

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL CROSS SECTIONS
3-5	LAYOUT OF CIRCLE & TYPICAL SECTIONS
6-10-6A-7A	LAYOUT OF INTERSECTION LOOP 12 & S.H. 183 TYPICAL SECTIONS
11	ESTIMATE & QUANTITY SHEET
12-16	PLAN & PROFILE SHEETS
17-24	TURNOUT DETAILS
25	CONCRETE PAVEMENT DETAILS (46-1 Mod.)
26	JOINT DETAILS (46-2 Mod.)
27-28	CONCRETE PAVEMENT DETAILS (SPECIAL)
29-31-31A	CROSS SECTIONS AT CULVERT SITES
32	INLET DETAILS
33	SCL
34	SC-NA
35	FWN
36	BC-1
37	W-2
38	CH-7
39	BASC-40
40	RR-8
41	SWC-39
42-43	BW-46 (142)
44	M-47

STATE OF TEXAS STATE HIGHWAY DEPARTMENT

PLANS OF PROPOSED STATE HIGHWAY LOOP 12 DALLAS COUNTY FROM COCKRELL HILL ROAD TO STATE HWY. 183 CONCRETE PAVEMENT

WORK ORDERS

NO. 1 REPAIR 3/4" WATER PIPE ENCASED IN 2" PIPE LOCATED WEST OF INTERSECTION OF LOOP 12 & HWY. 183 (STA. 430).

NO. 2 REBUILD 260 L.F. OF 15' PRIVATE DRIVE MOVED FROM STATION 450 TO 122.

NO. 3 REPAIR AND RELAY 150' OF 3/4" WATER PIPE ENCASED IN 36" OF 2" PIPE UNDER CLASS B - 60 M.P. PAVING, LOCATED ABOUT STATION 435 ON HWY. 183.

NO. 4 REBUILD DRIVEWAY AT ABOUT STATION 122+00 LEFT.

FIELD CHANGES [F.634(14) ONLY]

NO. 1 EXTEND 3'x2' CONCRETE BOX CULVERT 23.2' UPSTREAM.

NO. 2 ELIMINATE 4'-24" WIDTH CROSS OVERS FOR INTERSECTIONS AT PETERS DRIVE AND WILDWOOD DRIVE AND PROVIDE 2'-170" WIDTH INTERSECTIONS. (SEE SHEET 7A).

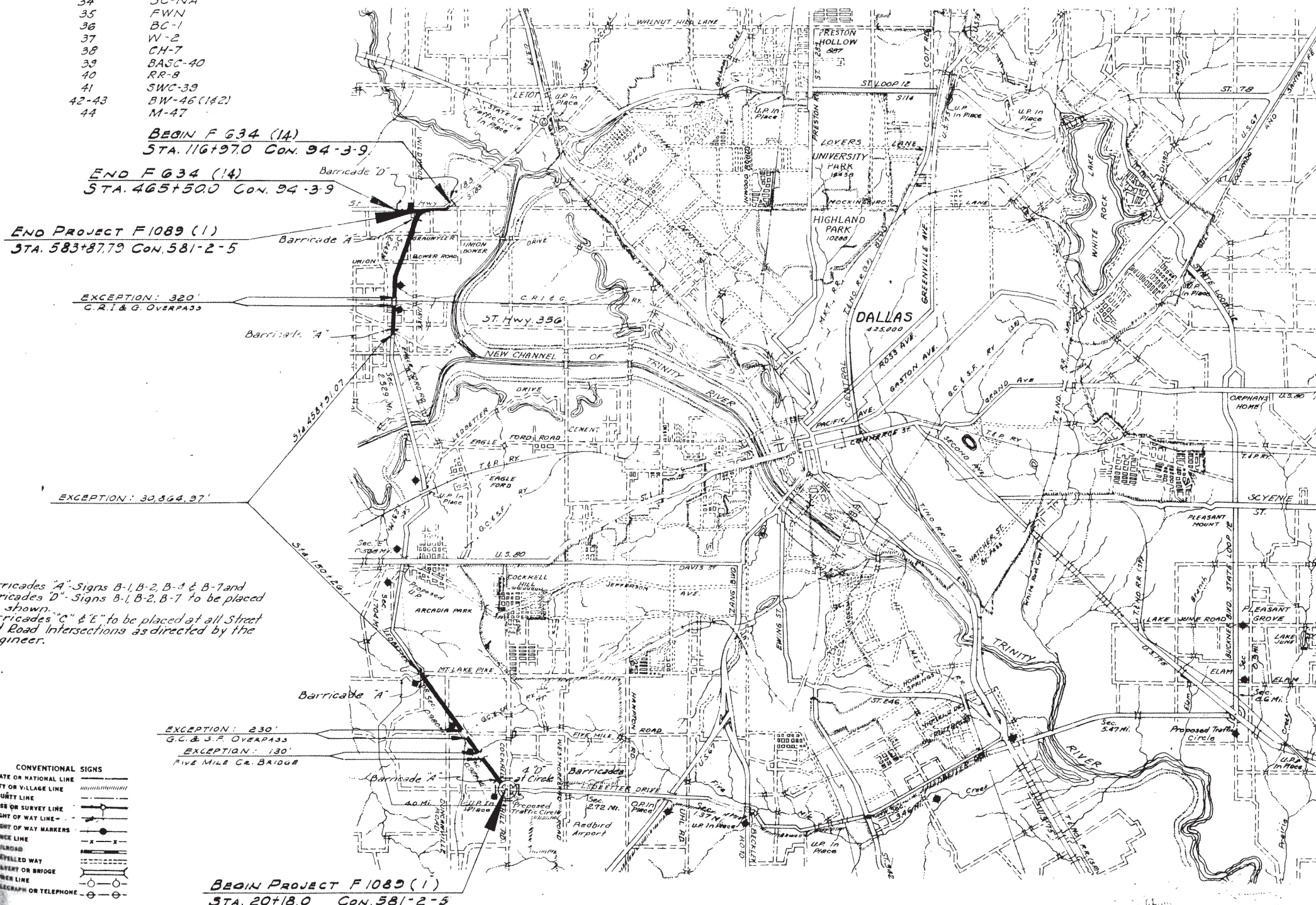
NO. 3 STA'S 433+62 TO 438+87 & 432+78 TO 456+98, SALVAGING AND REPLACING BASE FOUND ON SHOULDERS AT INTERSECTIONS OF PETERS ROAD & WILDWOOD ROAD.

DATE WORK STARTED: 5-15-49

DATE WORK COMPLETED: 12-3-49

Net Length of Project 28,522.52 Ft. = 5.40 Mi.

F1089(1)	24,924.82 FT.	4.70
F634(14)	3,697.70 FT.	0.70
TOTAL	28,522.52 FT.	5.40



F 1089 - (1)

NO EQUATIONS EXCEPTIONS

Sta. 65+80.0 to Sta. 67+10.0 - Five Mile Cr. Bridge	130.
Sta. 80+44.52 to Sta. 82+44.52 - G.C. & S.F. Overpass	230.
Sta. 150+26.1 to Sta. 458+91.07	30,864.1
Sta. 497+43 to Sta. 500+63 - C.R.I.G. Overpass	320.6
TOTAL	31,544.7

F 634 - (14)

EQUATIONS

Sta. 119+97 Back = 120+00.5 Fwd.	3.
Sta. 122+00 Back = 433+51.8 Fwd.	31,151.
TOTAL	31,154.

NO EXCEPTIONS

SPECIFICATIONS ADOPTED BY THE STATE HIGHWAY DEPARTMENT OF TEXAS, JANUARY 13, 1938, AND APPROVED BY THE PUBLIC ROADS ADMINISTRATION FEBRUARY 16, 1939, AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS SHALL GOVERN ON THIS PROJECT.

REQUIRED CONTRACT PROVISIONS FOR FEDERAL AID PROJECTS APPROVED AUGUST 5, 1948.

STATE HIGHWAY DEPARTMENT

CORRECT: Feb. 14, 1949

DESIGNING: [Signature]

ENGINEER: [Signature]

RECOMMENDED FOR APPROVAL: [Signature]

RECOMMENDED FOR APPROVAL: [Signature]

RECOMMENDED FOR APPROVAL: [Signature]

APPROVED: [Signature]

