7304
15

STATE OF TEXAS
STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

PLAN OF PROPOSED
STATE HIGHWAY IMPROVEMENT

FEDERAL AID PROJECT
M-S007(1) 1 G S007(2) & M S009(1)

PLAN 1 IN = 50 FT.
PROFILE 1 IN HOR = 50 FT. 1 IN VERT = 10 FT.
CROSS SECTIONS 1 IN HOR AND VERT = 5 FT.

DALLAS AND ROCKWALL COUNTY
SH 66

FROM DAIRY ROAD IN GARLAND TO THE BEGINNING OF LAKE RAY HUBBARD RELOCATION
GRADING, STRUCTURES, CONCRETE PAVEMENT, FOUNDATION COURSE, ... ASPHALT STABILIZED BASE AND ASPHALTIC CONCRETE PAVEMENT

Date Work Accepted ... 28, 1977
FINAL PLANS
Letting Date : September 17, 1975
Date Work Began : October 13, 1975
... Completed : September 26, 1977

Field Change No. 1 — Revise shop... curves and revise plan ...
Field Change No. 2 — ...
Field Change No. 3 — Provide additional ... MKT RR Underpass
Field Change No. 4 — ...
Extra Work Order No. ...
Field Change No. 5 — Revise price for Items 246, 260 and 262.

TOTAL PROJECT	9-3-16	9-3-17	9-4-28
NET LENGTH OF ROADWAY			
NET LENGTH OF BRIDGES			
NET LENGTH OF PROJECT			

INDEX OF SHEETS

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56	... CONSTRUCTION JOINT
57	TS-71 (MOD)
58	BJS-69 (MOD)
59	SPECIAL BRIDGE APPROACH SLAB DETAIL
...	MILLS CREEK BRIDGE AT DAVIS ... DR.
...73B	MILLS CREEK BRIDGE AT S.H. 66
74-79, 77A, 78A & 78B	MKT RR UNDERPASS LAYOUT & DETAILS
...	ROWLETT CREEK BRIDGE LAYOUT & DETAILS
...	MC5-1
...	MCW-F1
...	MC 9-3
87-88	MC-30°
...	MCW-F2-...
...	MC9-2
...	MC-45°
...	MCW-F1-45°
...	MC5-2
...	CH-1
...	CH-...-...
97...	BRIDGE RAIL (TYPE T2 (...), (TYPE C-4) ...
...	RAIL AND PRAIL
...	GF (TD)...
...	MBGF (B...74
...	RCD-69
104	BED ...
105	CST-...
...	...
...	BC(...)-...-7...A
...	M...
...	SD ...-71 (REV)
...	SD ...
...	SDD
...	SPA...

STA 0+00 ... TO STA 7+78.33 ... = 12,893 FT

ONE EXCEPTION:
PROJECT M-S007(1)
FROM STA 7+78.33 TO STA 137+10 = 12,931.67

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
TRAVEL WAY
CULVERT BRIDGE
...
TELEGRAPH OR TELEPHONE

SPECIFICATIONS ADOPTED BY THE STATE HIGHWAY DEPARTMENT OF TEXAS JANUARY 3, 1972 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS SHALL GOVERN ON THIS PROJECT: ... CONTRACT PROVISIONS ... FEDERAL ... (FORM FHWA-273, APRIL, 1974).

