US90, 28-13-14

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT
6	TEXAS	UI 56 (12)
STATE DIST. NO.	**COUNTY**	**STATE CONTROL**
20	Jefferson	28-13

65

DESIGN SPEED 50 M.P.H.

STATE OF TEXAS
STATE HIGHWAY DEPARTMENT

PLANS OF COMPLETED STATE HIGHWAY IMPROVEMENT

FEDERAL AID PROJECT.
UI 56 (12)

SCALES: PLAN: 1 IN. = 100 FT. PROFILE: 1 IN. HOR. = 20 FT., 1 IN. VERT. = 5 FT. OTHERS AS NOTED.

NET LENGTH OF PROJECT = 13,062.55' = 2.473 MI.

2.473

Final Plans

JEFFERSON COUNTY
FROM EIGHTH STREET TO COLLEGE STREET
GRADING, STRUCTURES, & CONCRETE PAVEMENT

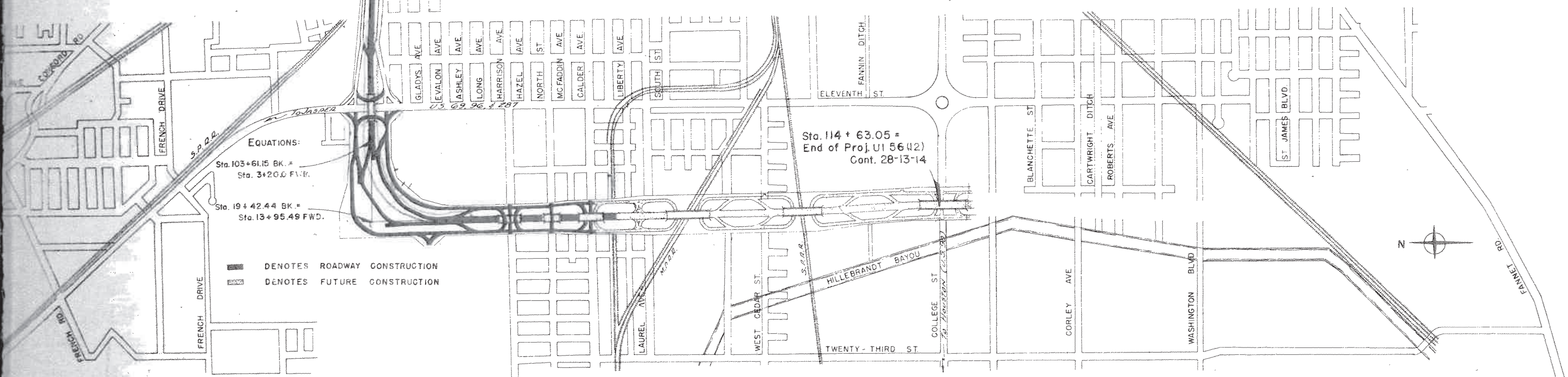
BEAUMONT, TEX.

INDEX OF SHEETS

EXTRA WORK ORDER NO. 1
Reconstruction of [illegible]
EXTRA WORK ORDER NO. 2
[illegible]

FIELD CHANGE NO. 1
Move ramp [illegible], revise 24' of 2-7'x7' [illegible] to [illegible] and extend [illegible] St. [illegible]
FIELD CHANGE NO. 2
Two additional Inlets @ Sta. 91+94 Rt. & Lt. and mino[illegible]
FIELD CHANGE NO. 3
Additional intersection, Turn-Out and one Inlet.
FIELD CHANGE NO. 4
Reduce median curb height from 6" & 7" to 5 [illegible]
FIELD CHANGE NO. 5
Placing 3" non-metallic conduit for signals
FIELD CHANGE NO. 6
Reduce exit-ramp [illegible] and [illegible]
FIELD CHANGE NO. 7
Construction of Emb. for future overpasses.

Sta. 80+92.60 Beg. of Proj. UI 56 (12)
Cont. 28-13-14 =
Sta. 307+00 UI 56 (7)



NOTE

The contractor shall provide and e[...] Barricades and Warning Signs in accord[...] with BW-54 at points as directed by th[...] Engineer and as shown on Layout Sheet N[...]

Class "E" Barricades shall be provid[...] at all cross streets when ordered by th[...] Engineer.

See Special Provisions, Description [...] Project, Scope of Contract, Traffic Ser[...] and Sequence of Work.

Completed 12/5[...]

BEAUMONT INCORPORATED
POPULATION 94,014 1950

Exceptions:
Sta. 99+40.40 to Sta. 101+41.90 = -201.50
Sta. 36+34.99 to Sta. 38+66.49 = -231.50
Sta. 43+55.04 to Sta. 45+86.54 = -231.50
Sta. 50+80.26 to Sta. 53+11.76 = -231.50
Total = -896.00

Equations:
Sta. 103+61.15 Back = Sta. 3+20 Fwd. +10,041.15'
Sta. 19+42.44 Back = Sta. 13+95.49 Fwd. + 546.95'
Total = +10,588.10'

DELIVERY POINT FOR MATERIALS
Beaumont, Texas - All Railroads

RECOMMENDED FOR APPROVAL 11-8
J. Martin
City Engineer of Beaumont, T[...]