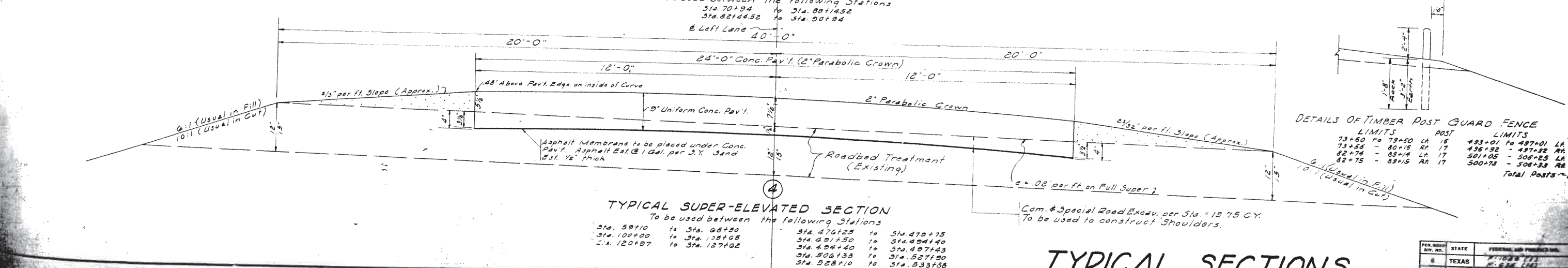
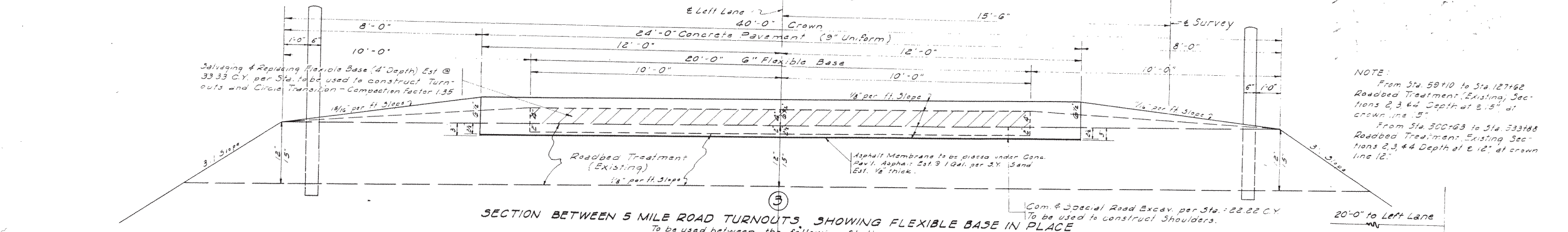
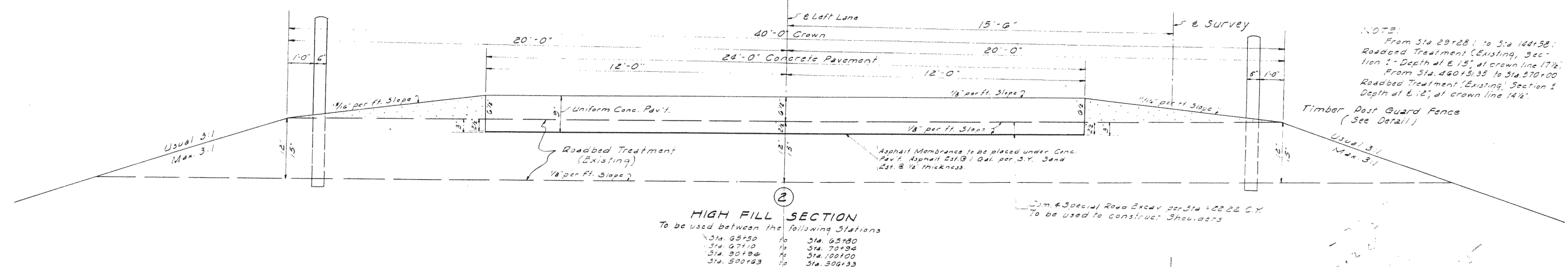
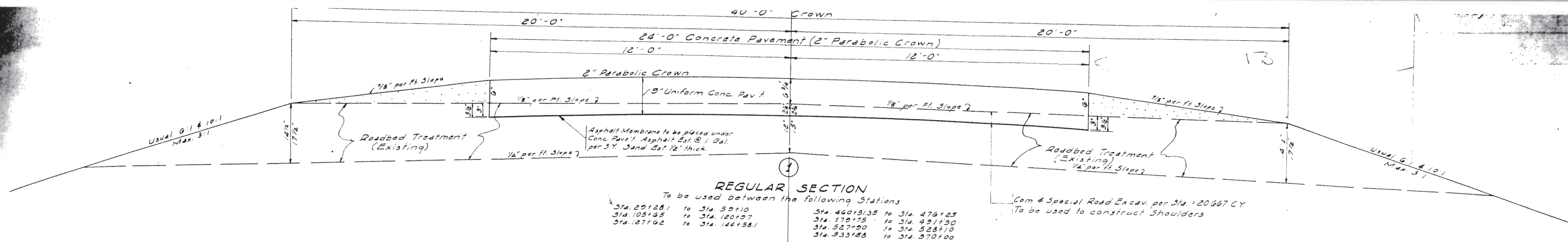
APPROVED: [Signature]

APPROVED: [Signature]

BEGIN PROJECT F1089(1)
STA. 20+18.0 CON. 581-2-5

NOTE: FEDERAL PROJECT MARKERS OF APPROVED DESIGN WILL BE ERECTED AT EACH END OF THE PROJECT PRIOR TO COMPLETION.

City Limits corrected to Oct. 1946

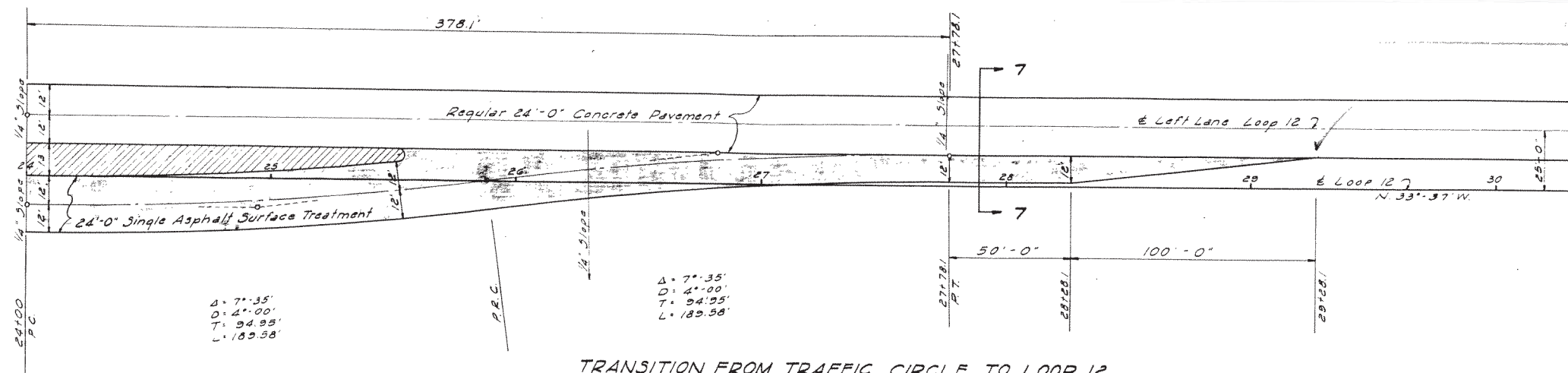


DETAILS OF TIMBER POST GUARD FENCE

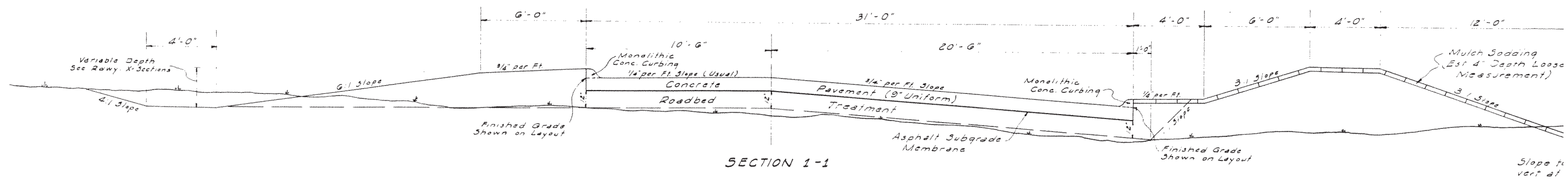
LIMITS	POST	LIMITS
73+60 to 73+60	LA 16	493+01 to 497+01
73+60 to 80+16	LA 17	497+01 to 497+02
80+16 to 82+74	LA 17	501+05 to 506+25
82+74 to 83+16	LA 17	506+25 to 506+33
83+16 to 83+16	LA 17	506+33 to 506+33
Total Posts = 17		

TYPICAL SECTIONS

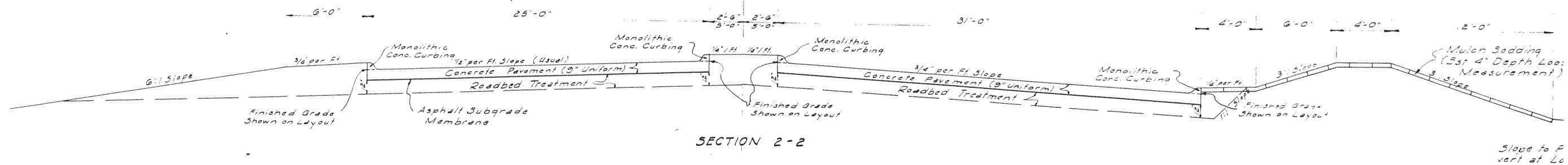
FED. HIGHWAY DIST. NO.	STATE	FEDERAL AID FUNDING NO.
18	TEXAS	2-65-111
STATE DIST. NO.	COUNTY	
18	DALLAS	



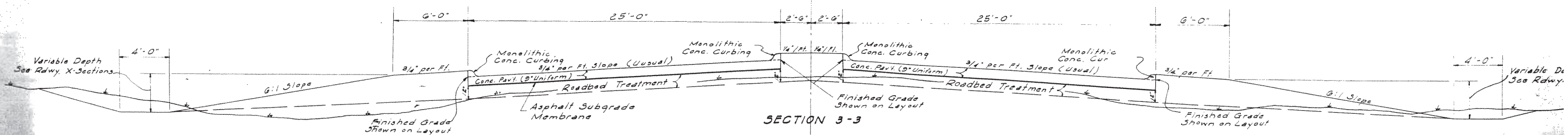
TRANSITION FROM TRAFFIC CIRCLE TO LOOP 12



