FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.
6	TEXAS	UI 56(4)

STATE DIST. NO.	COUNTY	CONTROL SECTION NO.
20	Jefferson	28-13-4

US 90. 28-13-04

STATE OF TEXAS
STATE HIGHWAY DEPARTMENT

PLANS OF COMPLETED STATE HIGHWAY IMPROVEMENT

FEDERAL AID PROJECT
UI 56 (4)

SCALES: PLAN 1 IN. = 20 FT. PROFILE 1 IN. HOR. = 20 FT. 1 IN. VERT. = 5 FT. OTHERS AS NOTED.

NET LENGTH OF PROJECT = 2421.46 FT = 0.458 MI.

JEFFERSON COUNTY

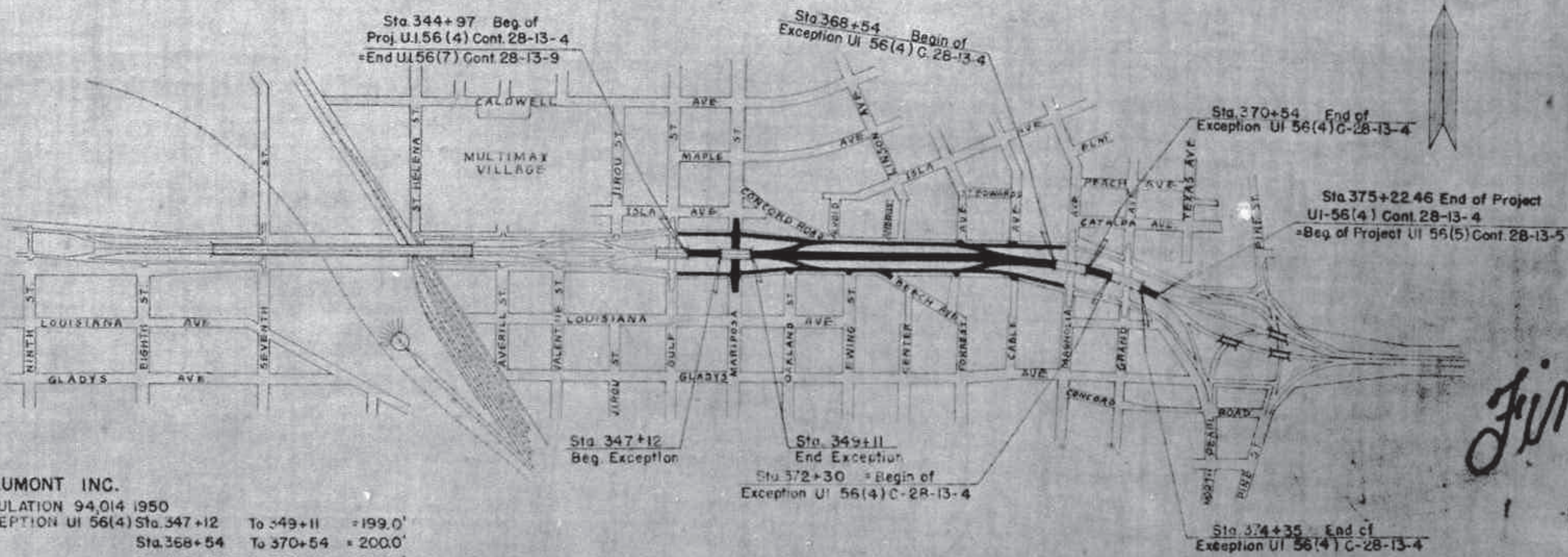
FROM GULF STREET TO A POINT 0.036 MILES
EAST OF GRAND AVE.
GRADING, STRUCTURES & CONCRETE PAVEMENT

INDEX OF SHEETS

APPROVED FIELD CHANGE No.	DESCRIPTION
1	ELIMINATION OF CONCRETE PAVEMENT, CONCRETE PIPE, & INLETS ON MARIPOSA

...tes
The contractor shall provide and errect street ...rricades and Warning Signs in accordance with ...-52(Rev.) at points as directed by the Engineer ...d as shown on Layout Sheet No. 2
Class "E" Barricades shall be provided at all ...ss streets when ordered by the Engineer.
See Special Provisions, Description of Project, ...ope of Contract, Traffic Service and Sequence ... Work.
Structures at Gulf St, Mariposa St, Magnolia and Grand Avenues are future Construction.