APPROVED 11-9
Elmo R. Beard
Mayor, City of Beaumont

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 JANUARY 13, 1955"

LAYOUT SCALE: 1 IN. = 1000 FT.

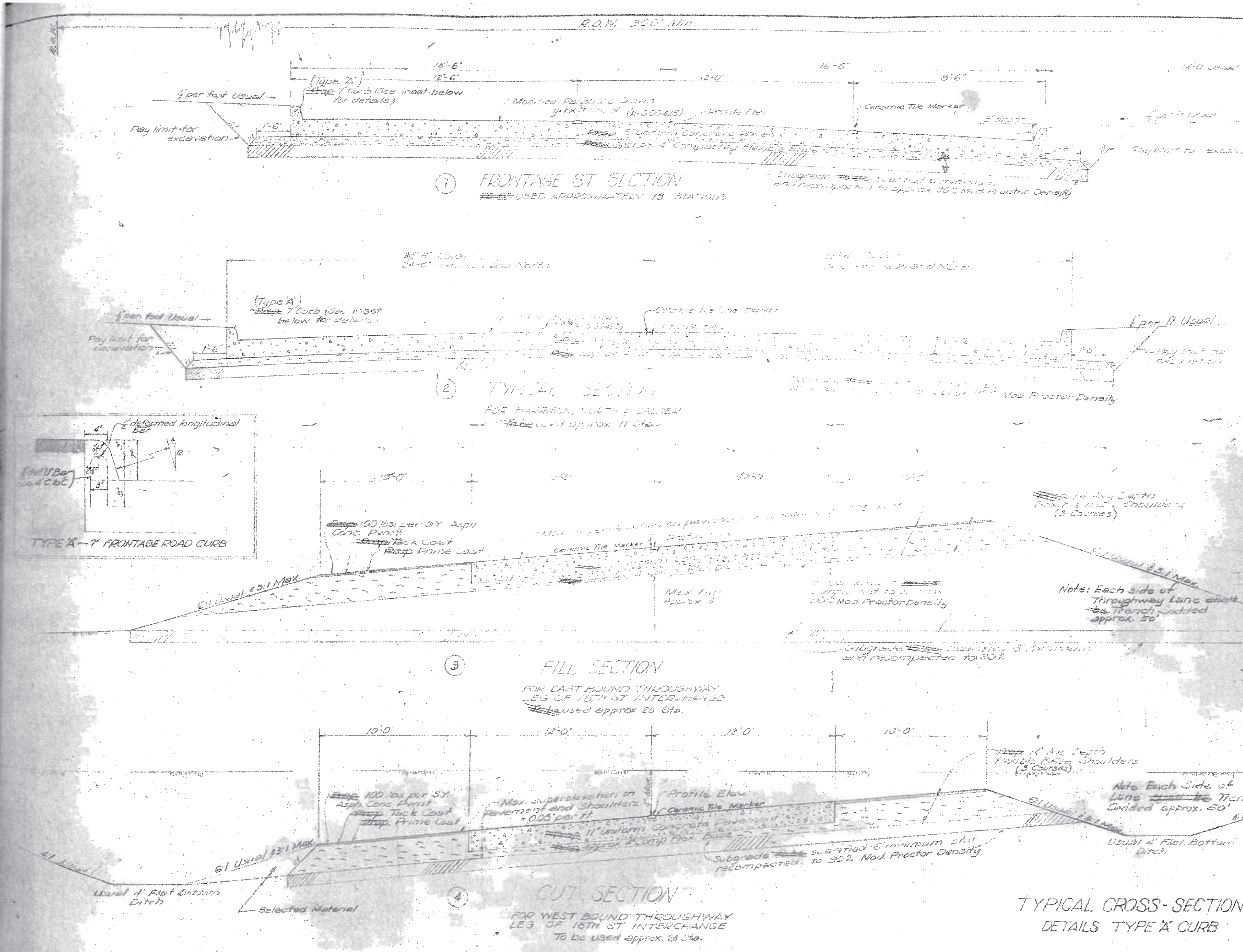
STATE HIGHWAY DEPARTMENT

CORRECT: 11-7 1955
[signature]
EXPRESSWAY ENGINEER

RECOMMENDED FOR APPROVAL 11-14 1955
W. E. Simmons
DISTRICT ENGINEER

APPROVED:
ENGINEER, ROAD DESIGN

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED:
DISTRICT ENGINEER



GENERAL NOTES

In those instances where fixed ... require, the governing slopes indicate... may be varied to the limit determined ... Engineer.

The 6" depth of subgrade to be scar... and recompacted to approximately 90% ... Density will not be measured for paymen... cost of scarifying and such manipulati... including "Rolling" and "Sprinkling" as is ... to prepare the material for compactio... be paid for directly, but will be consi... subsidiary to bid items "Rolling" and ...

For more detailed limits of paveme... paved shoulders, sodding, etc. refe... Plan & Profile sheets in these plans.

Contour elevations shown on Pla... sheets will govern where in conflict w... pavement crowns shown on Typical S...

