FINAL PLANS

6	TEXAS	I 45-3(62)278	1
18	DALLAS	92-14-16	IH45

DATE WORK BEGAN: 2/21/72
DATE WORK COMPLETED: 10/14/75
DATE WORK ACCEPTED: 10/16/75

LETTING DATE: 1/27/72

STATE OF TEXAS
STATE HIGHWAY DEPARTMENT

PLAN OF PROPOSED
STATE HIGHWAY IMPROVEMENT

FEDERAL AID PROJECT
I-45-3(62)278

INTERSTATE HIGHWAY 45

DALLAS COUNTY

GRADING, STRUCTURES, STORM SEWERS AND CONCRETE PAVEMENT
FROM: SOUTH OF LOOP 12
TO: OVERTON ROAD

SCALE: 1" = 40' OTHERS AS NOTED
NET LENGTH OF PROJECT = 10,837.47 FT. = 2.051 MI.
TOTAL ROADWAY = 9,925.76 FT. = 1.879 MI.
TOTAL BRIDGES = 911.71 FT. = 0.172 MI.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
	TITLE SHEET
	PROJECT LAYOUT
	TYPICAL SECTIONS
	SPECIFICATION DATA SHEETS
	ESTIMATE AND QUANTITY SHEETS
	SUMMARY SHEETS
	PLAN SHEETS
	PROFILE SHEETS
	SUPERELEVATION TRANSITIONS
	DETOURS AND LAYOUTS
	CURVE DATA
	MISCELLANEOUS DETAILS
	PIPE UNDERDRAIN LAYOUT
	DRAINAGE AREA MAPS
	HYDRAULIC CALCULATIONS
	CULVERT AND STORM SEWER LAYOUT SHEETS
	STORM SEWER AND PIPE PROFILES
	INLET AND MANHOLE DETAILS
	CULVERT CROSS SECTIONS AND DETAILS
	EROSION CONTROL SHEET
	M.K.T. R.R. OVERPASS WIDENING (LOOP 12) LAYOUT AND DETAILS
	M.K.T. R.R. OVERPASS N.W. CONNECTION LAYOUT AND DETAILS
	M.K.T. R.R. OVERPASS S.W. CONNECTION LAYOUT AND DETAILS
	LOOP 12 UNDERPASS (I.H. 45) LAYOUT AND DETAILS
	RAMP "F" OVERPASS AT RAMP "A" LAYOUT AND DETAILS
	RAMP "B" OVERPASS AT NORTHBOUND COLLECTOR ROAD LAYOUT AND DETAILS
[illegible]5	ILLINOIS AVENUE OVERPASS (I.H. 45) LAYOUT AND DETAILS
[illegible]2	ILLINOIS AVENUE OVERPASS RAMP "B" LAYOUT AND DETAILS
	LINFIELD STREET OVERPASS (I.H. 45) LAYOUT AND DETAILS
	TRINITY RIVER BRIDGE NAVIGATION CROSSING (OVERTON ROAD OVERPASS) LAYOUT AND DETAILS
	Gp A
	Gp B
	Gp NS
	Gp C
	Gp D
	F [illegible] N
	JS-71
[illegible]76	RAIL TY T-4
	RR 8 & RR 9
[illegible]3	CH-II
[illegible]80	CH-IIB-30° & 45°
[illegible]2	RPM (1) & (2)
[illegible]3	SC-NA
284	MC 10-2
285	MCW-FI-30°
286	MC-30°
287	GF (TD)-70B
288	BED (DH)-69A
289	BAS-69 (MOD.)
290	CPCR (B)-71 (1)
291	CPCR (B)-71 (2)
292	CPCD-71 (REV.)
293	RC (CPCR)-71 (REV.)
294	CLF-69
295	RCD-69
296-301	BC (1) THRU (6)-70
302	CST-71
303	CIS-71
304	M-69

SHEETS ADDED BY FIELD CHANGES & REVISIONS

F.C. No. 1 - 244A-247A
F.C. No. 2 - None
F.C. No. 3 - 235A
F.C. No. 4 - 48A, 187A, 196A
F.C. No. 5 - 233A
F.C. No. 6 - 179A-186A
F.C. No. 7 - 27, 30, 31, 33-37, 38A, 38B, 39-43, 282A
F.C. No. 8 - None
Revisions: 28A, 53A, 54A, 272A, 286A