N



BEAUMONT INC.
POPULATION 94,014 1950

EXCEPTION UI 56(4)		
Sta. 347+12	To 349+11	= 199.0'
Sta. 368+54	To 370+54	= 200.0'
Sta. 372+30	To 374+35	= 205.0'
	Total	= 604.0'

Final Plans

PROJECT CONSTRUCTED AND FINAL PLANS PREPARED BY:
[signature]
EXPRESSWAY ENGINEER

RECOMMENDED FOR APPROVAL
[signature] 9-14 1953
CITY ENGINEER OF BEAUMONT, TEXAS

APPROVED
Otto 8 [signature] 9-14 1953
MAYOR, CITY OF BEAUMONT, TEXAS

CONVENTIONAL SIGNS
STATE OR NATIONAL LINE
CITY OR VILLAGE LINE
COUNTY LINE
BASE OR SURVEY LINE
RIGHT OF WAY LINE
RIGHT OF WAY MARKERS
FENCE LINE
RAILROAD
TRAVELLED WAY
CULVERT OR BRIDGE
POWER LINE
TELEGRAPH OR TELEPHONE

SPECIFICATIONS ADOPTED BY THE STATE HIGHWAY DEPARTMENT OF TEXAS, JANUARY 2, 1951 AND APPROVED BY THE U. S. BUREAU OF PUBLIC ROADS JULY 25, 1951 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR FEDERAL AID PROJECTS APPROVED AUGUST 5, 1948.

DELIVERY POINT OF MATERIAL

DELIVERY PT.	RAILROAD	DISTANCE	CAPACITY
Beaumont	T. & N.O.	1.0	Ample
Beaumont	K.C.S.	1.0	Ample
Beaumont	G.C. & S.F.	1.0	Ample
Beaumont	M.P.	1.0	Ample

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

LAYOUT SCALE: 1 IN. = 500 FT.

STATE HIGHWAY DEPARTMENT

CORRECT: 9-15 1953
[signature]
SUPERVISING URBAN ENGINEER

RECOMMENDED FOR APPROVAL: 9-18 1953
W. E. Simmons
DISTRICT ENGINEER

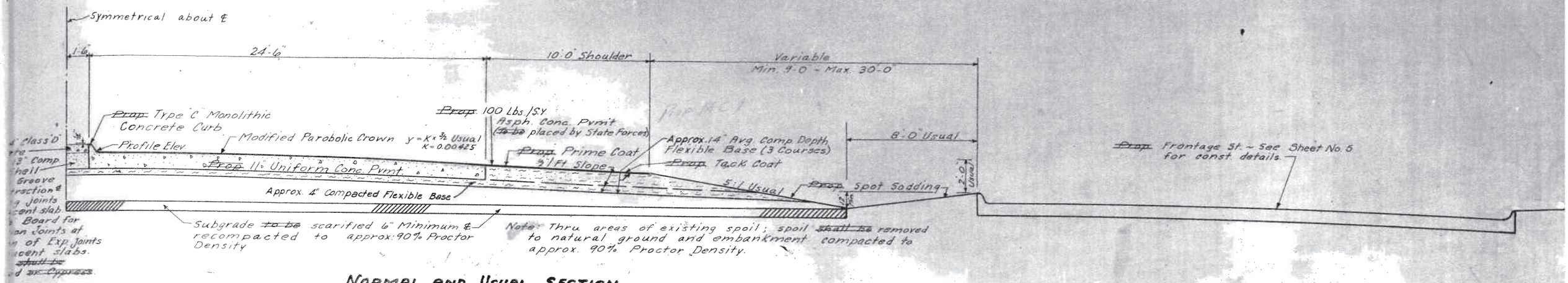
RECOMMENDED FOR APPROVAL:
[redacted]

APPROVED:
[redacted]
ENGINEER ROAD DESIGN

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

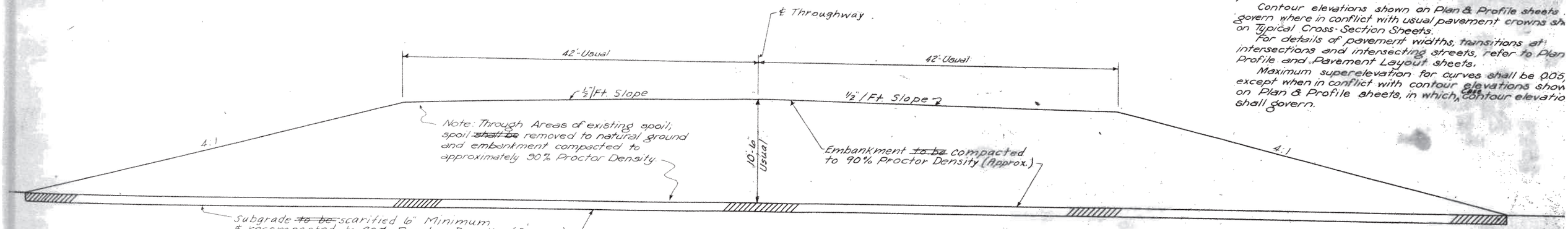
[redacted]

APPROVED:
[redacted]
DISTRICT ENGINEER



NORMAL AND USUAL SECTION
THROUGHWAY

~~To be~~ used approximately 15 Stations



FILL SECTION FOR FUTURE THROUGHWAY

~~To be~~ used approximately 11 Stations

GENERAL NOTES

In those instances where fixed features require, the governing slopes indicated hereon may be varie between the limits and to the extent determined by the Engineer.