SECTION 1-1



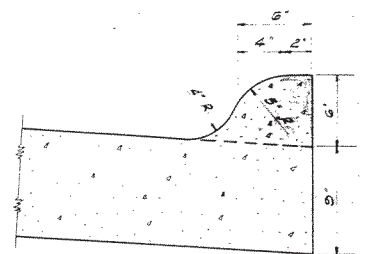
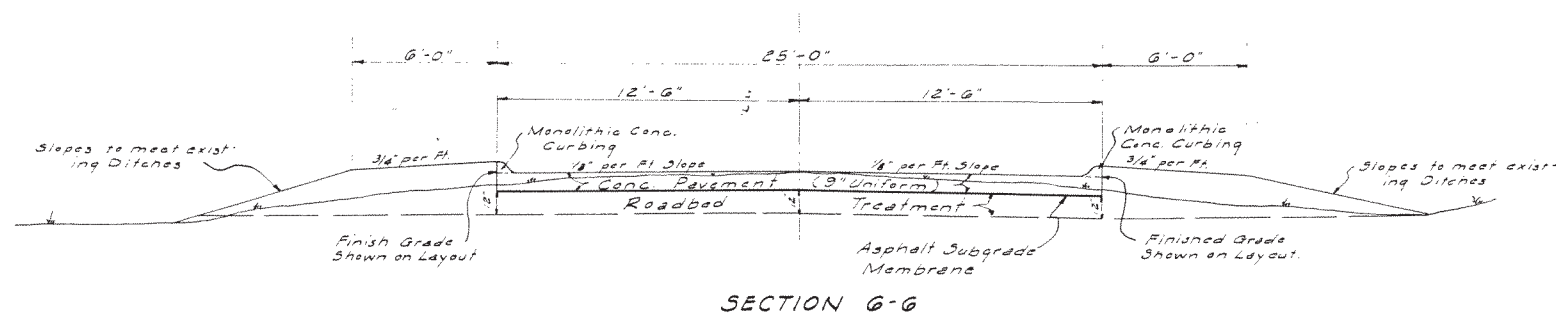
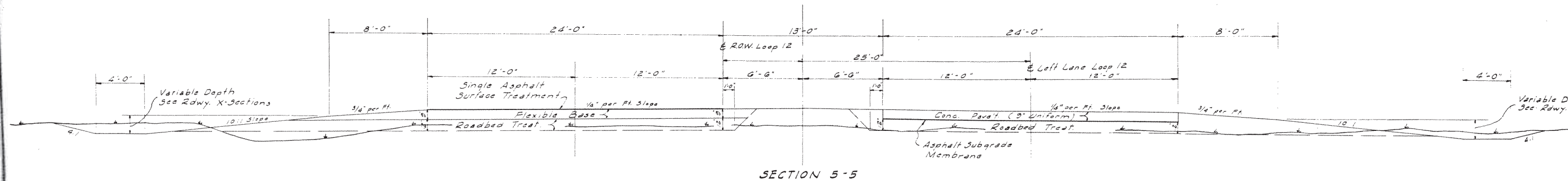
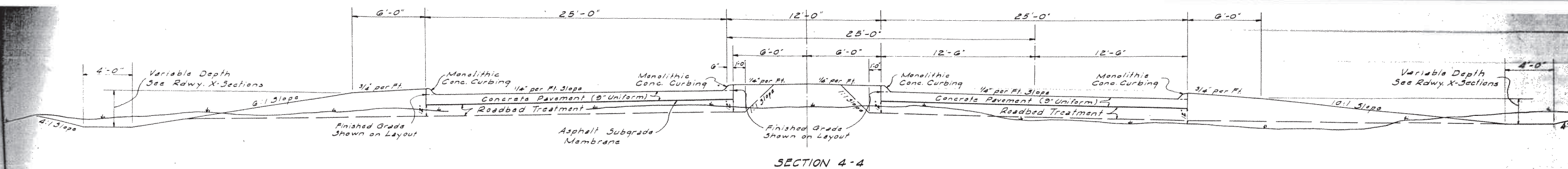
SECTION 2-2



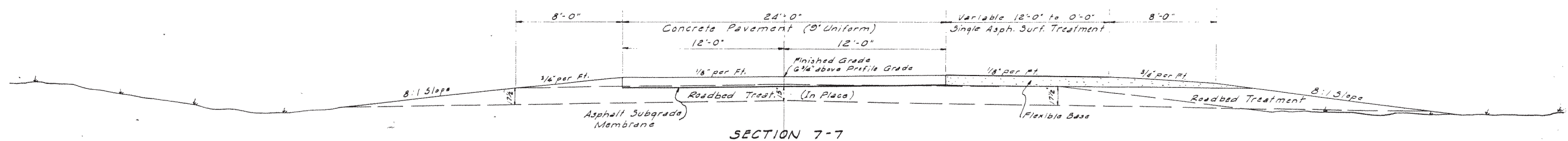
SECTION 3-3

TYPICAL SECTIONS TRAFFIC CIRCLE

FED. ROAD DIV. NO.	STATE	FEDERAL AID F-1188
6	TEXAS	F-634
STATE DIST. NO.	COUNTY	
18	DALLAS	387

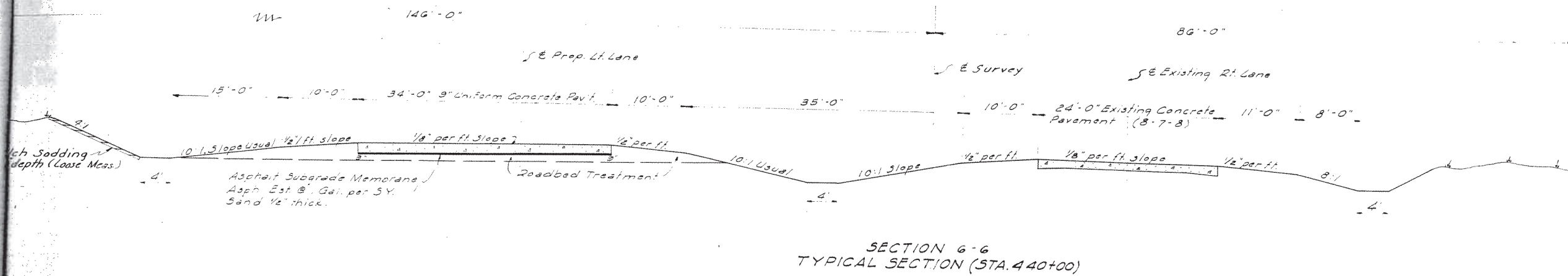
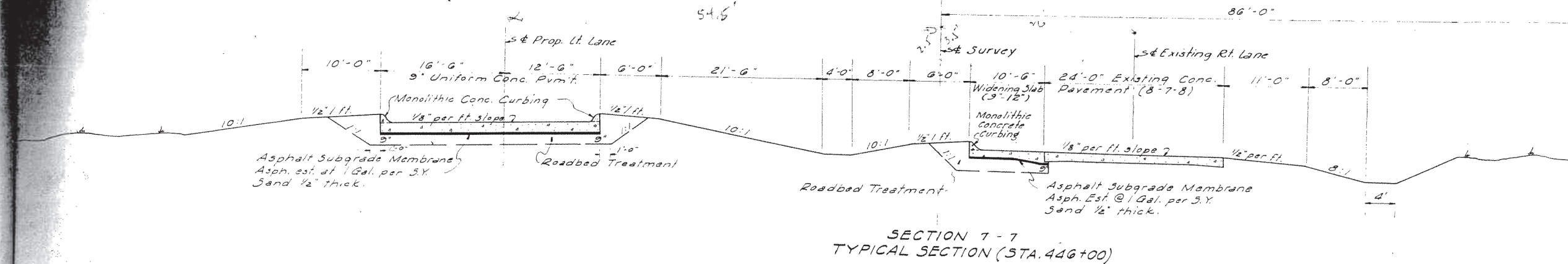


DETAIL OF MONOLITHIC CONCRETE CURBING
 Note: The shaded area shall be measured and paid for as "Monolithic Concrete Curbing".
 The unshaded area shall be measured and paid as "Concrete Pavement".



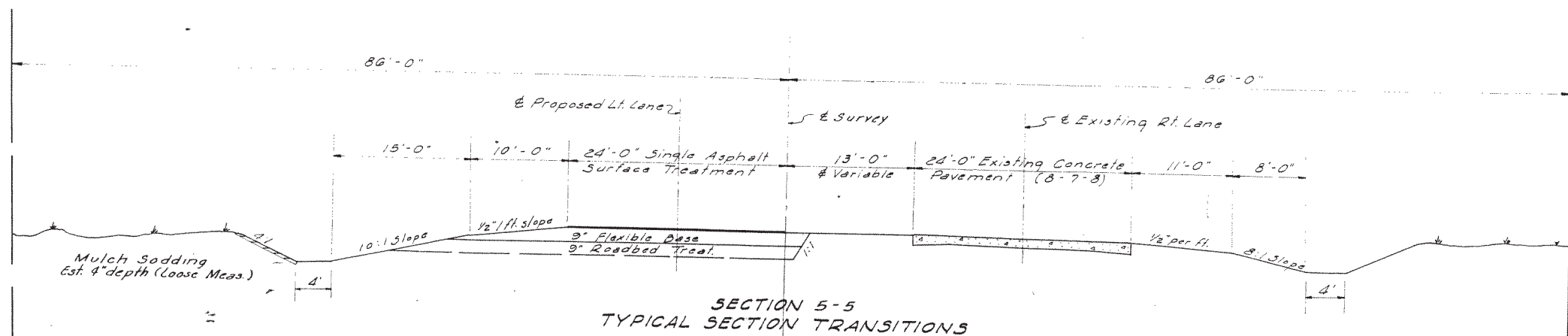
TYPICAL SECTIONS TRAFFIC CIRCLE

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.
6	TEXAS	7-1289-111
STATE DIST. NO.	COUNTY	SECTION
18	DALLAS	28

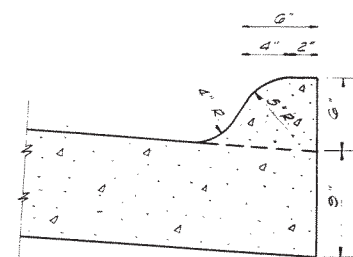
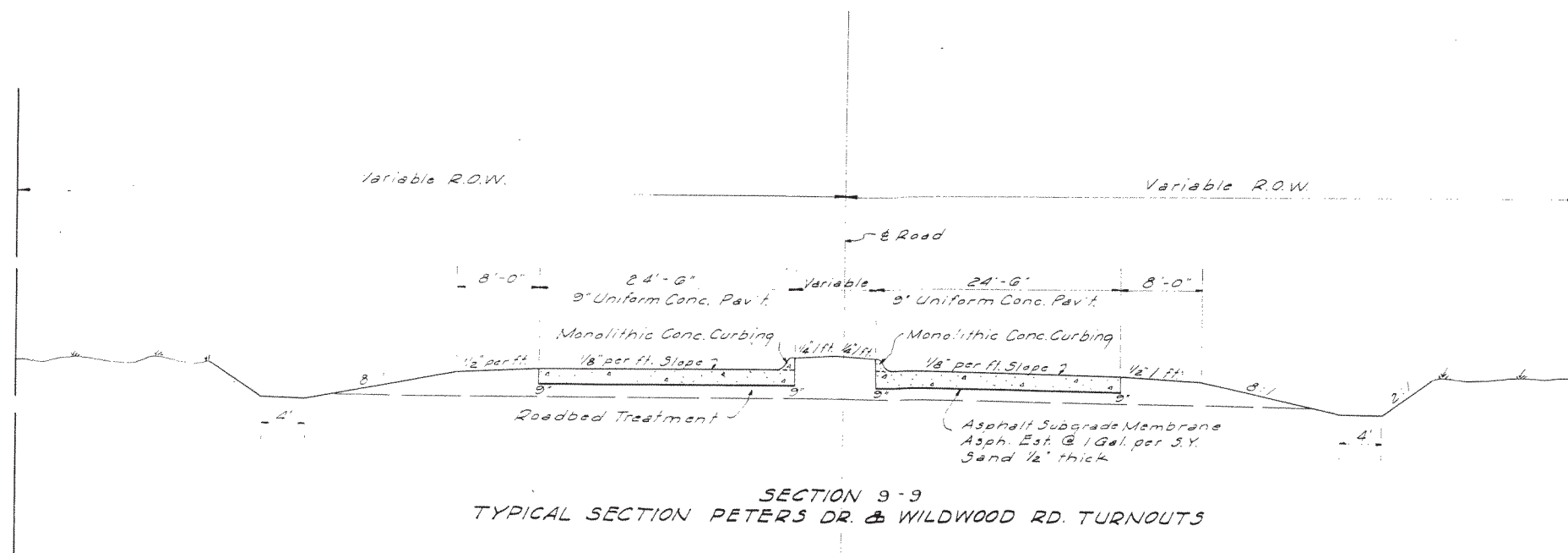