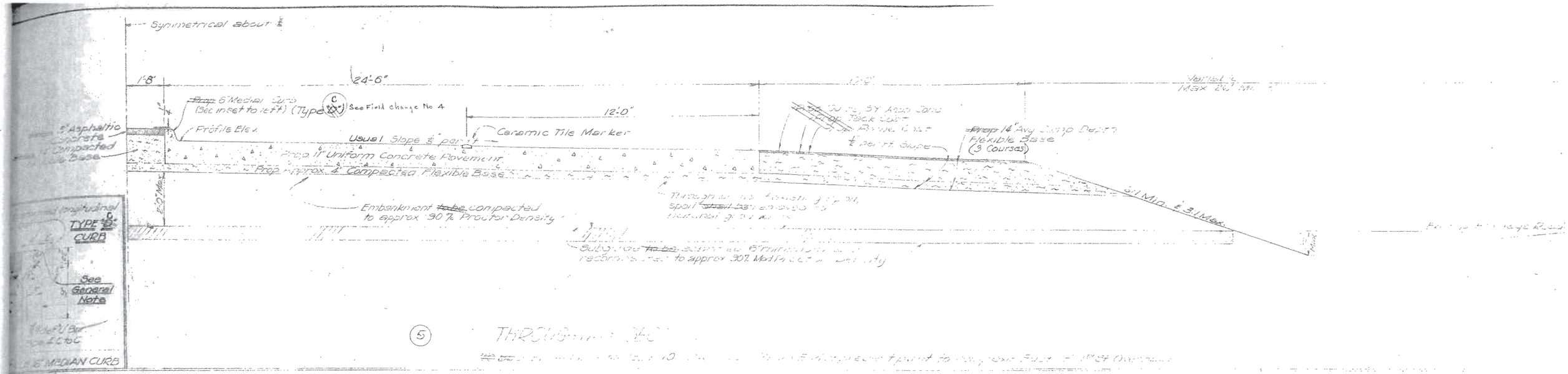
For details of pavement widt... at intersections and intersecting s... to Plan & Profile and Pavement Layout ...

All curb shall be paid for as Monolith... The steel shown in the curb details are for ... alternate method only. If the Contractor ... he may place any or all monolithic curb ... curing time on the Concrete Pavement is ... If this alternate method of placing cur... the Contractor shall furnish and install ... entire expense, U Bars and longitudina... as shown in each curb detail. The "U" Bars ... placed into Concrete Pavement after ... pass of finishing machine in a nea... and grade. ½" Preformed Expansion ... Filler Material shall be installed in C... same location as Contraction and ... sion Joints in Concrete Pavemen... for Curb Joints shall be include... unit bid price for "Monoli...

Backfilling of excavated areas sha... be paid for directly, but shall be c... sidered subsidiary to bid item "Co... Road Excavation."

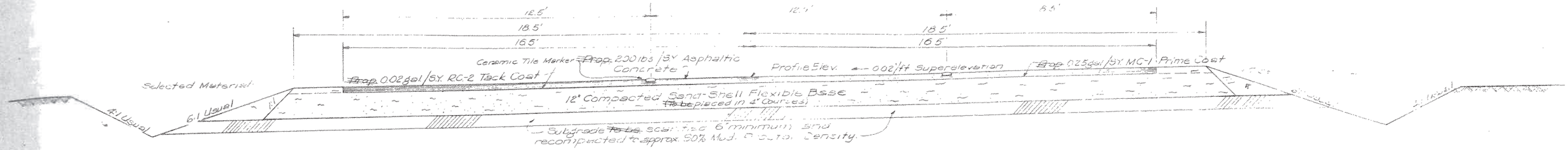
TYPICAL CROSS-SECTIONS
DETAILS TYPE "A" CURB

FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	
6	TEXAS	U 156 (12)	
STATE DIST. NO.	COUNTY	CONT.	SECT.
20	Jefferson	28	13

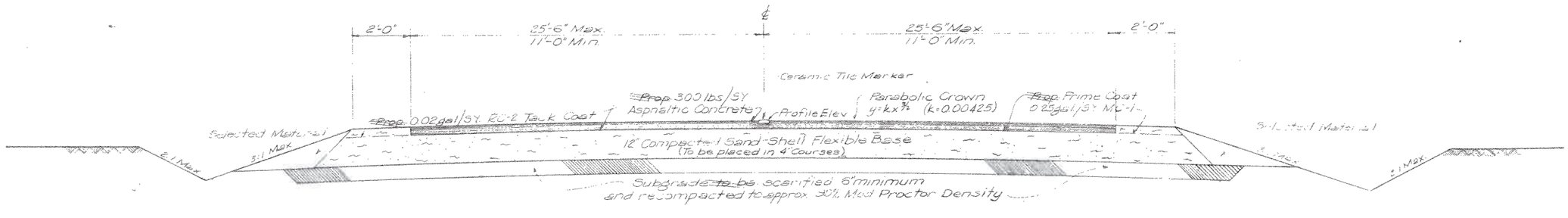


TYPICAL CROSS-SECTIONS
DETAILS TYPE "B", "C" & "D" CURBS

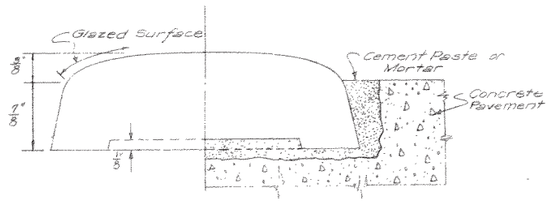
FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.
6	TEXAS	
STATE DIST. NO.	COUNTY	CONT. / SECT. / JOB