The 6" depth of sub-grade to be scarified and recompacted to approx. 90% Proctor Density will not be measured for payment. The cost of scarifying and such manipulation (not including "Sprinkling" and "Rolli as is necessary to prepare the material for compact will not be paid for directly but will be considered subsidiary to bid item "Common Road Excavation."

For more detailed limits of pavements, curbs, pave shoulders, sodding, etc. refer to Plan & Profile sheets in the plans.

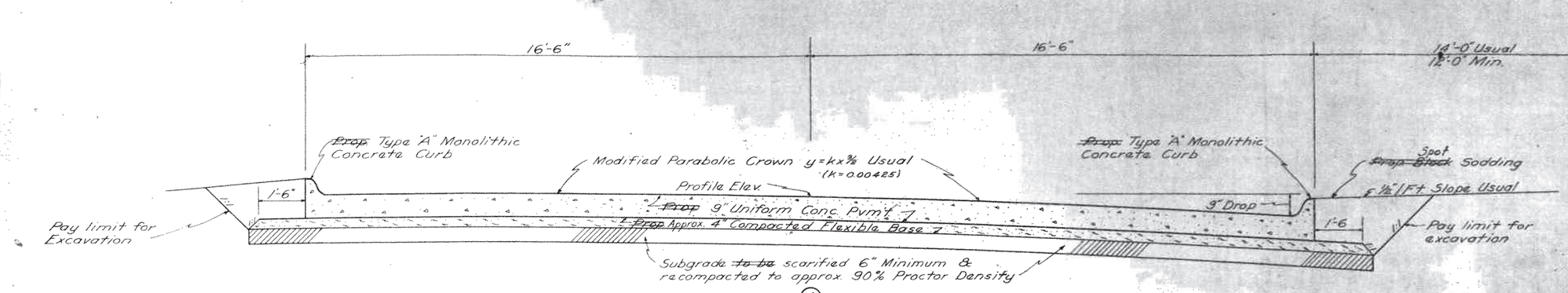
Contour elevations shown on Plan & Profile sheets govern where in conflict with usual pavement crowns sh on Typical Cross-Section Sheets.

For details of pavement widths, transitions at intersections and intersecting streets, refer to Plan Profile and Pavement Layout sheets.

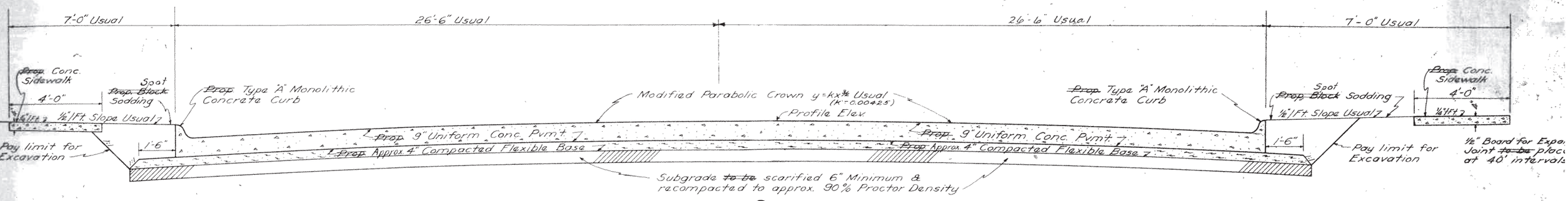
Maximum superelevation for curves shall be 0.06, except when in conflict with contour elevations show on Plan & Profile sheets, in which case contour elevatio shall govern.

TYPICAL CROSS SECTIONS

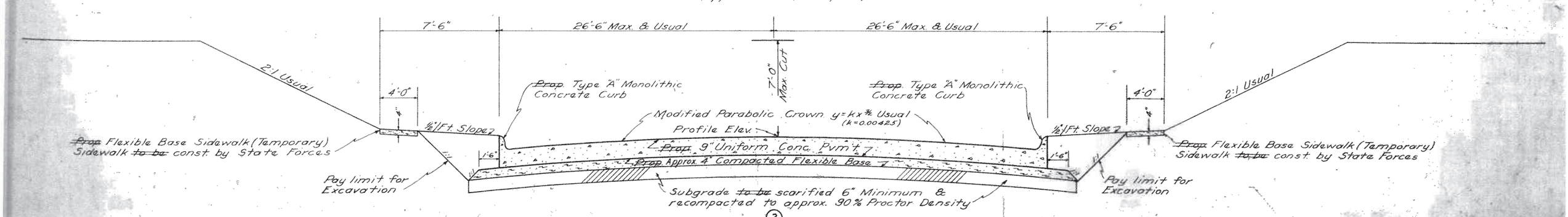
FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	
6	TEXAS	U.I. 36(4)	
STATE DIST. NO.	COUNTY	CONT.	SECT.	JOB	HIGH