LIMITS OF MULCH SODDING
to be placed on Back Slopes as
shown on typical sections

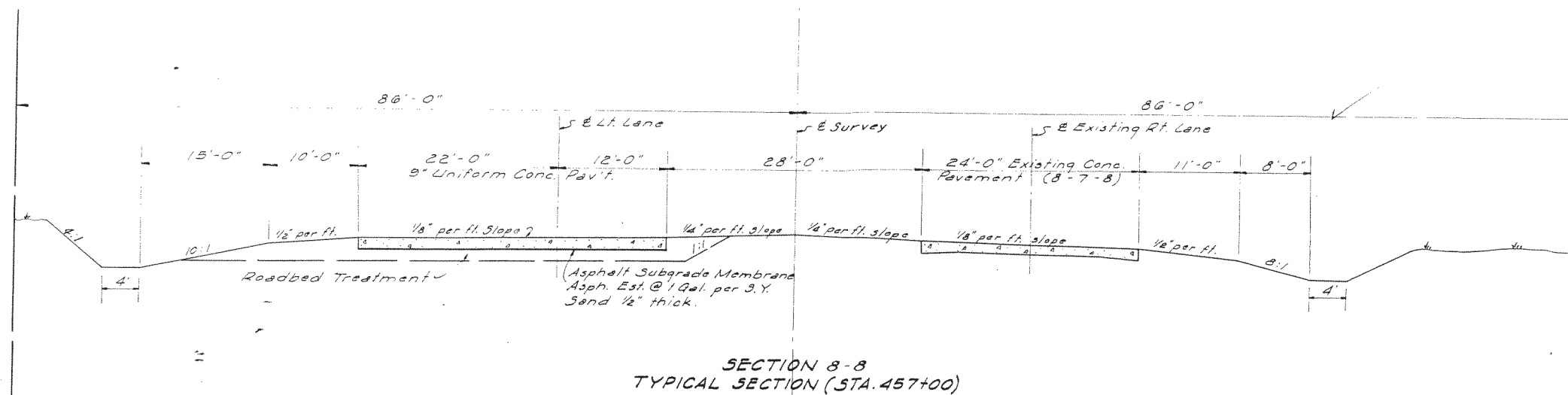
STA.	to	STA.
436+51.8		436+53
437+50		442+50
438+50		454+50



TYPICAL SECTIONS S.H. 183 AT INTERSECTION LOOP



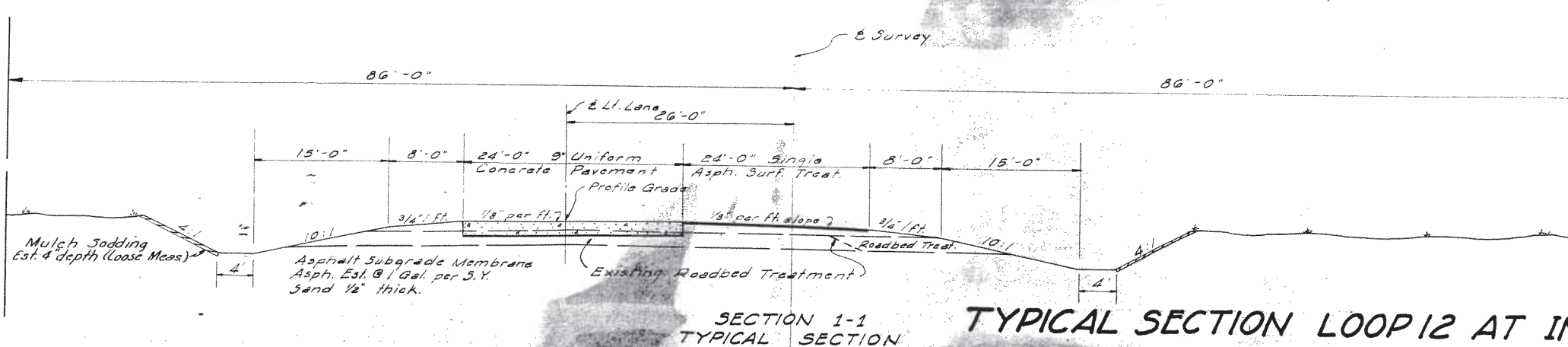
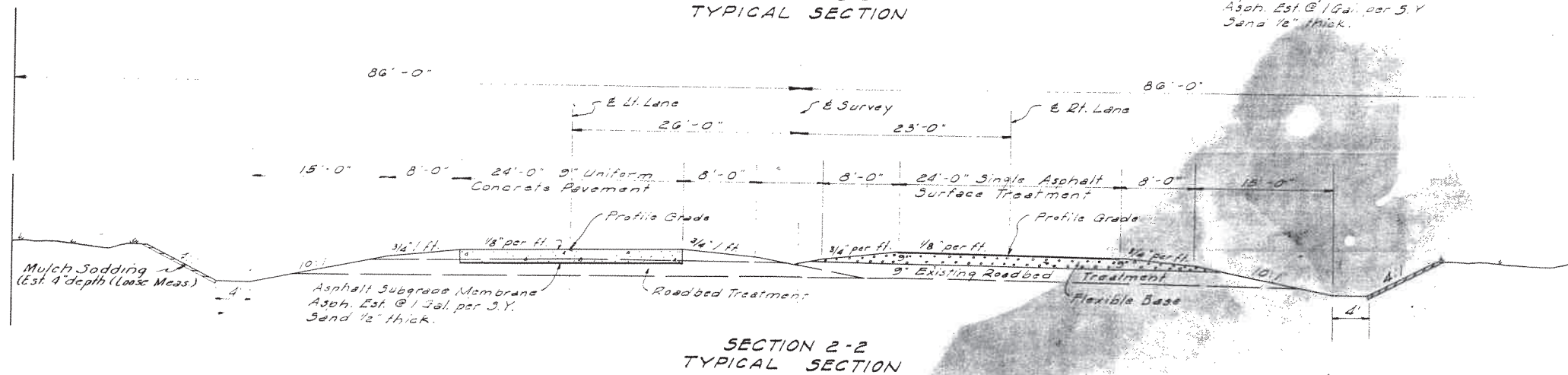
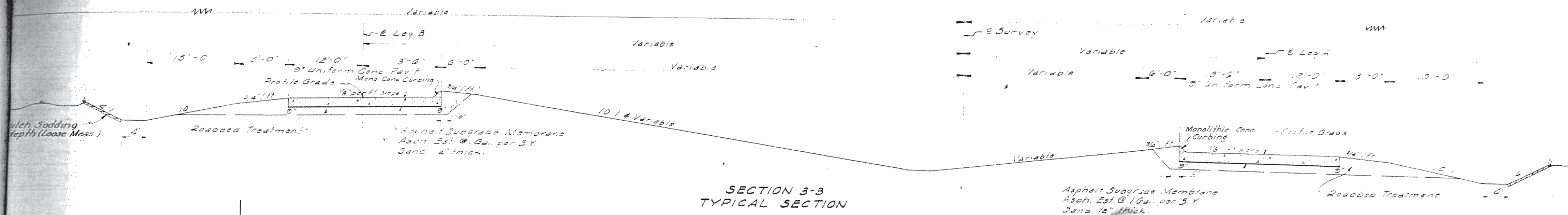
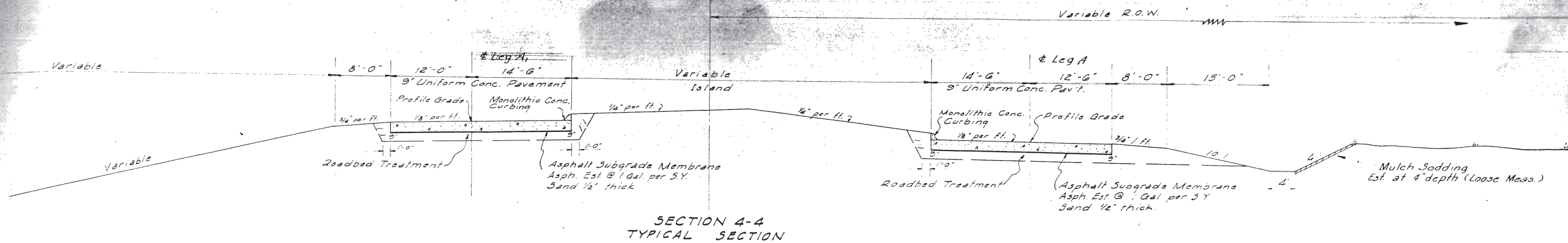
DETAIL OF MONOLITHIC CONCRETE CL
Note: The shaded area shall be measured for as "Monolithic Concrete Curbing."
The unshaded area shall be measured and for as "Concrete Pavement."