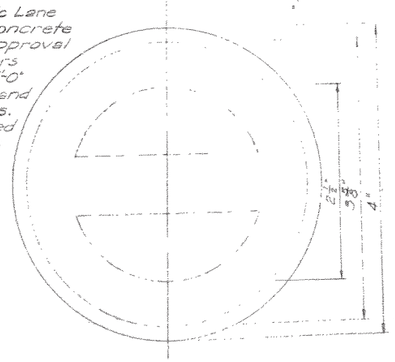
(8) TYPICAL FLEXIBLE BASE SECTION
RIGHT FRONTAGE ROAD
~~To be~~ used approximately 11.5 Stations



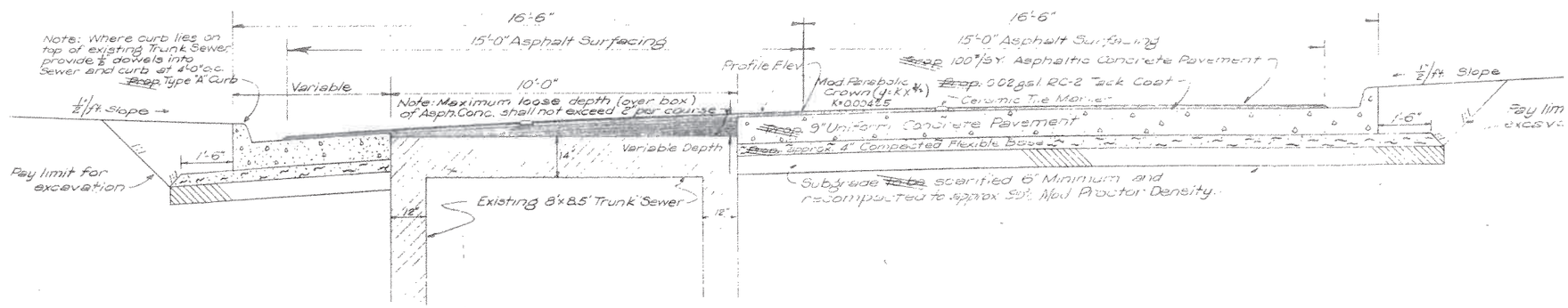
(9) TYPICAL FLEXIBLE BASE SECTION
CALDER AVENUE
~~To be~~ used approximately 2.25 Stations



...s: Section of Traffic Lane ...ker embedded in concrete ...y be varied upon approval ...the Engineer. Markers ... to be spaced at 15'-0" ...rvals on Tangents and ... intervals on Curves. ...kers shall be spaced ...provide 12'-0" Traffic ...ne intervals.