① **NORMAL AND USUAL SECTION**
NORTH AND SOUTH FRONTAGE STREETS
~~To be~~ used approximately 49 Stations



② **NORMAL SECTIONS**
MARIPOSA STREET
~~To be~~ used approximately 4 Stations
(Approach to Underpass)

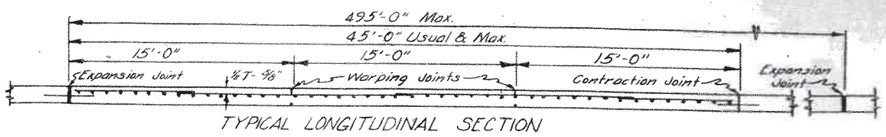


③ **CUT SECTION**
MARIPOSA STREET
~~To be~~ used approximately 2 Stations
(Thru Underpass)

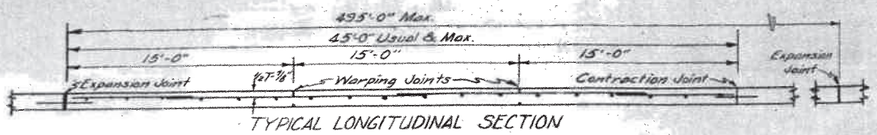
TYPICAL CROSS-SECTIONS
NORTH & SOUTH FRONTAGE STS.- MARIPOSA St.

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.
6	TEXAS	UI-56(4)

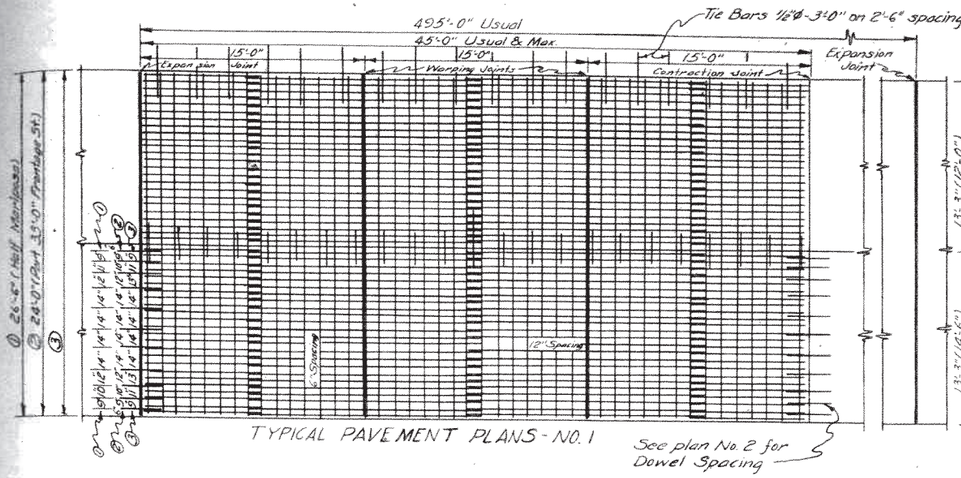
STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.
20	Jefferson	28	13	4



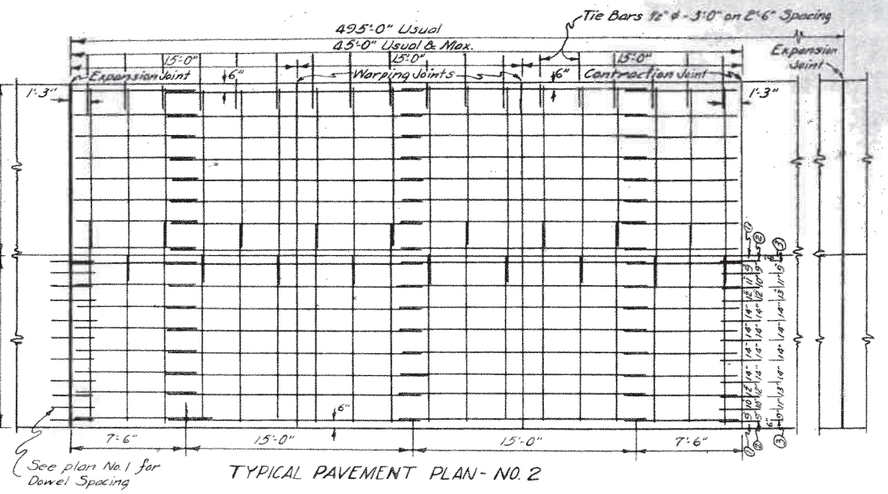
TYPICAL LONGITUDINAL SECTION



TYPICAL LONGITUDINAL SECTION

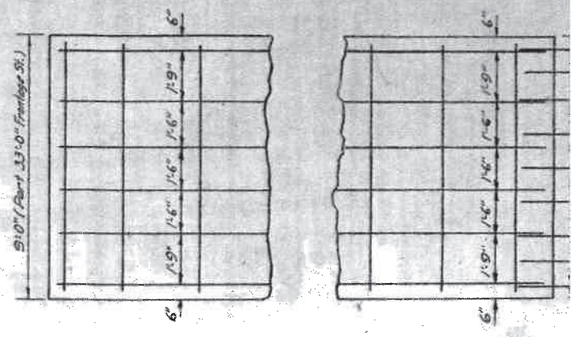


TYPICAL PAVEMENT PLANS - NO. 1



TYPICAL PAVEMENT PLAN - NO. 2

NOTE:
Location of Expansion, Contraction, and Warping Joints shall conform to adjacent 24' slab.