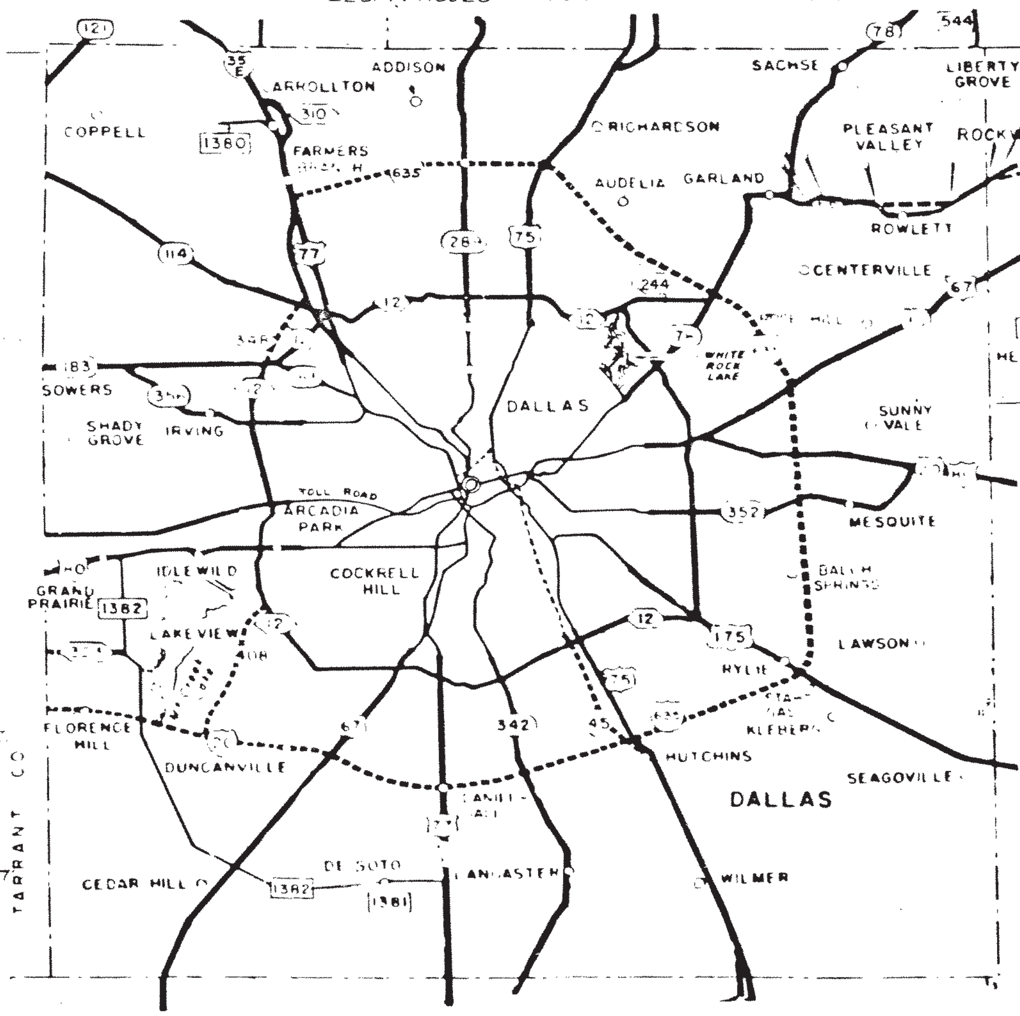
STA ... END CONT 9-3-17
END PROJECT ...

STA 200+42 = END CONT 9-3-16 PROJ M S007(1)
BEGIN CONT 9-4-28 ... S009(1)

STA ... BEGIN CONT 9-3-17
BEGIN PROJECT I G S007(2)

STA 22+... END CONT 9-4-28
END PROJECT ...

STA ... BEGIN CONT 9-3-16
BEGIN PROJECT S007(1)



LAYOUT SCALE: 1 IN. = 2 MILES

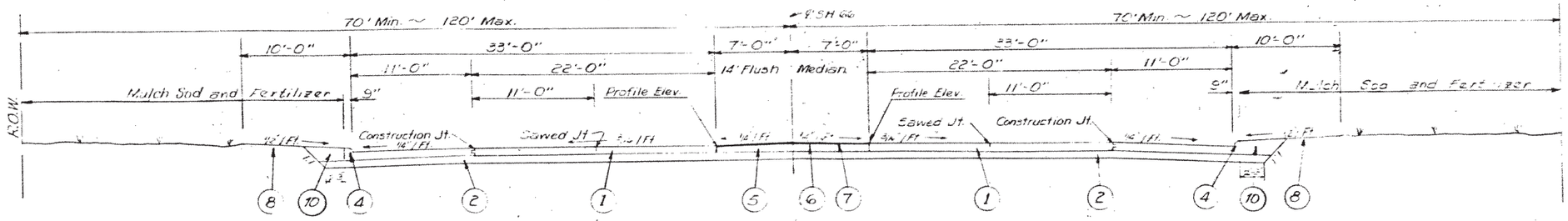
Note: The Contractor shall ... own investigation and arrange for drainage facilities.