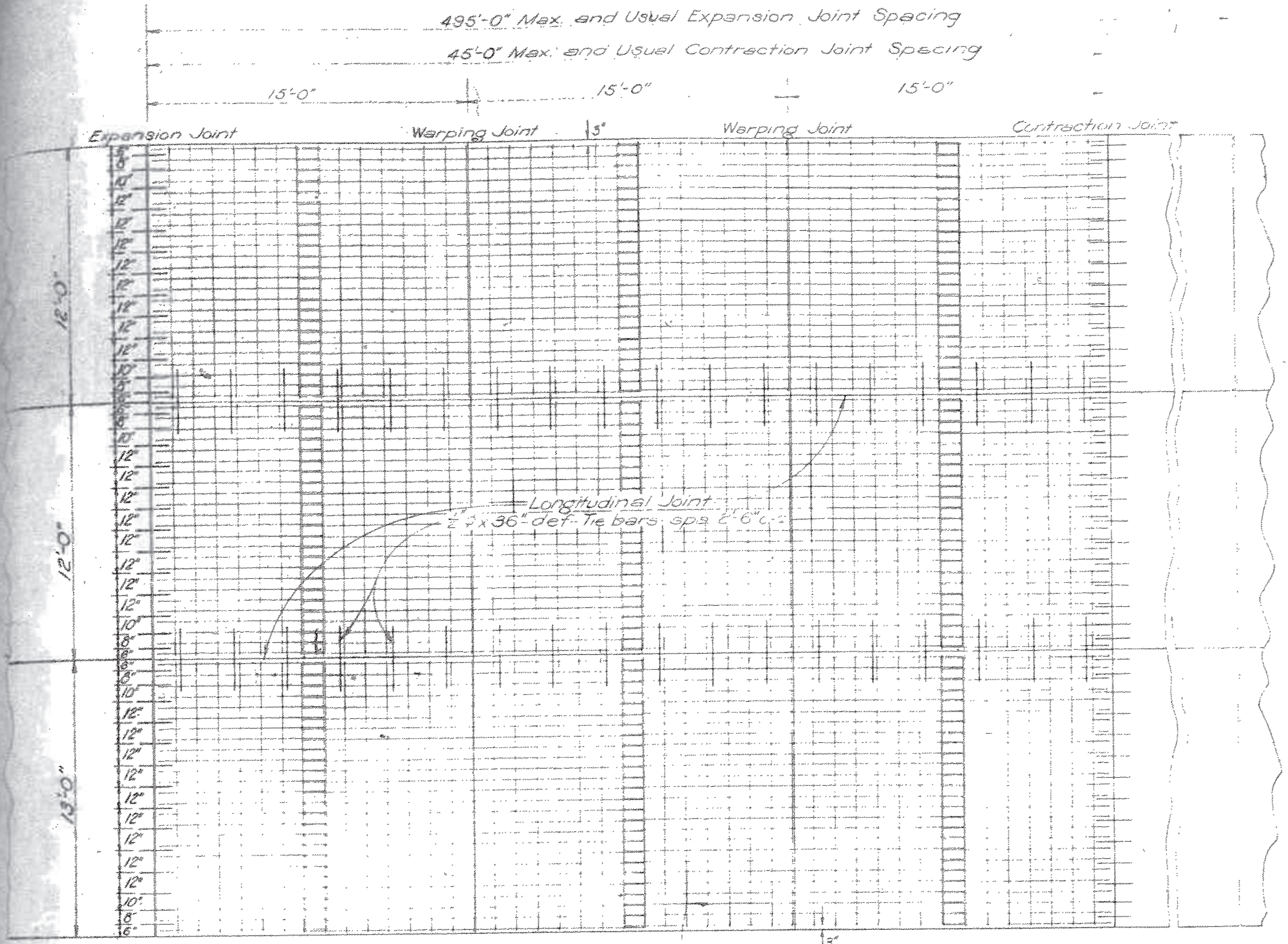
DOME SHAPED VITREOUS CERAMIC
TRAFFIC LANE MARKERS



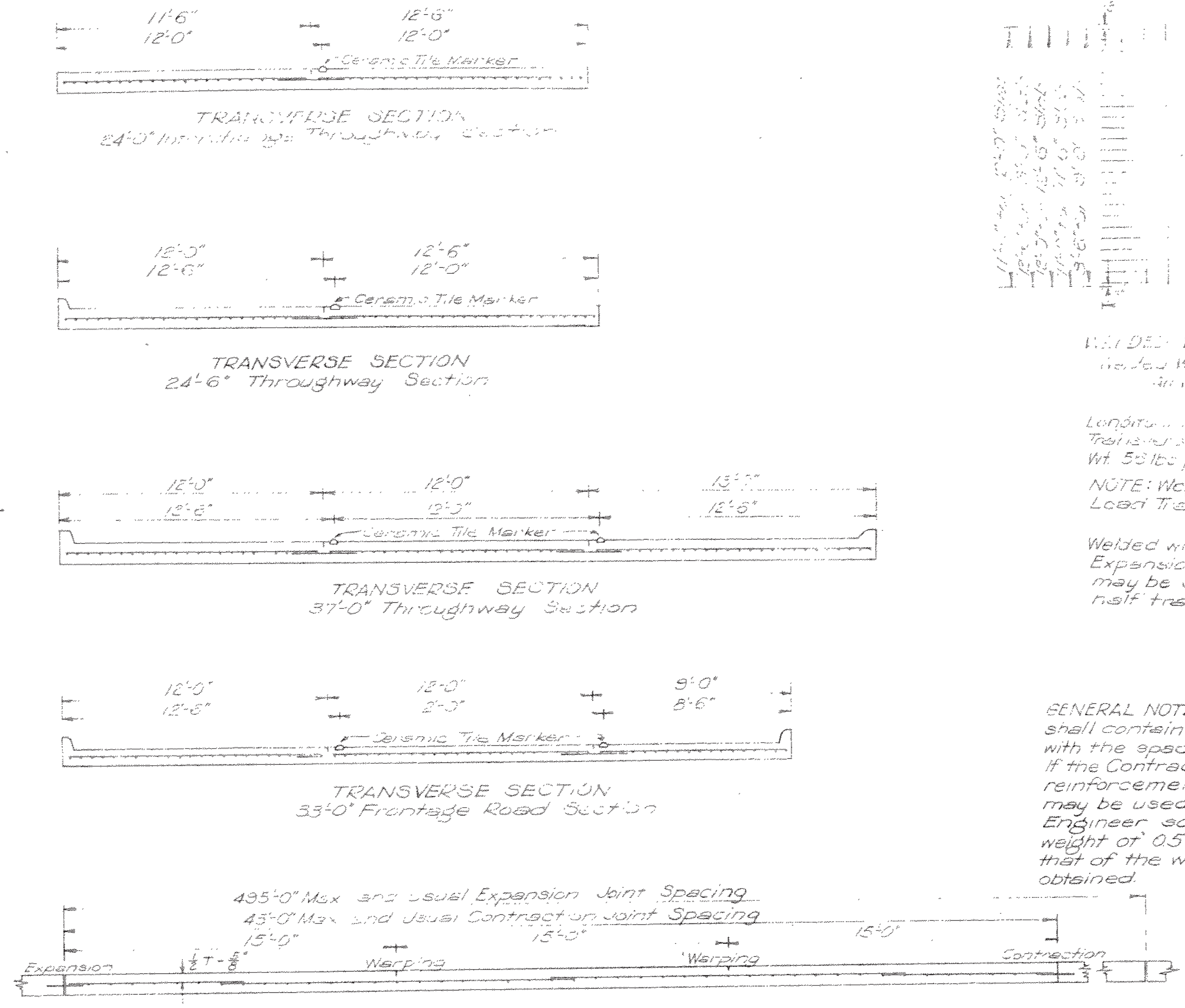
TYPICAL CROSS-SECTIONS

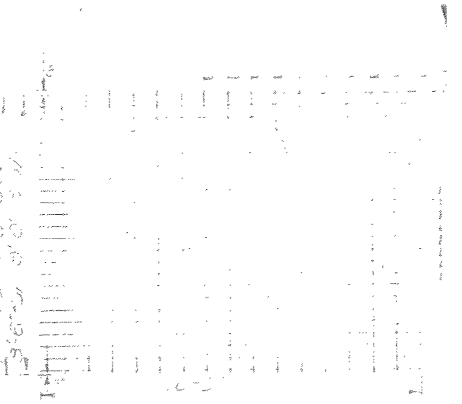
(10) LEFT FRONTAGE ST SECTION
~~To be~~ used approximately 19 Stations

FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.
6	TEXAS	SG [illegible]
STATE DIST. NO.	COUNTY	CONT. / SECT. / JO
20	[illegible]	26 / 13 / [illegible]



TYPICAL PAVEMENT PLAN
12'-0", 12'-0" & 13'-0" SLAB





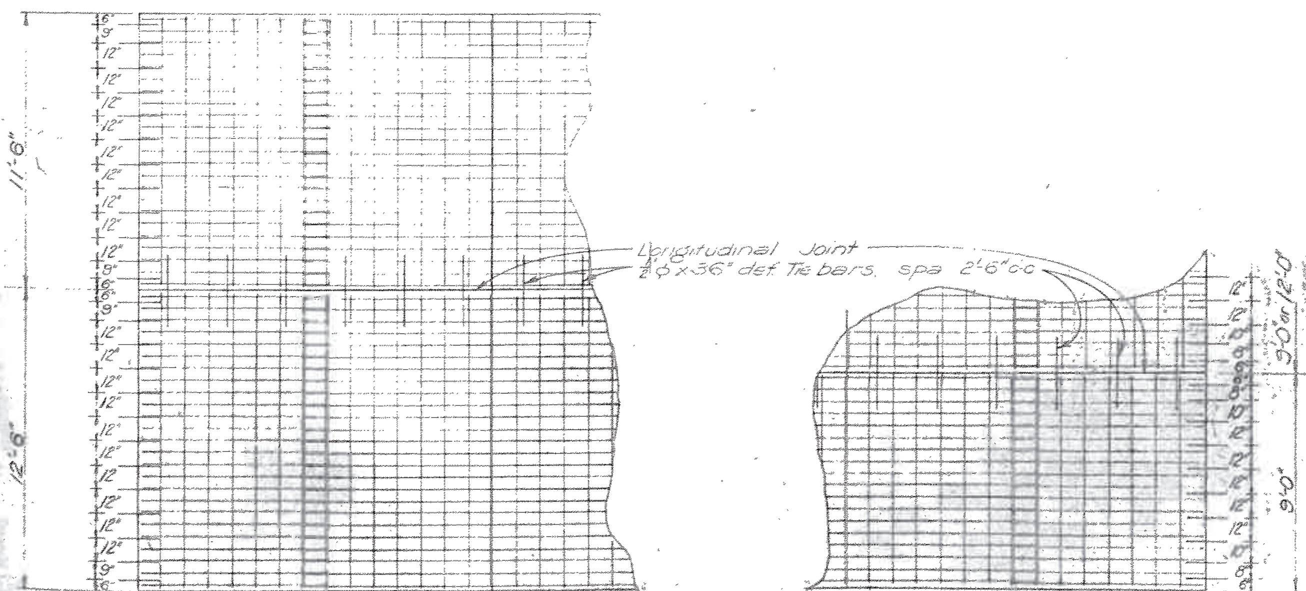
WELDED WIRE FABRIC MAT NO. 1
Welded Wire Fabric Reinforcement