DETAIL 9'-0" SLAB (PART 33'-0" FRONTAGE ST.)

REINFORCING STEEL PLAN NO. 2

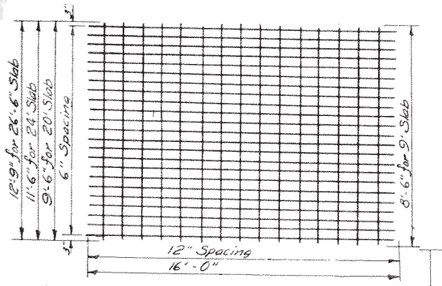
9'-0" Width

Bar	At Exp. Joint				At Cont. Joint				Intermediate**			
	No.	Size	Lgth.	Wt. - lbs.	No.	Size	Lgth.	Wt. - lbs.	No.	Size	Lgth.	Wt. - lbs.
Long.	6	½"ø	8'-1"	32.398	6	½"ø	8'-1"	32.398	6	½"ø	16'-8"	66.800
Trans.	3	½"ø	8'-6"	17.034	3	½"ø	8'-6"	17.034	6	½"ø	8'-6"	34.068

** For 45' section multiply above quantities by 2

REINFORCING STEEL PLAN NO. 3

9'-0" Width X 45'
Long. Bars: 12 @ ½" ø Def. x 23'-0" = 184.368 lbs.
Trans. Bars: 19 @ ½" ø Def. x 8'-6" = 107.882



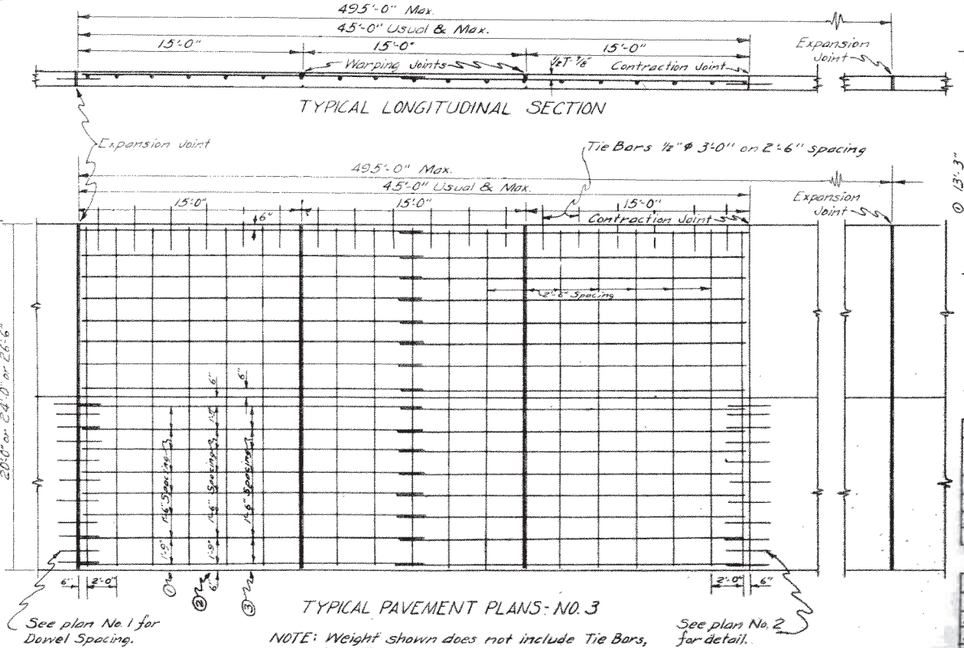
WELDED WIRE FABRIC - MAT NO. 1

Welded Wire Fabric Reinforcement.
All Welded Wire fabric.

Longitudinal No. 1 @ 6" C.C.
Transverse No. 7 @ 12" C.C.
Weight: 56 lbs. per 100 Sq. Ft.
NOTE: Weight does not include Tie Bars, Load Transmission Units or Dowel Bars.
Welded wire mats on either side of Expansion and Contraction Joints can be standard mat cut in half transversely.