The Contractor shall provide barricades and warning devices ...

STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

CORRECT ... 1974
CORRECT ... 1974
SENIOR DESIGN ENGINEER
CORRECT ... 1974
DISTRICT DESIGN ENGINEER
CORRECT
RESIDENT ENGINEER
APPROVED
BRIDGE ENGINEER
RECOMMENDED FOR APPROVAL
DISTRICT ENGINEER
CHIEF ENGINEER OF HIGHWAY DESIGN

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED:
DIVISION ENGINEER



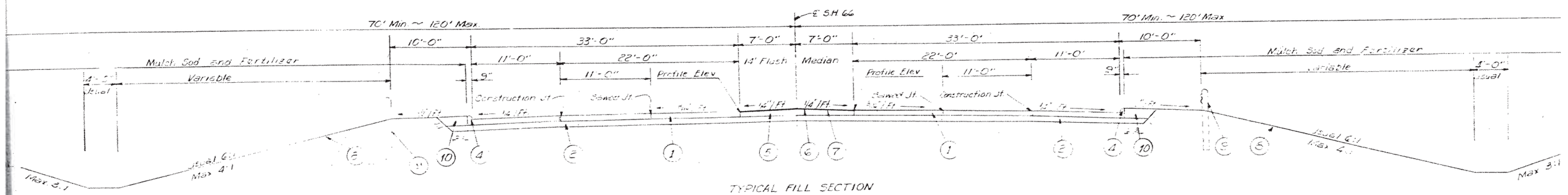
LEGEND
1. 9" Concrete Pavement (CPC.
2. Lime Stab. Subgrade (Approx 6"
3. Cl. B. Conc. Riprap (5")
4. Monolithic Curb Ty. I.
5. Approx. 8" Fnd. Crse. (Lime Stab
6. Approx. 1" ASP
7. Prime Coat
8. Mulch Sod & Fertilizer
9. Galv. Strl. Beam Guard Fence Class "B" (when necessary)
10. Earth Backfill
11. Class B Conc. Riprap (4")
12. Class A Guard Rail (Bar

Lime Stabilized Foundation Course estimated at 65 tons per station

TYPICAL NORMAL SECTION

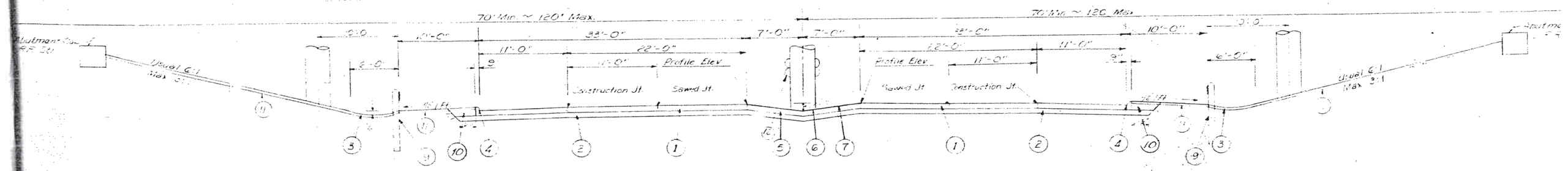
To be used between: Sta. 37+50 and 39+00
Sta. 50+00 and 51+00 (Use Depressed Median - See Sec. C)
Sta. 62+00 and 71+50
From Sta. 71+50 to Sta. 77 transition from Section "A" to Section "D".