TYPICAL SECTIONS S.H. 183 AT INTERSECTION LOOP 1

Sheet 2 of 2 Sheets

FED. ROAD DIST. NO.	STATE	FEDERAL AID P.
6	TEXAS	2-6-52
STATE DIST. NO.	COUNTY	DATE
18	DALLAS	3/1/52

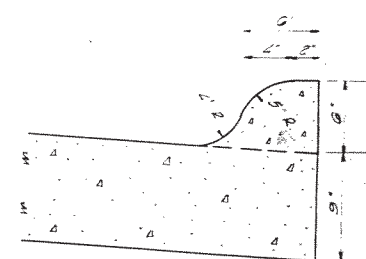


TYPICAL SECTION LOOP 12 AT INTERSECTION S.H. 183

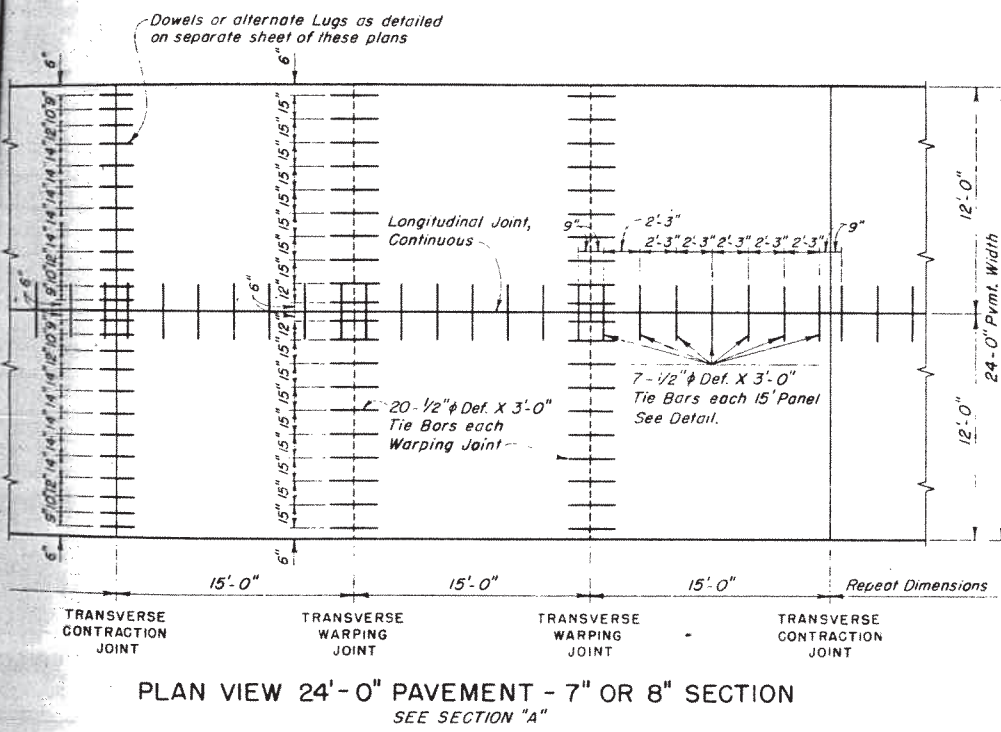
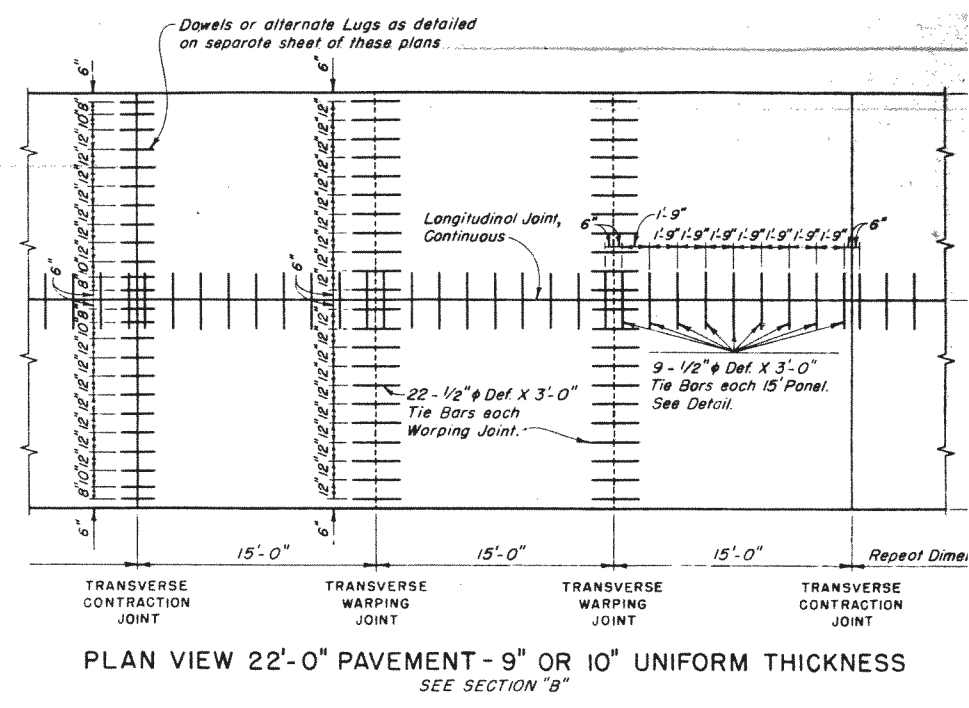
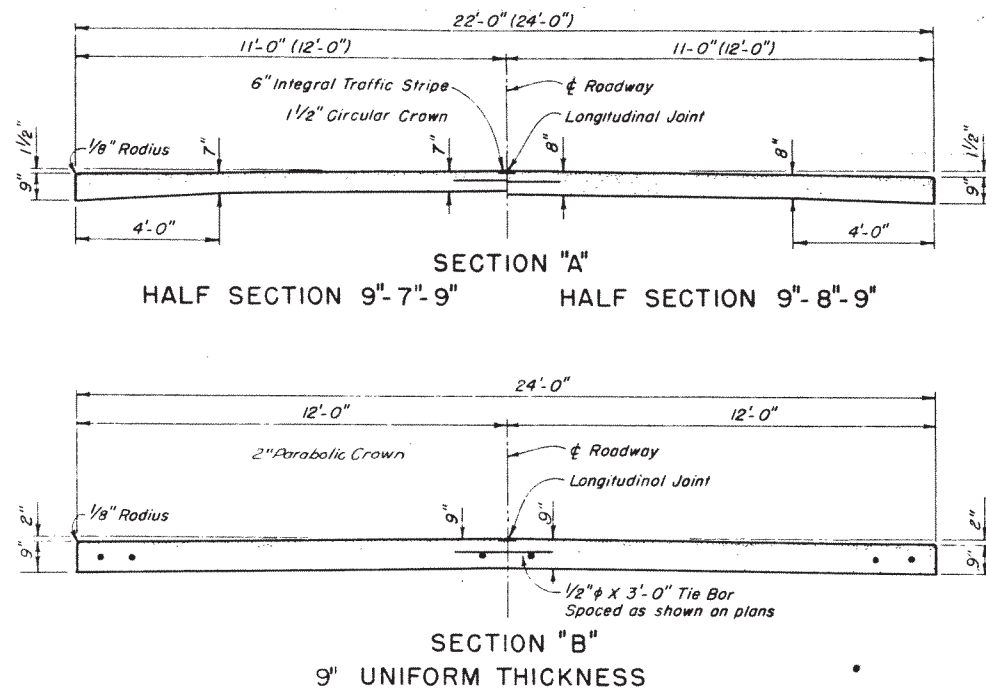
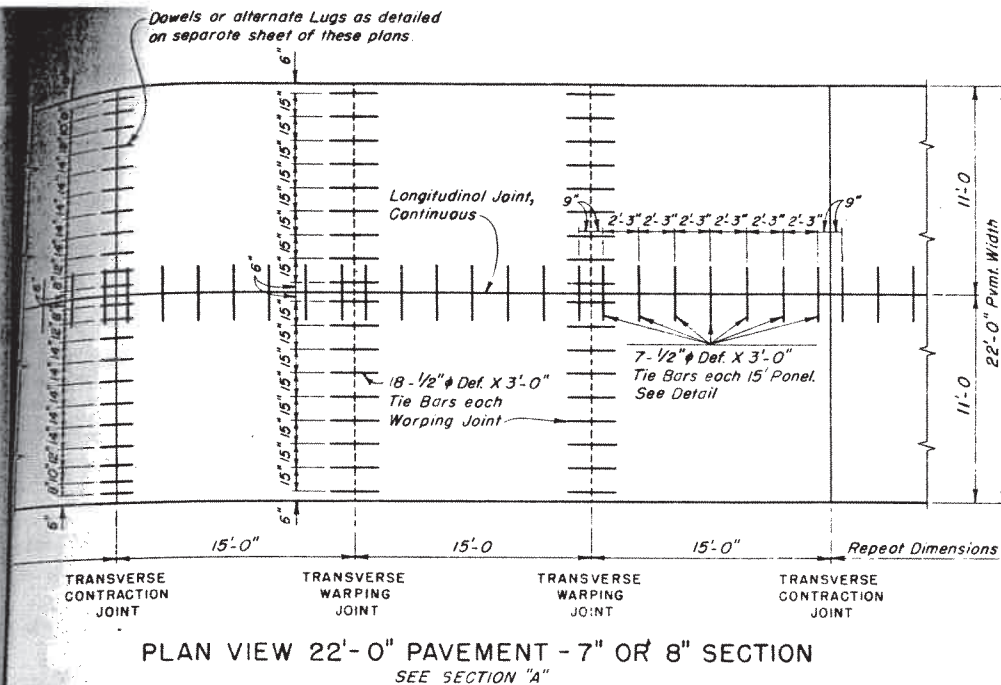
LIMITS OF MULCH SODDING
be placed on Back Slopes as
shown on Typical Sections.

Lt. Leg
Sta. to Sta.
577+00 - 579+55
577+31 - 584+06

Rt. Leg
Sta. to Sta.
577+00 - 584+06



FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.
18	TEXAS	7-523-171
STATE DIST. NO.	COUNTY	CORRESP. SECTION NO.
18	DALLAS	382



GENERAL NOTES:

Contraction Joints shall be constructed in accordance with governing details in these plans.

Expansion Joints shall be placed adjacent to bridge approach slabs, and when required by these plans or special provision, shall be spaced as required at a normal contraction joint location, and shall be constructed in accordance with the governing details in these plans.