REINFORCING STEEL PLAN NO. 3

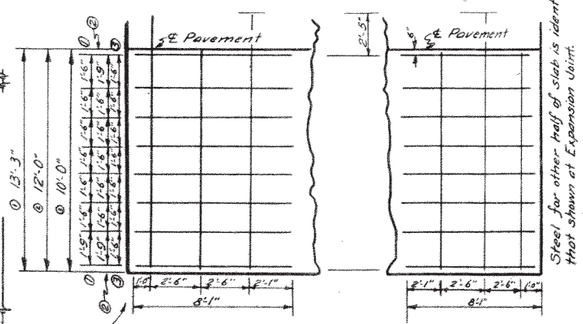
① 26'-6" Width x 45'
Long. Bars = 36 @ ½" ø Def. x 23'-0" = 553.104 lbs.
Trans. Bars = 19 @ ½" ø Def. x 26'-0" = 329.992 lbs.
② 24'-0" Width x 45'
Long. Bars = 32 @ ½" ø Def. x 23'-0" = 491.648 lbs.
Trans. Bars = 19 @ ½" ø Def. x 23'-6" = 298.262 lbs.
③ 20'-0" Width x 45'
Long. Bars = 28 @ ½" ø Def. x 23'-0" = 430.192 lbs.
Trans. Bars = 19 @ ½" ø Def. x 19'-6" = 247.494 lbs.



TYPICAL PAVEMENT PLANS - NO. 3

NOTE: Weight shown does not include Tie Bars, Load Transmission Units or Dowel Bars.

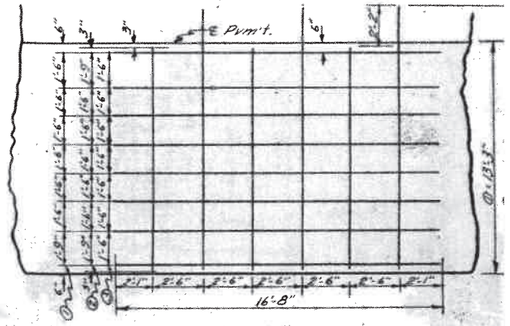
GENERAL NOTES:
Either of the three (3) alternate types of reinforcing shown may be constructed at the option of the Contractor. Pavements of varying width shall contain reinforcing placed to conform with the spacing shown on this sheet.



AT EXPANSION JOINT

Steel for other half of slab is identical to that shown at "Contraction Joint."

AT CONTRACTION JOINT



INTERMEDIATE

REINFORCING STEEL PLAN NO. 2

② 26'-6" Width*

Bar	At Exp. Joint				At Cont. Joint				Intermediate**			
	No.	Size	Lgth.	Wt. - lbs.	No.	Size	Lgth.	Wt. - lbs.	No.	Size	Lgth.	Wt. - lbs.
Long.	18	½"ø	8'-1"	97.193	18	½"ø	8'-1"	97.193	18	½"ø	16'-8"	200.401
Trans.	3	½"ø	12'-9"	25.551	3	½"ø	12'-9"	25.551	6	½"ø	12'-9"	51.102
Trans.	3	½"ø	14'-11"	29.893	3	½"ø	14'-11"	29.893	6	½"ø	14'-11"	59.786

② 24'-0" Width*

												**
Long.	16	½"ø	8'-1"	86.394	16	½"ø	8'-1"	86.394	16	½"ø	16'-8"	178.133
Trans.	3	½"ø	11'-6"	23.046	3	½"ø	11'-6"	23.046	6	½"ø	11'-6"	46.092
Trans.	3	½"ø	13'-8"	27.388	3	½"ø	13'-8"	27.388	6	½"ø	13'-8"	54.776

② 20'-0" Width

Long.	14	½"ø	8'-1"	75.595	14	½"ø	8'-1"	75.595	14	½"ø	16'-8"	165.867
Trans.	3	½"ø	9'-6"	19.038	3	½"ø	9'-6"	19.038	6	½"ø	9'-6"	38.076
Trans.	3	½"ø	11'-8"	23.380	3	½"ø	11'-8"	23.380	6	½"ø	11'-8"	46.760

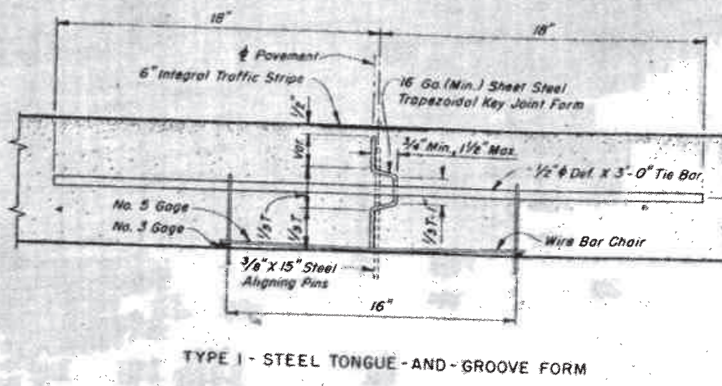
* NOTE: For 53'-0" Pvmt and 33'-0" Pvmt. slabs may be joined either by extending transverse bars 18" into adjoining slab or by the use of ½" ø def. x 3'0" Tie Bars.
** For 45' section multiply intermediate quantities by 2.