(A)



TYPICAL FILL SECTION

(B)



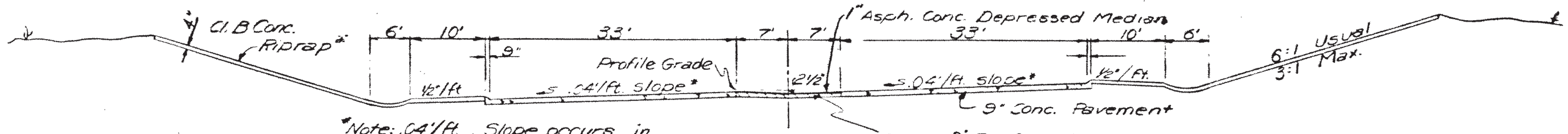
TYPICAL CUT SECTION
THRU R.R. UNDERPASS
SUPERELEVATED CURVES

(C)

Sheet 1 of 4

TYPICAL SECTIONS

FROM NEAR DAIRY RD. TO EAST OF M.K.T. RAILROAD

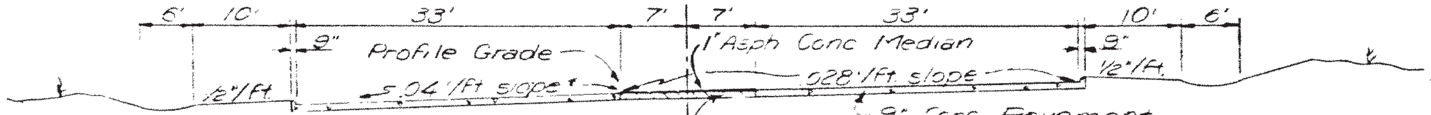


*Note: .04'/ft. Slope occurs in full superelevation

#Note: Riprap Slopes occur only under Railroad Structure.

TYPICAL SECTION A-1

To be used between: Sta. 39+00 and Sta. 42+00
Sta. 45+00 and Sta. 50+00
Sta. 51+00 and Sta 59+00 ---- Note: Median to be constructed as shown on Typical Section A at Sta. 51+50. Transition to Typical Section C median in 50' both directions.