Longitudinal ... 6" c-c
Transverse No. ... 12" c-c
Wt. 56 lbs per 100 sq ft

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

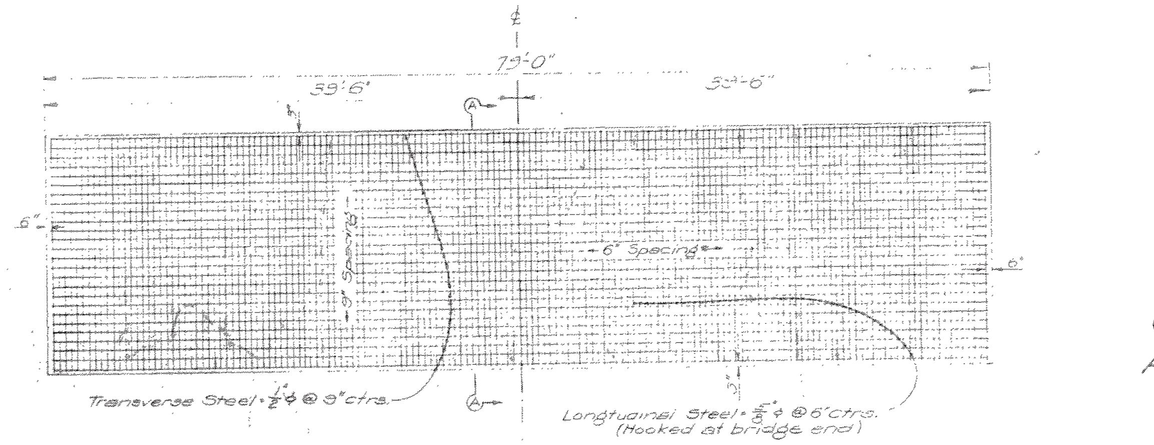
Welded wire mats on either side of Expansion and Contraction Joints may be standard mat cut in half transversely.

GENERAL NOTE: Pavements of varying widths shall contain reinforcing placed to conform with the spacing shown on this sheet. If the Contractor so elects an alternate reinforcement of ½"φ deformed steel bars may be used. Spacing shall be as the Engineer so directs so that a minimum weight of 0.56 lbs per Sq Ft (equivalent to that of the welded wire fabric) shall be obtained.

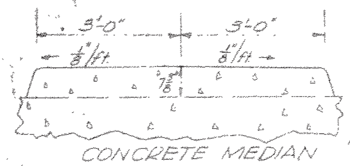


12'-6" & 11'-6" SLAB

9'-0" SLAB

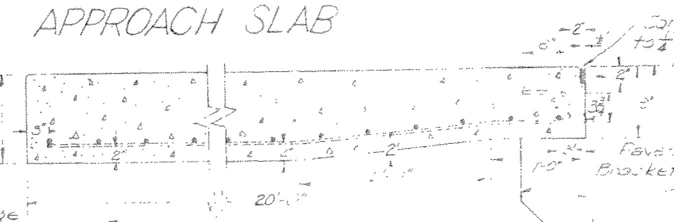


APPROACH SLAB



CONCRETE MEDIAN

Note: Approach Slab Median and Approach Slab shall be monolithic. Curbs and median shall conform to adjacent bridge and Roadway Median. Payment shall be made at Unit bid price for "Conc. Pavement".

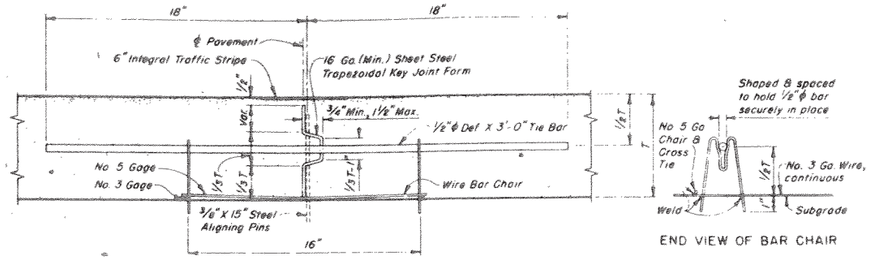


SECTION A-A APPROACH SLAB

NOTE: Payment for Concrete Approach Slab and necessary shaping of subgrade under slab shall be made at the unit price bid for "Concrete Pavement".

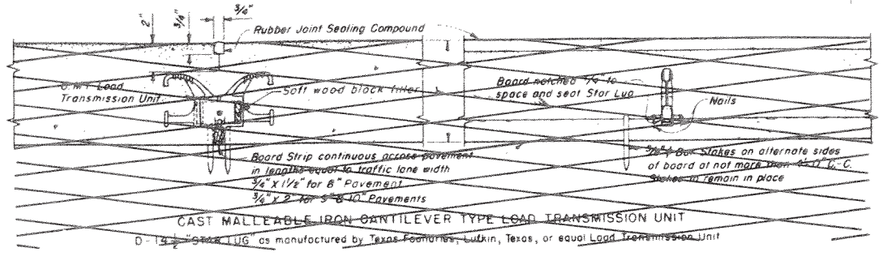
CONCRETE PAVEMENT & APPROACH SLAB DETAILS

FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	
6	TEXAS	UI 56(12)	
STATE DIST. NO.	COUNTY	CONT.	SECT.
20	Jefferson	28	13