At each bridge end construct a thickened and reinforced approach slab as detailed on other sheet in these plans. Additional work, concrete and steel shall be included in unit price bid for "Concrete Pavement."

The furnishing of all material and the installation of all reinforcing steel, tie bars, joints, including load transmission units or dowels and sleeves, and all dowel or bar chairs, shall be subsidiary work and shall be included in the unit price bid for "Concrete Pavement."

Provisions for use of this patented installation have been made by the State free of royalty charges to the Contractor. (Note: Integral Traffic Stripes will not be used on this Project.)

Expansion Joints shall be placed at the end of the days' pour & as shown above.

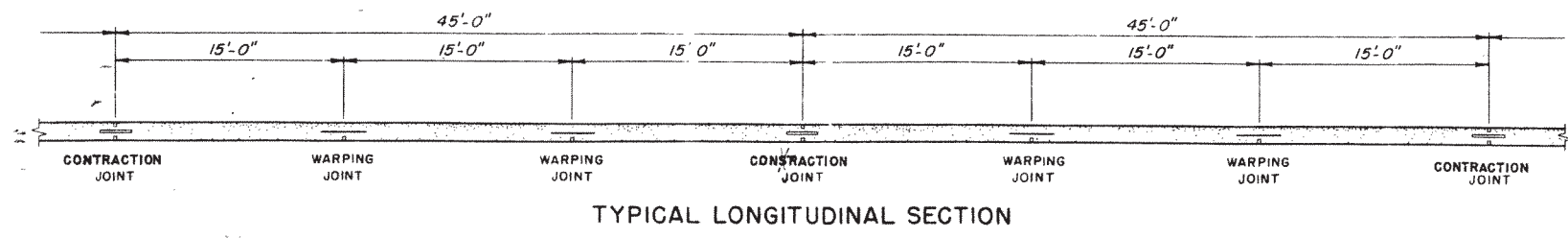
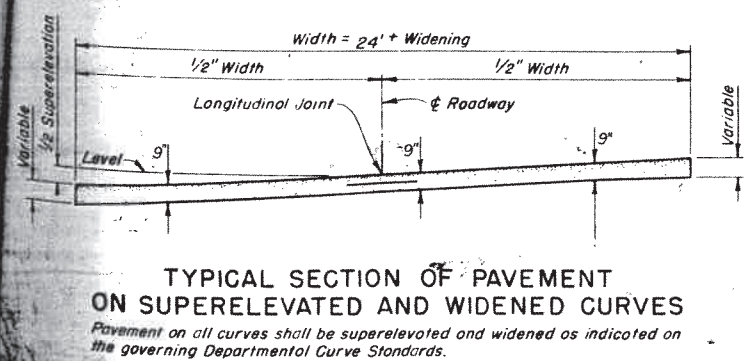
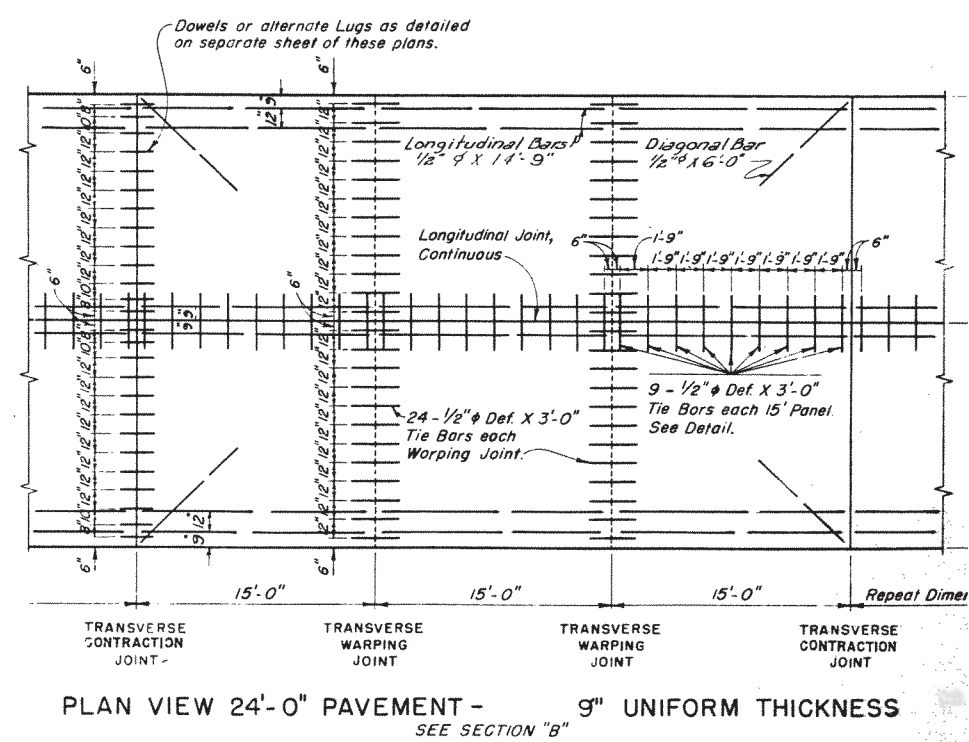
The Contractor shall hold and save the State, its officers, its agents, and its employees harmless to liability of any nature or kind, including costs and expenses, for or on account of any patent or unpatented invention, article or appliance manufactured or used in accordance with the details of these plans.

The section of pavement used will be as shown on Typical Cross Section Sheet of these plans.

TABLE OF REINFORCING STEEL QUANTITIES

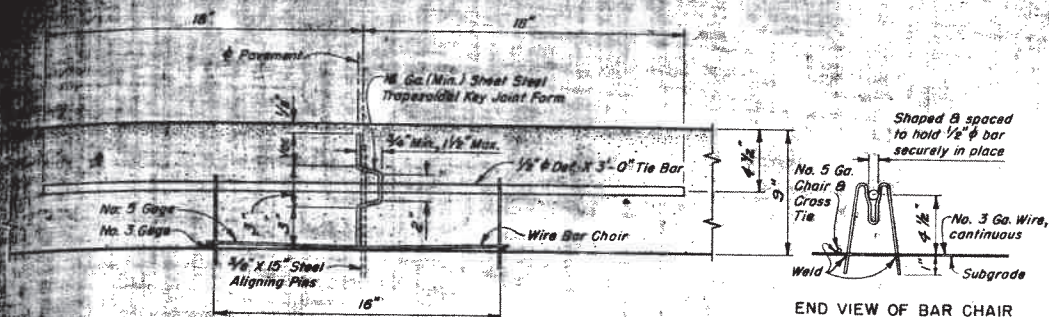
Each 45' Typical Slab:		7" 8" Pavement not used on this Project	Lb.	9" Slab	Lb.
DIAGONAL BARS	24'-0" Section	2 @ 18 - 1/2" ϕ Def. X 3'-0"	72	4 - 1/2" ϕ X 6'-0"	16
WARPING JT. TIE BARS	24'-0" Section	2 @ 20 - 1/2" ϕ Def. X 3'-0"	80	2 @ 24 - 1/2" ϕ Def. X 3'-0"	96
LONGITUDINAL BARS	24'-0" Section	21 - 1/2" ϕ Def. X 3'-0"	42	18 - 1/2" ϕ X 14'-9"	177
LONGITUDINAL JT. TIE BARS	24'-0" Section	21 - 1/2" ϕ Def. X 3'-0"	42	27 - 1/2" ϕ Def. X 3'-0"	54
Lb./sq. yd. of Typical 45' Slab		Total	164	122	343
		22'-0" Section	1,036		1,291
		24'-0" Section	1,016		2,358

Steel quantities are for information of bidders. No direct payment will be made for reinforcing steel. Refer to "General Notes."

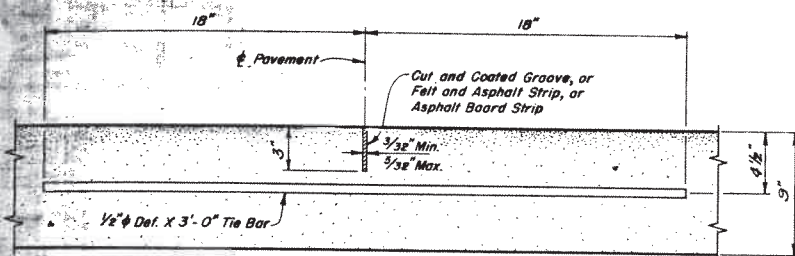


TEXAS HIGHWAY DEPARTMENT
CONCRETE PAVEMENT DATA
9" UNIFORM SECTION
24'-0" PAVEMENT
DESIGN NO. 46

APPROVED:	ENGINEER OF ROAD DESIGN	FED. ROAD DIST. NO.	6	STATE	TEXAS	FED. AID PROJ. NO.	2-1000 (14)
REVISED:		STATE DIST. NO.	18	COUNTY	DALLAS	DATE	10-24-53



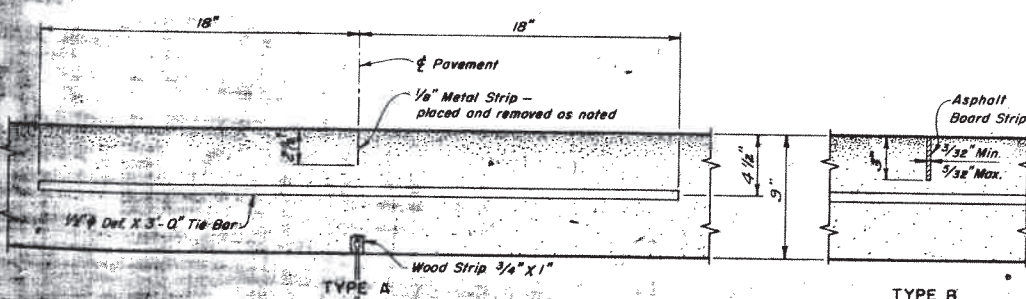
TYPE 1 - STEEL TONGUE AND-GROOVE FORM



TYPE 2 - MACHINE CUT GROOVE

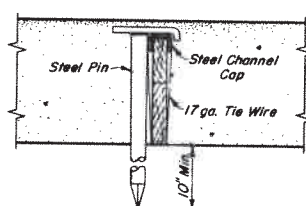
Top groove shall be cut by an approved machine and the vertical faces of the concrete coated with an approved concrete curing compound before closing and final finishing, or a 1/8 inch asphalt impregnated felt strip shall be inserted, continuous between expansion joints, or an asphalt board strip held in an approved continuous metal shield, shall be placed continuously in a groove cut in the concrete by an approved mechanical device operated in advance of the longitudinal float. The strips or groove shall be true to line, vertical, and of the depth shown. Tie bars shall be installed as in Type 1, or accurately placed in position on the screeded concrete by means of an approved template and forced to the proper position with a suitable tool.