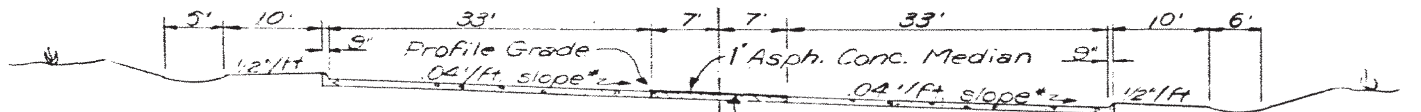


* Note: .04'/ft. and .028'/ft slopes occur in full superelevation

SECTION A-2

To be used between: Sta 35+00 and 37+00
Sta 42+00 and 45+00

Transition Rt. Profile Grade from Sta 35+00 to 38+00



* Note: .04'/ft slope occurs in full superelevation

SECTION A-3

To be used between Sta. 59+00 and Sta. 62+00

Transition Lt. Profile Grade from Sta. 58+00 to 63+00

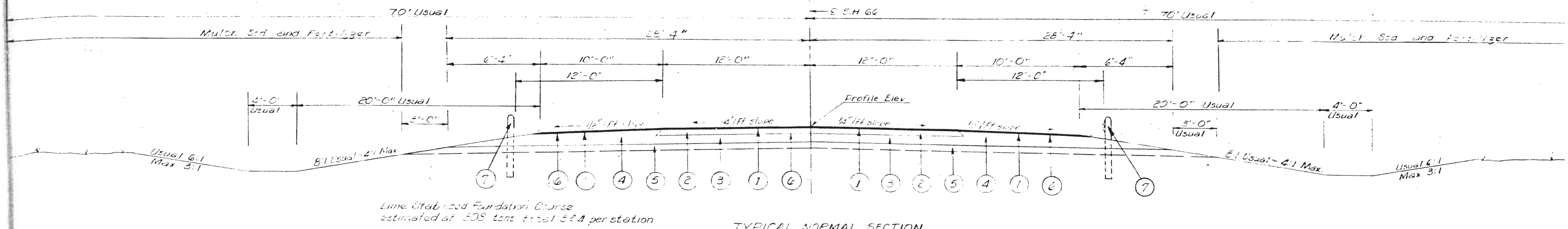
TYPICAL SECTIONS

FROM STA. 32+00 TO STA 62+00

Note: For transition information see CST-71. See Section "A" for subgrade, curb, backfill and joint information.

Sheet 2 of 4

18 Dallas, etc. 9 3



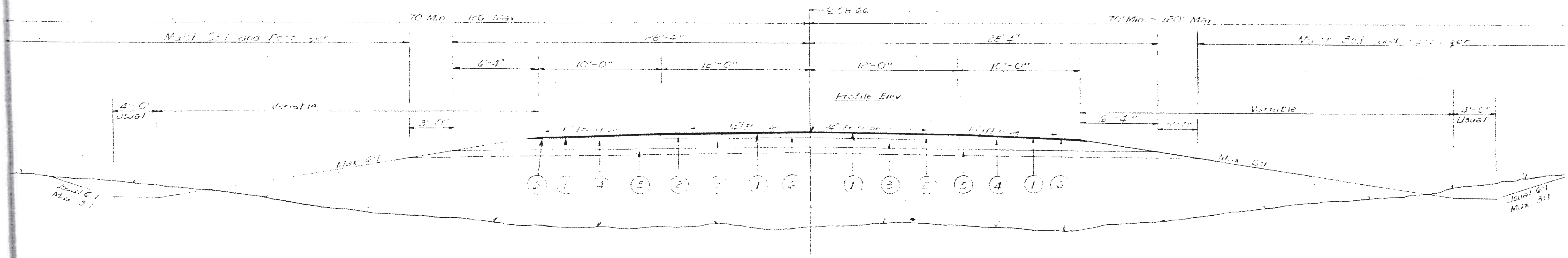
TYPICAL NORMAL SECTION

To be used West of Exception between Sta. 77+00 & 170+71.33 except for superelevation on curves. Then refer to CST-71 for slopes and transition information.

(D)

LEGEND

1 Approx. 1" ACP Surf
2 Approx 3" Asph. Stab. Base
3 Fnd. Crse. (Approx 9") (Lime Stab) (5% L
4 Fnd. Crse. (Approx. 5") (Lime Stab) (5%
5 Lime Stab. Subgrade (Approx. 6") (5%
6 Prime Coat
7 Std. St. Bm. Gd. Fence (when neces



TYPICAL FILL SECTION

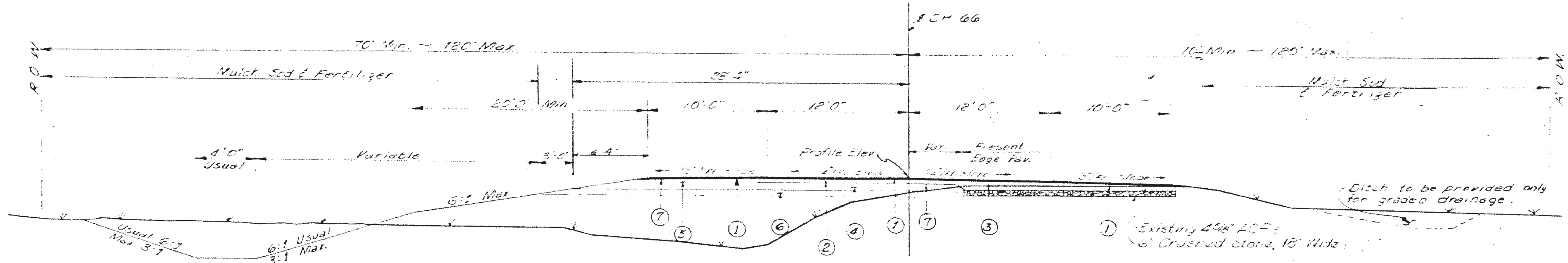
(E)