MAT DETAIL OF PAVEMENT PLAN NO. 2

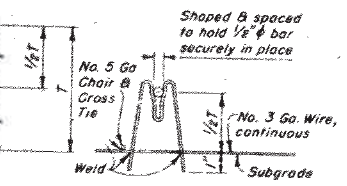
NOTE: Weight shown does not include Tie Bars, Load Transmission Units or Dowel Bars.

CONCRETE PAVEMENT DETAILS SHOWING ALTERNATE METHODS OF REINFORCING 9" & 11" UNIFORM SECTIONS

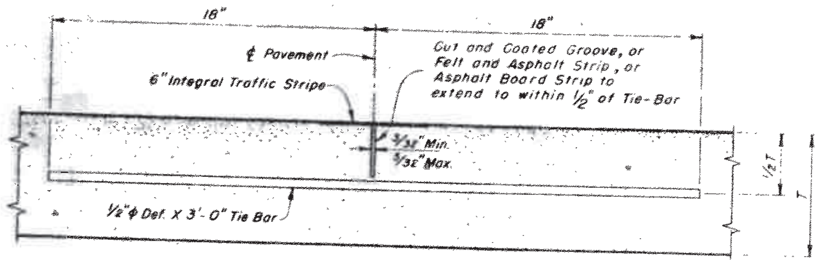
FED. AID PROJ. NO.	STATE	FEDERAL PROJECT NO.
6	TEXAS	111.56 (4)
STATE SHEET NO.	COUNTY	CONT.	SECT.	JOB
20	Jefferson	28	13	4



TYPE 1 - STEEL TONGUE-AND-GROOVE FORM



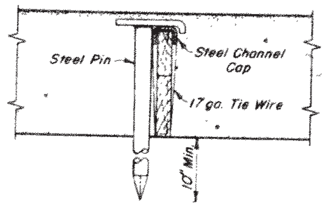
END VIEW OF BAR CHAIR



TYPE 2 - MACHINE CUT GROOVE

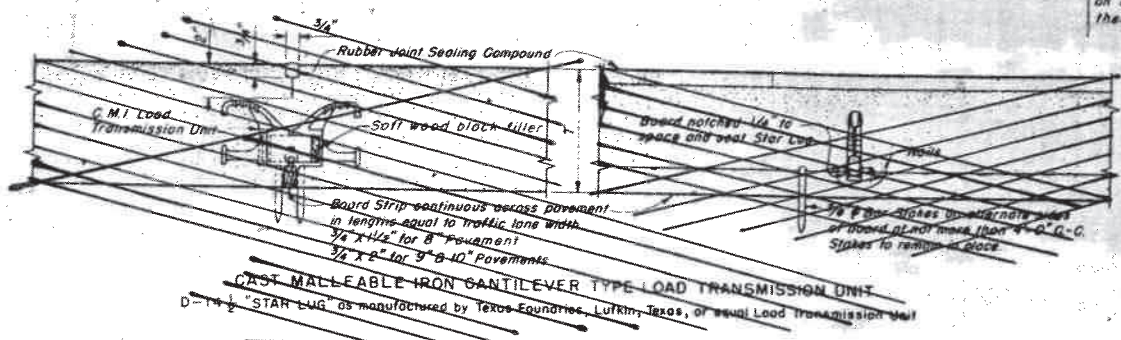
Top groove shall be cut by an approved machine and the vertical faces of the concrete coated with an approved concrete curing compound before closing and final finishing, or a 1/16" asphalt impregnated felt strip shall be inserted, continuous between expansion joints, or an asphalt board strip held in 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

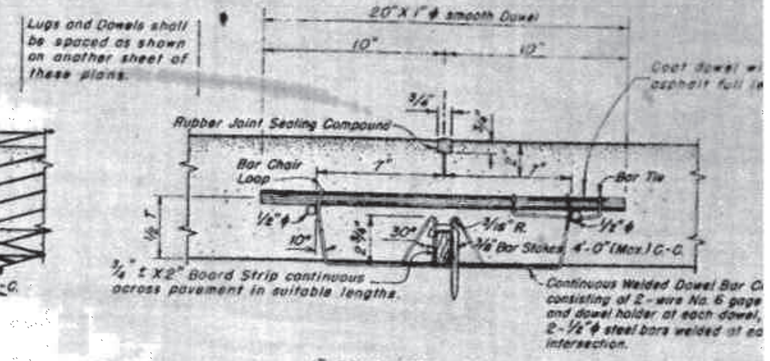


INSTALLING PIN
FOR EXPANSION JOINT

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 top strip shall not be removed until immediately prior to pouring joint seal.