ALTERNATE TYPES OF LONGITUDINAL JOINTS



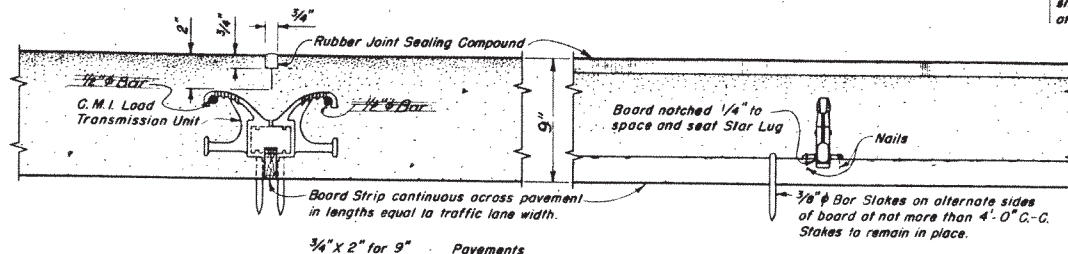
The 3/4 x 1 Wood Strip as shown for Type A shall be continuous for width of pavement, and shall be securely fastened to the subgrade by 40-penny nails driven through drilled holes at not more than 30" centers. Tie Bars shall be placed accurately in position, after screeding, by means of an approved template. The transverse finishing machine shall pass over the joint area after installing the bars. Type A, 1/2 x 2 or 2 1/2 Metal Strip --- Cut top surface of concrete directly over wood strip and insert metal strip after screeding and in advance of longitudinal float. After longitudinal float has passed over, remove steel plate prior to finishing. Type B, Asphalt Board Strip --- Asphalt board strip held in an approved continuous metal shield, shall be placed continuously in a groove cut by an approved mechanical device operating in advance of the longitudinal float.

ALTERNATE TYPES OF TRANSVERSE WARPING JOINTS



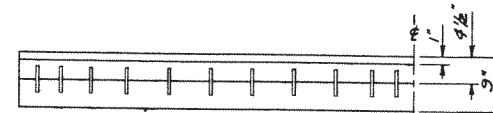
INSTALLING PIN FOR EXPANSION JOINT

Board Joint Filler of specified type shall be secured on subgrade in exact position and line as illustrated or by other approved device. Pins shall be removed after passage of finishing machine, then pavement resurfaced by second pass of finishing machine. After second passage of finishing machine remove concrete to 1" below top of board and nail 3/4 x 7/8 wood strip to top of board filler to form joint seal space. Replace concrete and finish with longitudinal float. The wood strip shall not be removed until immediately prior to pouring joint seal.

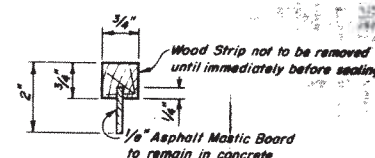


CAST MALLEABLE IRON CANTILEVER TYPE LOAD TRANSMISSION UNIT
D-14 "STAR LUG" as manufactured by Texas Foundries, Lufkin, Texas, or equal Load Transmission Unit

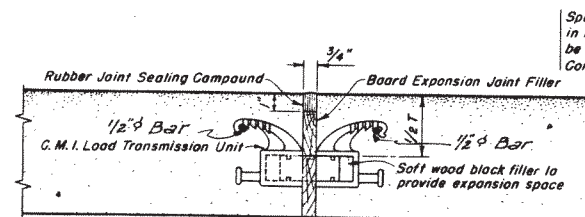
ALTERNATE TYPES OF TRANSVERSE CONTRACTION JOINTS



ELEVATION OF BOARD STRIP FOR EXPANSION JOINT WITH C.M.I. LOAD TRANSMISSION UNITS

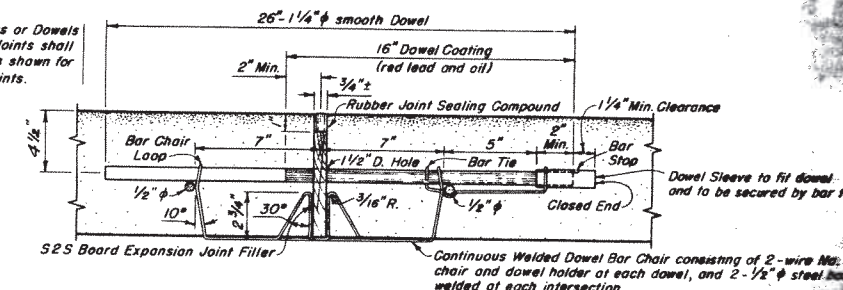


CONTRACTION JOINT SEAL FORM



CAST MALLEABLE IRON CANTILEVER TYPE LOAD TRANSMISSION UNIT
D-13 "STAR LUG" as manufactured by Texas Foundries, Lufkin, Texas, or equal Load Transmission Unit

ALTERNATE TYPES OF TRANSVERSE EXPANSION JOINTS



1/4" ROUND STEEL BAR DOWEL

GENERAL NOTES

Either of the alternate types of Joints shown by these details may be constructed, at the option of the Contractor. If the Contractor desires to use any other alternate device, he shall, prior to its use, secure its approval by the Engineer.

Load Transmission Units or Dowels shall be secured parallel to the pavement surface and center line. All Joints, including all materials, devices, and work required shall be considered subsidiary work and shall be included in the unit price bid for "Concrete Pavement." No direct payment will be made for any material, bar chair, steel, or any other device shown, nor for its installation.

"1" indicates center depth of thickened-edge pavements or depth of uniform pavements.

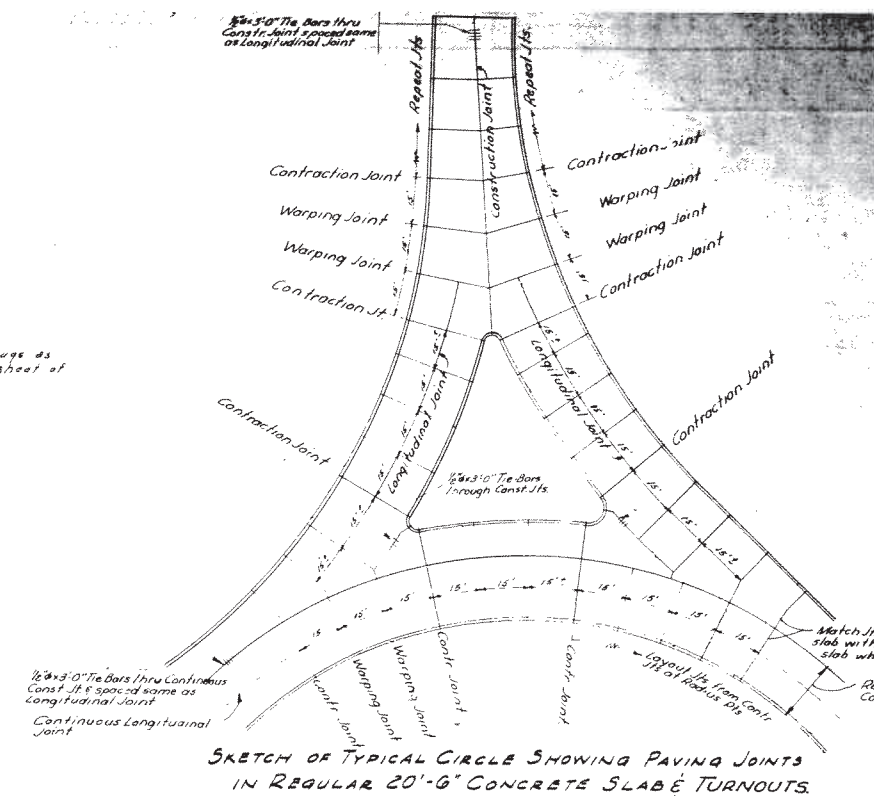
Traffic Stripe not used on this job. The Contractor shall install sufficient stakes, braces, brackets, or other devices as necessary to keep expansion joints true to required lines and grades and shall leave in place such of these devices as necessary to keep joints in this position.

The Contractor shall hold and save the State, its officers, its agents, and its employees harmless to liability of any nature or kind, including costs and expenses, for or on account of any patent or unpatented invention, article or appliance manufactured or used in accordance with the details of these plans.

TEXAS HIGHWAY DEPARTMENT CONCRETE PAVEMENT JOINT DETAILS 9" SECTION

DESIGN NO. 4

APPROVED:	ENGINEER OF ROAD DESIGN	DATE:	STATE:
REVISED:		DATE:	STATE:



SKETCH OF TYPICAL CIRCLE SHOWING PAVING JOINTS
IN REGULAR 20'-6" CONCRETE SLAB TURNOUTS.

REINFORCING STEEL FOR 45' LENGTH SLAB

DESCR. PTION		NO	SIZE	LENGT.	TOTAL WT. (LBS)	WT. SY (LBS)
Cordoba Tie Bars (20'-6" Bars)		30	2" Def	3'-0"	60	
Longitudinal Tie Bars		27	2" Def	3'-0"	54	
Longitudinal Bars		18	2" Def	2'-9"	77	
Dowels Bars		2	2" Def	6'-0"	6	
Warping Joint Tie Bars	20'-6" Pym.	2 @ 22	1/2" Def	3'-0"	88	
	25'-6" Pym.	2 @ 26	1/2" Def	3'-0"	104	
	26'-6" Pym.	2 @ 28	1/2" Def	3'-0"	112	
	27'-0" Pym.	2 @ 28	1/2" Def	3'-0"	112	
	28'-6" Pym.	2 @ 30	1/2" Def	3'-0"	120	
	29'-0" Pym.	2 @ 30	1/2" Def	3'-0"	120	
TOTALS			20'-6" Pavement		395	3854
			25'-6" Pavement		351	2753
			26'-6" Pavement		359	2709
			27'-0" Pavement		359	2659
			28'-6" Pavement		367	2575
			29'-0" Pavement		367	2533

Steel Quantities are for information of Bidders. No direct payment will be made for Reinforcing Steel. Refer to "General Notes". Also for bidders information, reinforcing steel in Concrete Turnouts has been estimated @ 2.87 #/LY.