TYPICAL SECTIONS
From East of M.K.T. Railroad To Lake Fay Hubbard Relocation

Sheet 3 of 4

M 5007

9



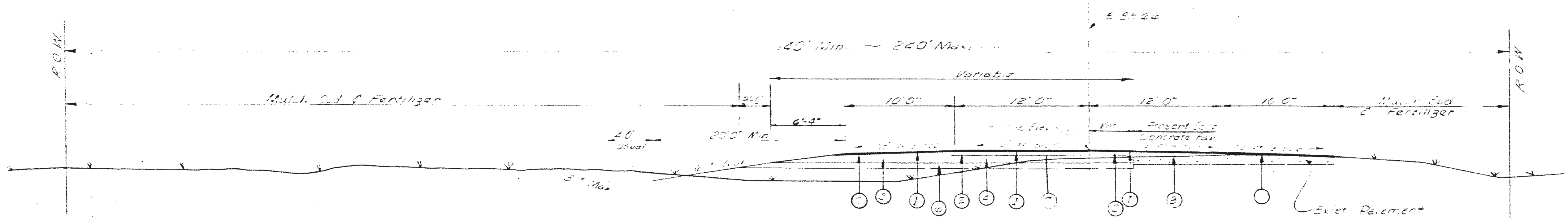
Lime Stabilized Foundation Course estimated at approximately 154 tons total 4 & 5 per station loose.

TYPICAL WIDENING SECTION
To be used between Sta 135+63.52 to Sta 200+42
East of Exception
(F)

Note: At those locations where new construction crosses to the opposite side of the present ℄, typical section will be in accordance with Typical Section "D". Approx 18 Sta will be required.

LEGEND

1. Approx. 1" ACP Surf.
2. Approx. 3" Asph. Stab. Base
3. Variable Depth Asph. Stab. Base
4. Fnd. Crse. (Approx. 9") (Lime Stab.) (
5. Fnd. Crse. (Approx. 15") (Lime Stab.) (
6. Lime Stab. Base (Approx. 3") (5%
7. Prime Coat



Lime Stabilized Foundation Course estimated at approximately 154 tons total 4 & 5 per station loose

TYPICAL WIDENING SECTION
To be used between Sta. 200+42 to Sta 222+54.21

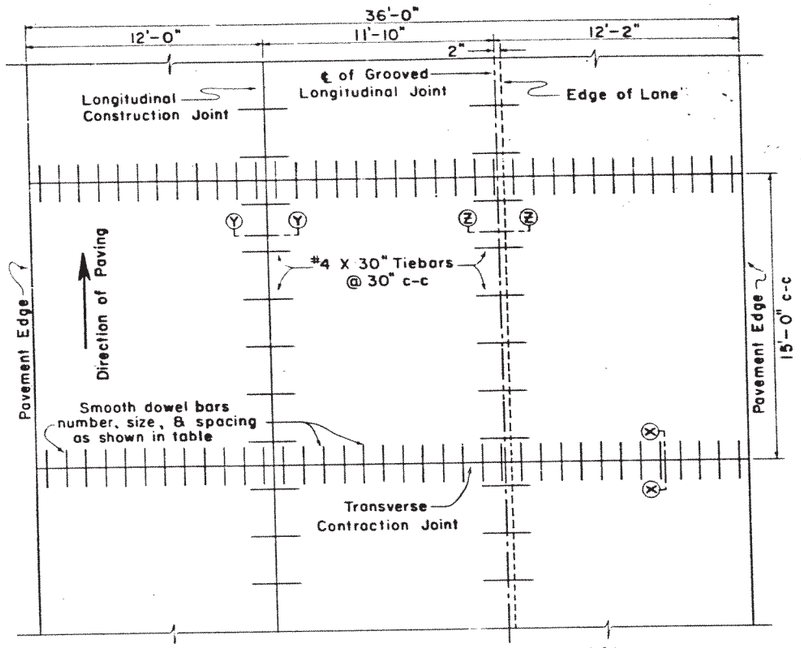
(G)