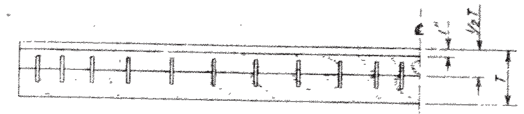


CAST MALLEABLE IRON CANTILEVER TYPE LOAD TRANSMISSION UNIT
D-14 1/2 "STAR LUG" as manufactured by Texas Foundries, Lufkin, Texas, or equal Load Transmission Unit

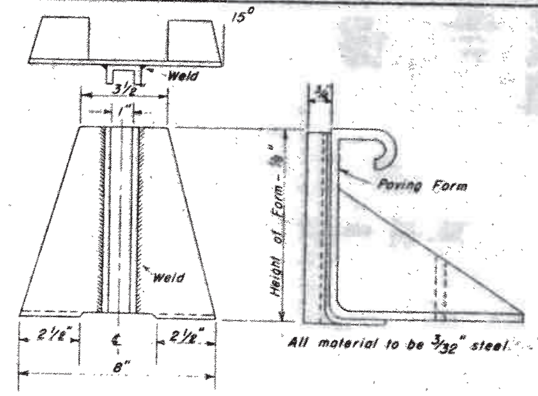


1" ROUND STEEL BAR DOWEL

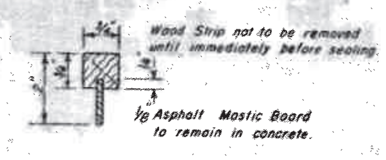
~~ALTERNATE TYPES OF~~ TRANSVERSE CONTRACTION JOINTS



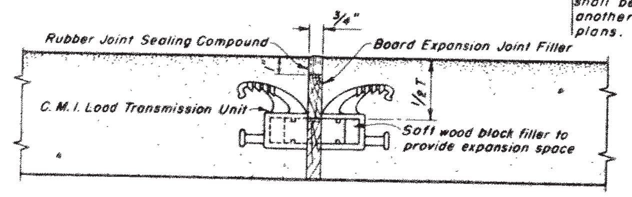
ELEVATION OF
BOARD STRIP FOR EXPANSION JOINT
WITH C.M.I. LOAD TRANSMISSION UNITS



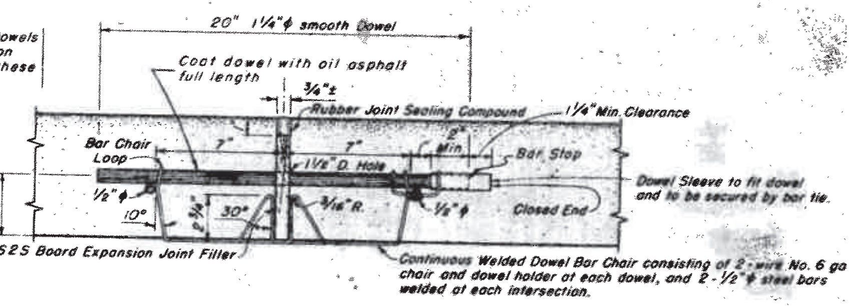
ACCEPTABLE CONTRACTION AND EXPANSION JOINT HOLDER
(Other types may be used if approved by engineer.)



CONTRACTION JOINT SEAL FORM

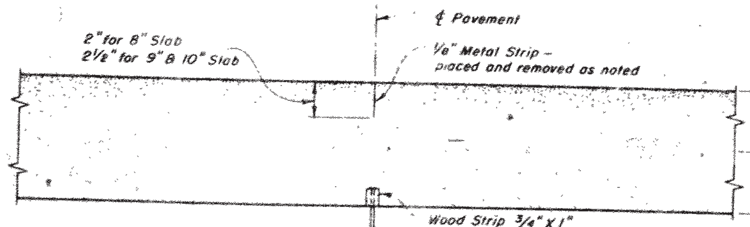


CAST MALLEABLE IRON
CANTILEVER TYPE LOAD TRANSMISSION UNIT
D-13 "STAR LUG" as manufactured by Texas Foundries, Lufkin, Texas or equal Load Transmission Unit

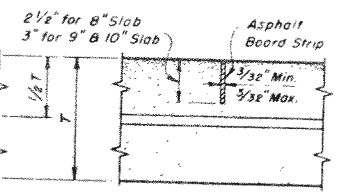


1 1/4" ROUND STEEL BAR DOWEL

ALTERNATE TYPES OF TRANSVERSE EXPANSION JOINTS



TYPE A



TYPE B

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 wire nails driven through drilled holes on 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, 1/8" 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

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.

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

For thickened edge pavements the bottom edges of board expansion joint fillers shall be made to conform with the subgrade by the addition of wedges of the same material and thickness.

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

8"-9"-10" SLABS

C.P.J. - 52 - 2 MOD

REVISED: FEB. 7, 1952

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.		
6	TEXAS	UI 56(4)		
STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.
20	Jeffe[illegible]	20	12	[illegible]