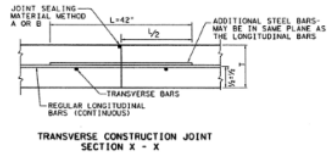
RECOMMENDED FOR LETTING:
DISTRICT ENGINEER

APPROVED FOR LETTING: 12-20-01
[signature], P.E. FOR DIRECTOR, DESIGN DIVISION

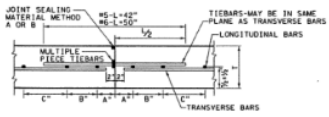
OLDHAM IM 40-1(182)



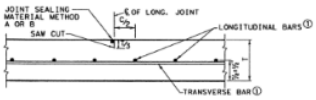
PROPOSED TYPICAL SECTIONS
SHEET 1 OF 2



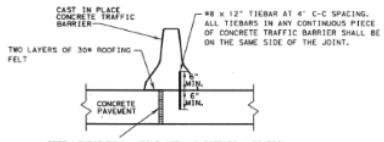
TRANSVERSE CONSTRUCTION JOINT
SECTION X - X



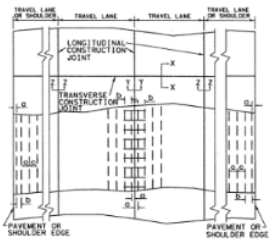
LONGITUDINAL CONSTRUCTION JOINT
SECTION Y - Y



LONGITUDINAL CONTRACTION JOINT
SECTION Z - Z



FREE LONGITUDINAL JOINT DETAIL



TYPICAL PAVEMENT LAYOUT

TABLE NO. 1 LONGITUDINAL STEEL

LONGITUDINAL STEEL SIZE AND SPACINGS						
SLAB THICKNESS AND BAR SIZE		REGULAR REINFORCEMENT	FIRST SPACING AT EDGE OR JOINT	SECOND SPACING FROM EDGE OR JOINT	ADDITIONAL REINFORCEMENT AT TRANSVERSE CONST. JOINT	
T INCHES	BAR NUMBER	SPACING "C" INCHES	SPACING "A" INCHES	SPACING "B" INCHES	SPACING 2 x C INCHES	LENGTH "L" INCHES
8	5	9	3 TO 4	3 TO 9	18	42
9	5	7.5	3 TO 4	3 TO 7.5	15	42
10	6	8.5	3 TO 4	3 TO 8.5	NONE	-
11	6	7	3 TO 4	3 TO 7	NONE	-
12	6	6	3 TO 4	3 TO 6	NONE	-
13	6	5.5	3 TO 4	3 TO 5.5	NONE	-

TABLE NO. 2 ALLOWABLE PAVEMENT WIDTH(W) IN FT.
FOR TRANSVERSE BAR SPACING (Ba) NOT SHOWN USE FORMULAE.

SLAB THICKNESS	8"	9"	10"	11"	12"	13"
#5 BAR AT 36"	62	55	50	45	41	38
#5 BAR AT 24"	93	83	74	68	62	57
#6 BAR AT 36"	88	78	70	64	59	54
#6 BAR AT 24"	126	117	105	96	88	81

TRANSVERSE STEEL AND TIEBAR SPACINGS SHALL BE BASED ON THE FOLLOWING FORMULAE.

FOR #5 BARS $W = \frac{17857\ N}{T\ Ba}$ FOR #6 BARS $W = \frac{25346\ N}{T\ Ba}$

W - ALLOWABLE WIDTH OF PAVEMENT SLAB WIDTH IN FEET (MEASURED EDGE TO EDGE OR EDGE TO UNTIED JOINT)
N - NUMBER OF LAYERS OF STEEL (1 OR 2)
T - THICKNESS OF SLAB IN INCHES
Ba - BAR SPACING IN INCHES

MAXIMUM Ba = 36"
MINIMUM Ba = 12"

GENERAL NOTES

1. FOR FURTHER INFORMATION REGARDING THE PLACEMENT OF CONCRETE AND REINFORCEMENT, REFER TO THE GOVERNING SPECIFICATIONS FOR "CONCRETE" AND "REINFORCING STEEL."
2. LONGITUDINAL AND TRANSVERSE BARS SHALL BE DEFORMED STEEL CONFORMING TO ASTM A-615 (GRADE 60) OR ASTM A-616 (GRADE 60).
3. DETAILS FOR PAVEMENT WIDTH, PAVEMENT THICKNESS AND THE CROWN CROSS-SLOPE SHALL BE SHOWN ELSEWHERE IN THE PLANS.
4. SPLICES SHALL BE A MINIMUM OF 33 TIMES THE NOMINAL STEEL DIAMETER.
5. CONSOLIDATION WITH HAND-MANIPULATED MECHANICAL VIBRATORS IS REQUIRED ADJACENT TO ALL TRANSVERSE CONSTRUCTION JOINTS.
6. THE DETAIL FOR THE JOINT SEALANT AND RESERVOIR WILL BE SHOWN IN CONCRETE PAVEMENT DETAIL, JOINT SEALANT.
7. PAVEMENT WIDTHS OF MORE THAN 16' SHALL HAVE A LONGITUDINAL JOINT (SECTION Z-Z OR Y-Y). THESE JOINTS SHALL BE LOCATED WITHIN 6" OF THE LANE LINE UNLESS THE JOINT LOCATION IS SHOWN ELSEWHERE ON THE PLANS.
8. THE SAW CUT FOR THE LONGITUDINAL JOINT SHALL BE ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.
9. WITHIN ANY AREA BOUNDED BY TWO FEET OF PAVEMENT LENGTH MEASURED PARALLEL TO THE CENTERLINE AND TWELVE FEET OF WIDTH MEASURED PERPENDICULAR TO THE PAVEMENT CENTERLINE, NOT OVER 33% OF THE REGULAR LONGITUDINAL STEEL SHALL BE SPLICED.
10. MULTIPLE PIECE TIEBARS SHALL BE USED AT LONGITUDINAL CONSTRUCTION JOINTS UNLESS OTHERWISE SPECIFIED IN THE PLANS.
11. FOR THE 13" SLAB THICKNESS, WHEN STANDARD DETAIL CPCR(1)-94 IS INCLUDED IN THE PLANS, THE CONTRACTOR MAY CHOOSE EITHER THE ONE OR TWO LAYER PLACEMENT OF REINFORCING STEEL UNLESS OTHERWISE SPECIFIED.

FOOTNOTE:
① WHEN MACHINE PLACING OF THE STEEL REINFORCEMENT IS USED, THE USE OF CHAIRS WILL NOT BE REQUIRED AND THE TRANSVERSE STEEL MAY BE PLACED ABOVE OR BELOW THE LONGITUDINAL STEEL. THE VERTICAL LOCATION OF THE BARS WILL BE APPROVED BY THE ENGINEER.

Texas Department of Transportation
Design Division (Pavement)

CONCRETE PAVEMENT DETAILS
CONTINUOUSLY REINFORCED STEEL BARS

ONE LAYER PLACEMENT
T-8, 9, 10, 11, 12, & 13 INCHES

CPCR(1)-94

©TxDOT SEPTEMBER 1994 — 8-1.0 — 8-1.0 — 8-00 — 8-CC — 80 MIL. ROOD

REVISIONS			FEDERAL AID PROJECT		SHEET
			DISTRICT	COUNTY	CONTROL SECTION JOB
			STATE		
			DATE	SHEET NO.	

FILE: CPCR194.DGN