Sheet 4 of

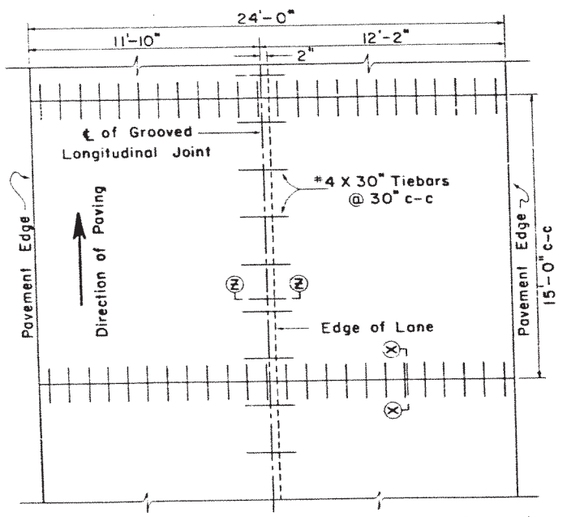
TYPICAL SECTIONS
From West of Maidu Creek To The beginning of ... Hwy
... ...

S 007

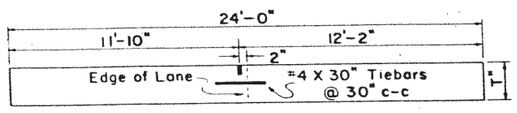
18 ..., etc. 9



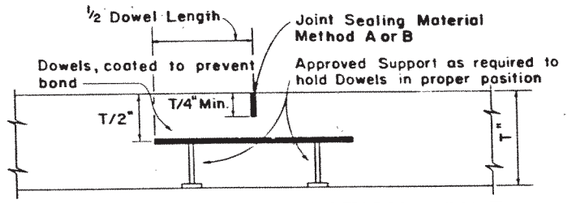
THREE LANE PAVEMENT PLAN
(12 ft. & 24 ft. Placement)*



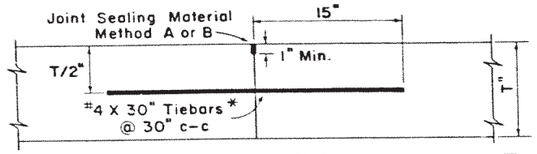
TWO LANE PAVEMENT PLAN



TYPICAL SECTION
(24 ft. Placement)*

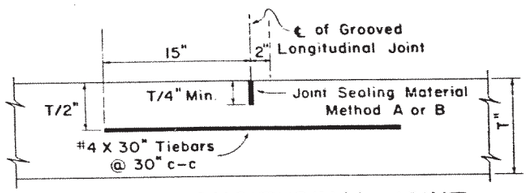


TRANSVERSE CONTRACTION JOINT
Section X-X



LONGITUDINAL CONSTRUCTION JOINT
Section Y-Y

*WITH THE APPROVAL OF THE ENGINEER, MULTIPLE-PIECE TIEBARS (THREADED COUPLING OR OTHER ADEQUATE DEVICE) MAY BE USED TO FACILITATE CONSTRUCTION PROVIDED THE SYSTEM DEVELOPS A FORCE EQUAL TO 1 1/2 TIMES THE MINIMUM FORCE OF THE TIEBAR SHOWN. THE SPACINGS FOR THE SYSTEM SHALL BE LESS THAN OR EQUAL TO THE SPACING ALLOWED FOR BARS OF SIMILAR YIELD STRENGTH.



GROOVED LONGITUDINAL JOINT
Section Z-Z

* Lane widths are for illustrative purposes only and should not be used if in conflict with typical cross sections shown elsewhere in the plans.