TYPE 1 - STEEL TONGUE-AND-GROOVE FORM

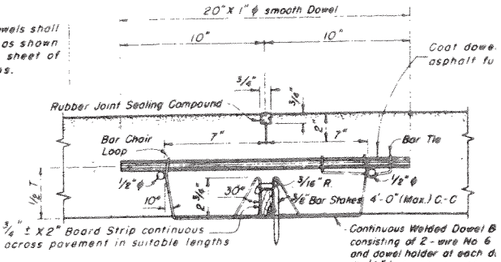
END VIEW OF BAR CHAIR



CAST MALLEABLE IRON CANTILEVER TYPE LOAD TRANSMISSION UNIT

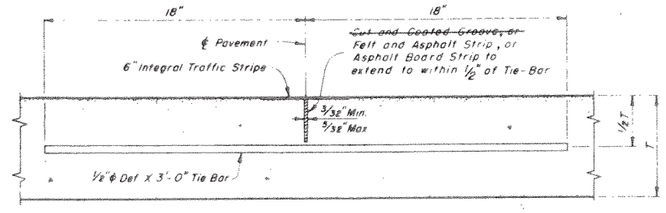
D-13 "STAR-LUG" as manufactured by Texas Foundries, Lufkin, Texas, or equal Load Transmission Unit

Lugs and Dowels shall be spaced as shown on another sheet of these plans.



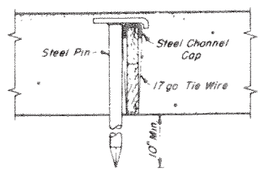
1" ROUND STEEL BAR DOWEL

ALTERNATE TYPES OF TRANSVERSE CONTRACTION JOINTS



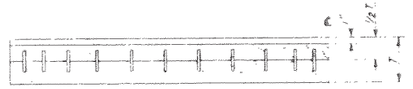
TYPE 2 - MACHINE CUT GROOVE

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 I, 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.

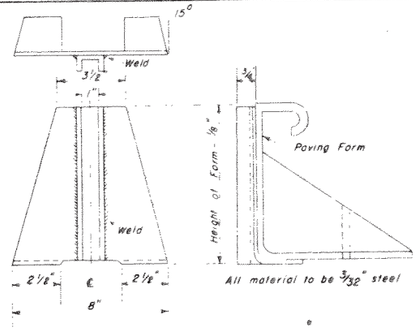


INSTALLING PIN FOR EXPANSION JOINT

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 1/8" 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.



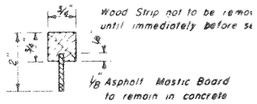
ELEVATION OF BOARD STRIP FOR EXPANSION JOINT WITH C.M.I. LOAD TRANSMISSION UNITS



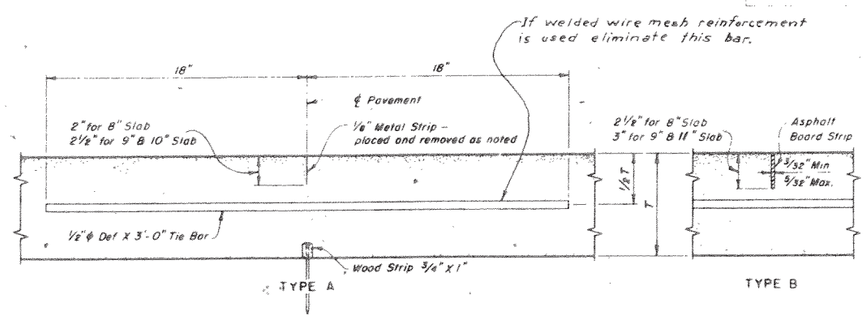
All material to be 3/32" steel

ACCEPTABLE CONTRACTION AND EXPANSION JOINT HOLDER

(Other types may be used if approved by engineer.)



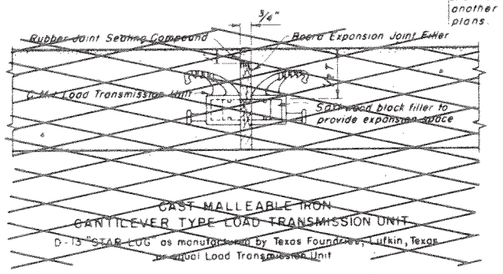
CONTRACTION JOINT SEAL FO



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.

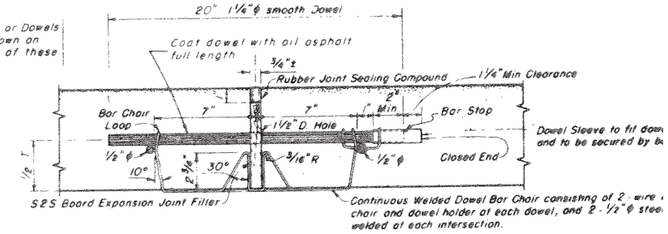
ALTERNATE TYPES OF TRANSVERSE WARPING JOINTS

Spacing of Lugs or Dowels shall be as shown on another sheet of these plans.



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

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 agen and its employees harmless to liability of any nature or kind, inclu 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"-11" SLABS

C.P.J. - 52 - 2 (MOD

REVISED FEB 7, 1952

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT
6	TEXAS	UI 56 (12)
STATE DIST. NO.	COUNTY	SHEET NO.	SECTION NO.
20	Jefferson	28	13