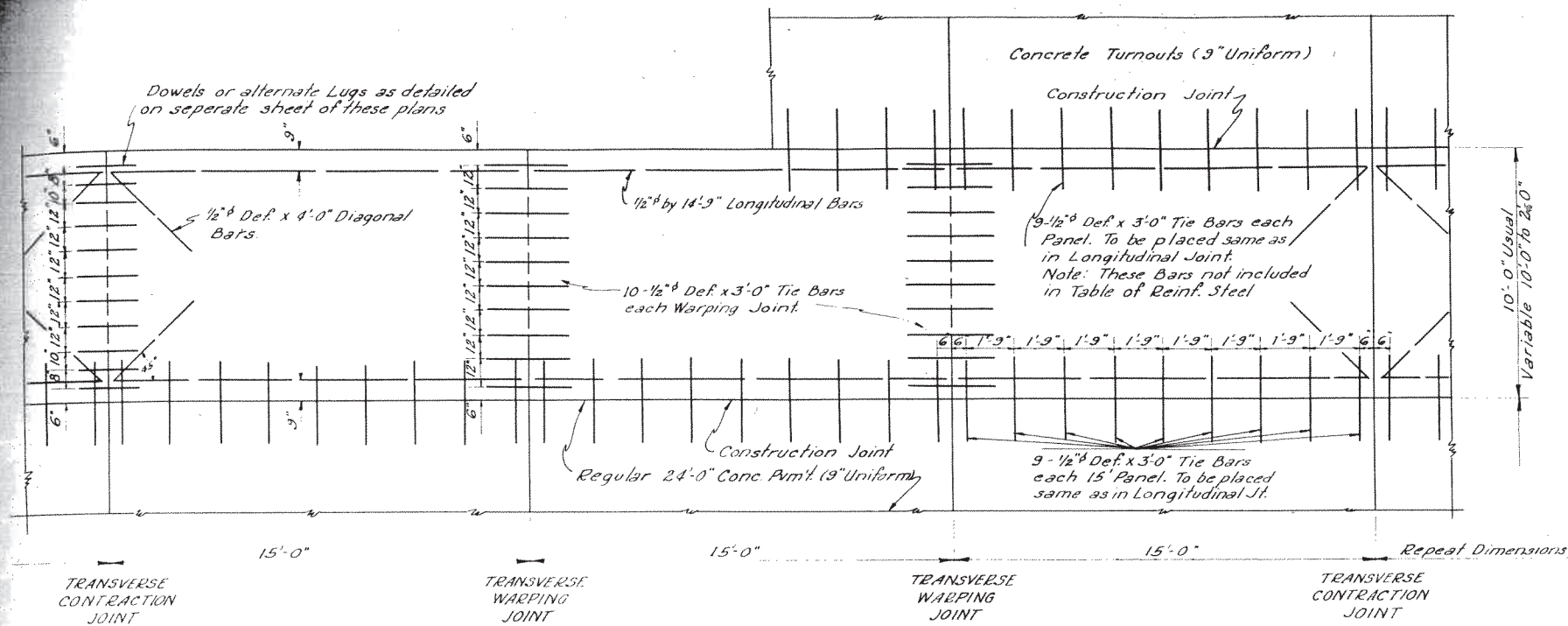
PLAN OF 20'-6"; 25'-6"; 26'-6"; 28'-6"; 29'-0" & 27'-0" CONCRETE
PAVEMENTS (9' UNIFORM)

See Layouts of Traffic Circle & Intersection of Loop 12 and S.H. 183 for limits of the various pavement widths above.
For Sections of the various pavement widths shown above see Typical Cross Sections of Traffic Circle and the intersection of Loop 12 & S.H. 183.
Intraqual Traffic Stripe will not be used on this project.

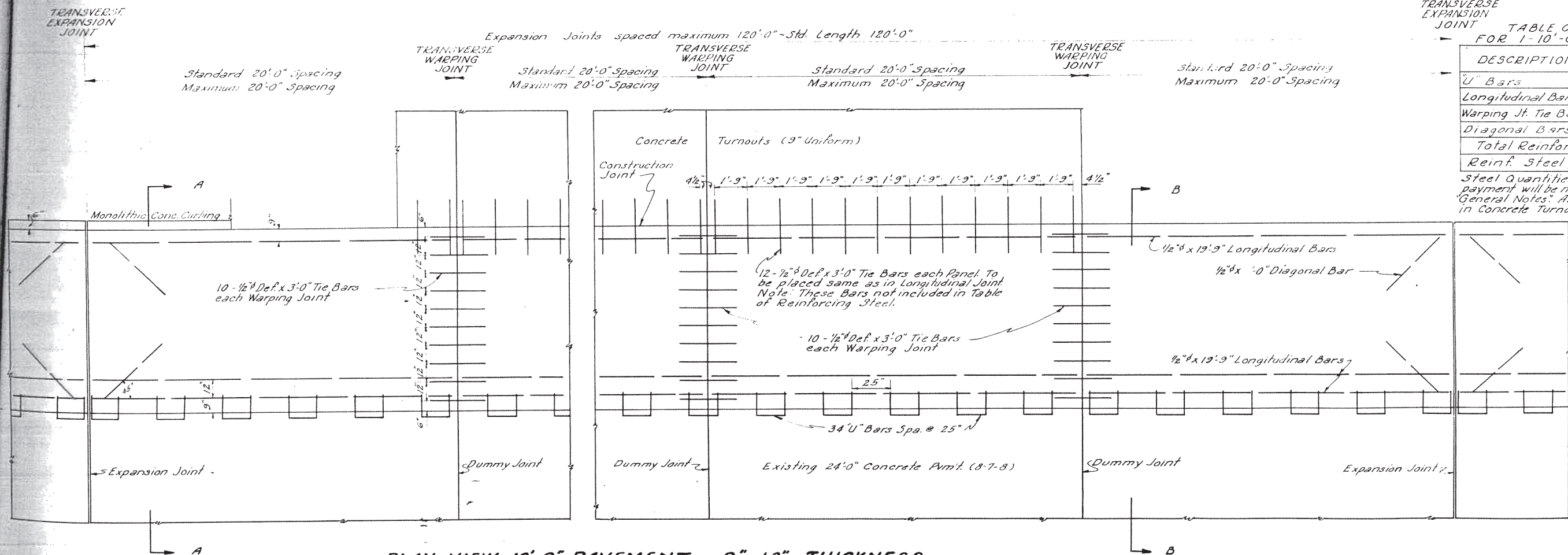
CONCRETE PAVEMENT DETAILS

The "General Notes" of Design No. 46-1-Mod. included in these plans shall apply to this sheet wherever applicable.

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	
6	TEXAS	F-1088 (1) F-634 (14)	
STATE DIST. NO.	COUNTY	Contract No.	Section No.
18	DALLAS	581	2



PLAN VIEW 10'-0" PAVEMENT - 9" UNIFORM THICKNESS

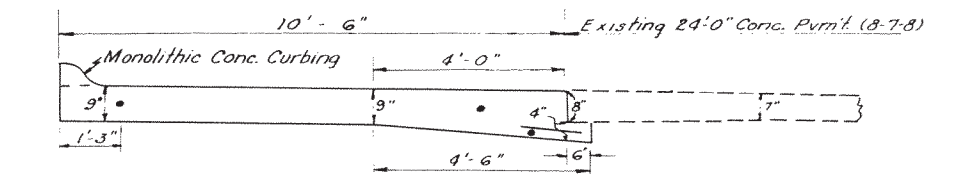


PLAN VIEW 10'-0" PAVEMENT - 9"-12" THICKNESS

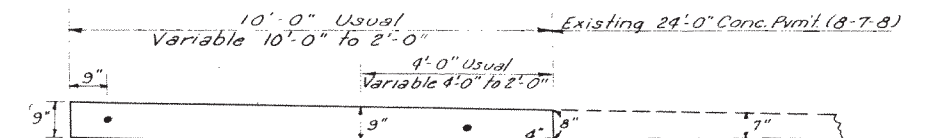
TABLE OF REINFORCING STEEL
FOR 1-10'-0" x 45'-0" CONCRETE SLAB

DESCRIPTION	NUMBER	SIZE	LENGTH	WEIGHT Lbs.
Construction Jt. Tie Bars	27	1/2" Def.	3'-0"	54
Longitudinal Bars	6	1/2" "	14'-9"	59
Warping Joint Tie Bars	20	1/2" "	3'-0"	40
Diagonal Bars	4	1/2" "	6'-0"	16
Total Reinforcing Steel - Lbs.				169
Reinf. Steel per S.Y. Conc. Pmt.				3.380

Steel Quantities are for information of Bidders. No direct payment will be made for Reinforcing Steel. Refer to "General Notes." Also for Bidders information, Reinf. Steel in Concrete Turnouts has been estimated @ 2.87% S.Y.



SECTION A-A



SECTION B-B

TABLE OF REINFORCING STEEL
FOR 1-10'-0" x 120'-0" CONCRETE SL

DESCRIPTION	NUMBER	SIZE	LENGTH
U Bars	34	1/2" "	4'-0"
Longitudinal Bars	18	1/2" "	19'-9"
Warping Jt. Tie Bars	50	1/2" "	3'-0"
Diagonal Bars	4	1/2" "	6'-0"
Total Reinforcing Steel - Lbs.			
Reinf. Steel per S.Y. Conc. Pmt.			

Steel Quantities are for information of Bidders. No direct payment will be made for Reinforcing Steel. Refer to "General Notes." Also for Bidders information, Reinf. Steel in Concrete Turnouts has been estimated @ 2.87% S.Y.

CONCRETE PAVING DETAILS

The "General Notes" of Design No. 46-t-Mod. included in these plans shall apply to this sheet wherever applicable.

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJ. NO.
6	TEXAS	F-1085 (1)
STATE DIST. NO.	COUNTY	SECTION NO.
18	DALLAS	581