GENERAL NOTES

1. NO EXPANSION JOINTS WILL BE USED EXCEPT AT STRUCTURE ENDS OR FIXED OBJECTS AS SHOWN ELSEWHERE IN THE PLANS.
2. FOR FURTHER INFORMATION REGARDING THE PLACEMENT OF CONCRETE AND LOAD TRANSFER DEVICES REFER TO THE GOVERNING SPECIFICATIONS FOR "CONCRETE PAVEMENT".
3. DETAILS AS TO PAVEMENT WIDTH, PAVEMENT THICKNESS, AND THE CROWN CROSS-SLOPE SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
4. JOINT GROOVE AND SEAL DETAILS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
5. TIEBARS SHALL BE SECURED PARALLEL TO THE PAVEMENT SURFACE AND PERPENDICULAR TO THE CENTERLINE BY:
   (a) USE OF BAR CHAIRS
   (b) ACCURATELY PLACED IN POSITION ON THE SCREEDED CONCRETE BY MEANS OF AN APPROVED TEMPLATE AND FORCED TO THE PROPER POSITION WITH A SUITABLE TOOL; OR
   (c) BY ANY OTHER MEANS WHICH, PRIOR TO ITS USE, HAS BEEN APPROVED BY THE ENGINEER.
6. DOWEL BARS SHALL BE SECURED PARALLEL TO THE PAVEMENT SURFACE AND CENTERLINE BY A DOWEL BAR CHAIR.
7. WHEN WORK IS STOPPED DUE TO BREAKDOWN OR OTHER CAUSE, CONCRETE SHALL BE REMOVED BEYOND LAST CONTRACTION JOINT IN PLACE AND A HEADER INSTALLED.
8. WHERE A MONOLITHIC CURB IS SPECIFIED, THE JOINT IN THE CURB SHALL COINCIDE WITH PAVEMENT JOINTS AND MAY BE FORMED BY ANY MEANS WHICH, PRIOR TO ITS USE, HAS BEEN APPROVED BY THE ENGINEER.
9. CONSTRUCTION JOINTS MAY BE FORMED BY USE OF METAL OR WOOD FORMS EQUAL IN DEPTH TO THE NOMINAL DEPTH OF THE PAVEMENT, OR BY OTHER MEANS WHICH HAVE BEEN APPROVED BY THE ENGINEER PRIOR TO THEIR USE.
10. LONGITUDINAL AND TRANSVERSE STEEL SPACING SHALL NOT VARY MORE THAN ONE TWELFTH OF THE SPACING SHOWN HEREON.
11. THE TIEBAR SPACINGS SHOWN ARE FOR ASTM DESIGNATIONS: A-615, OR A-616, GRADE 60, TIEBARS, WHICH SHALL NOT BE BENT. IF TIEBARS ARE TO BE BENT, THEY SHALL BE STEEL CONFORMING TO ASTM DESIGNATION: A-615, GRADE 40, WITH A CENTER TO CENTER SPACING OF 24 INCHES.
12. SEE RC (CPCR)-71 (Rev.) FOR STEEL PLACING REQUIREMENTS IN THE AREA OF CONFLUENCE AT RAMP TERMINALS.

DEPTH OF PAVEMENT (INCHES)	DOWELS (SMOOTH BARS)		
	SIZE AND LENGTH	AVERAGE SPACING (INCHES)	WEIGHT PER FOOT OF JOINT (LBS.)
8	1" X 18"	12	4.01
9	1 1/8" X 20"	12	5.63
10	1 1/4" X 22"	12	7.65
11	1 3/8" X 24"	12	10.10

TEXAS HIGHWAY DEPARTMENT

CONCRETE PAVEMENT DETAILS
CONTRACTION DESIGN
CPCD-71 (Rev.)

DN:	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.
CK. DN:	Original	Feb. 1969	6	TEXAS	
DW:			STATE DIST. NO.	COUNTY	CONT. SECT.
CK. DW:					
TR:					
CK. TR:					