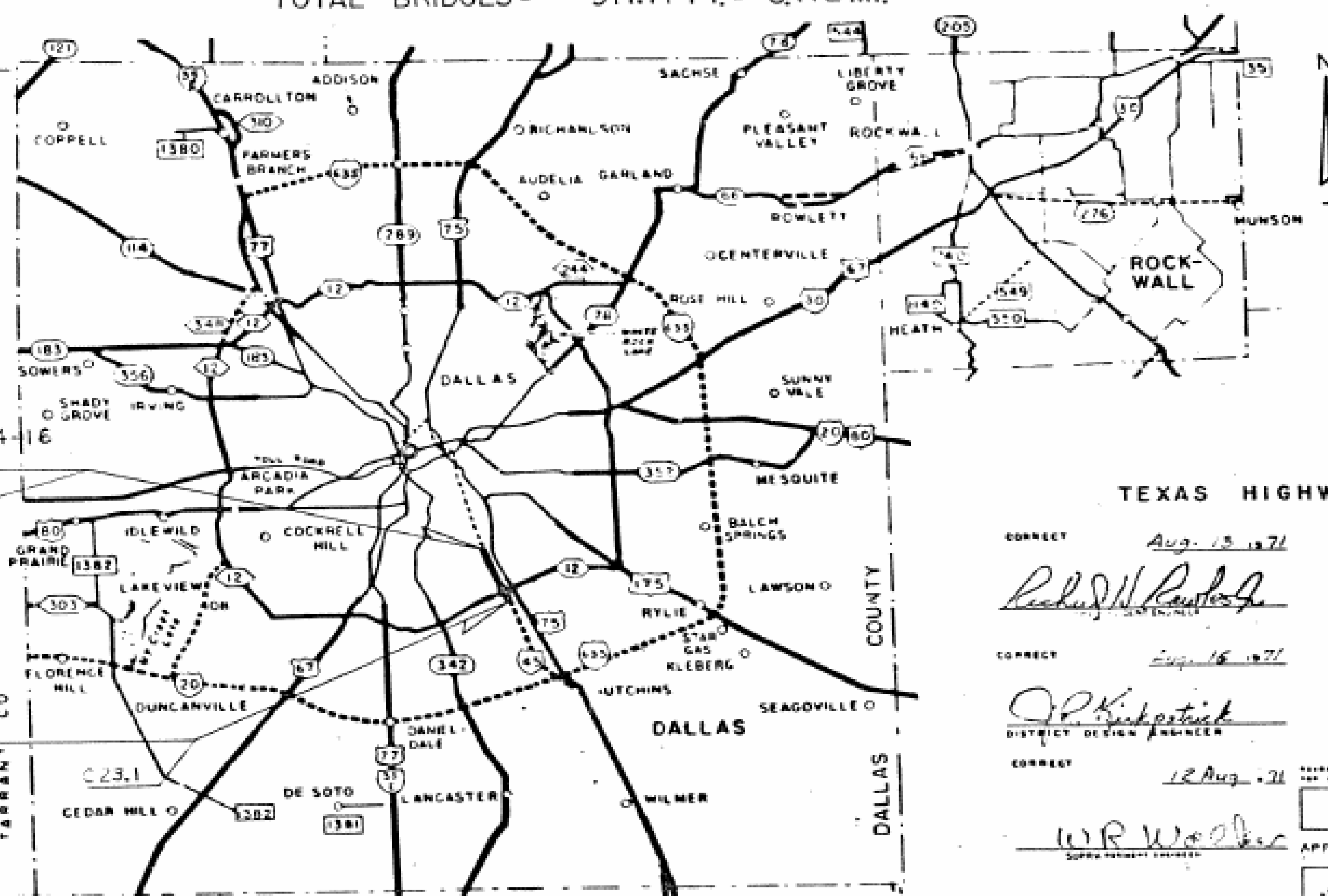
FIELD CHANGE DESCRIPTIONS

F.C. No. 1 - Change in dimensions in cap length and beam spacing on all bents of the Linfield Street Overpass Northbound.
F.C. No. 2 - Revise acceptance requirements for preformed joint seal material in accordance with the Special Provision.
F.C. No. 3 - Revise spacing of columns as shown on Plan Sheet No. 235A and increase overhang on west end of cap by 3 feet.
F.C. No. 4 - Adjust the profile grade to provide sufficient slab depth and reinforcing steel cover in the areas of the thickened top girder flanges (0.12 Ft. through the structure limits).
F.C. No. 5 - Construct Northwest Wingwall on Abutment Number 5 as shown on F. C. Plan Sht. 233A.
F.C. No. 6 - Interchange three prestressed concrete beams between Spans 1 and 3, relocate affected bearing seats and revise slab reinforcing steel for Ramp F Overpass at Ramp A.
F.C. No. 7 - Provide Thermoplastic pavement markings for edge lines along the median and outside pavement edges on the freeway lanes.
F.C. No. 8 - The addition of Item 292, Aggr. (Gr.4)(Over 120 %) and Item 340, Aggr (Ty D)(Over 120 %)

NOTE: THE CONTRACTOR SHALL MAKE HIS OWN INVESTIGATION AND ARRANGEMENTS FOR TRACKAGE FACILITIES.

STA. 395+38.65 CONT 92-14-16
End Project I 45-3(62)278
- I 45-3(63)231

STA. 287+00 CONT 92-14-16
Begin Project I 45-3(62)278
- I 45-3(59)272



CONVENTIONAL SIGNS

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

NO EXCEPTIONS
ONE EQUATION ~ 389+10.235 BK = 389+11.410 Fwd = -1.175'
NO RAILROAD CROSSINGS
LAYOUT SCALE: 1 IN. = 3 MILES

TEXAS HIGHWAY DEPARTMENT

CORRECT Aug. 13, 1971
[signature]
URBAN ENGINEER

CORRECT Aug. 16, 1971
[signature: J. P. Kirkpatrick]
DISTRICT DESIGN ENGINEER

CORRECT 12 Aug. 71
[signature: W. R. Walker]
SUPERVISING ENGINEER

RECOMMENDED FOR APPROVAL Aug. 16, 71
[signature]
DISTRICT ENGINEER

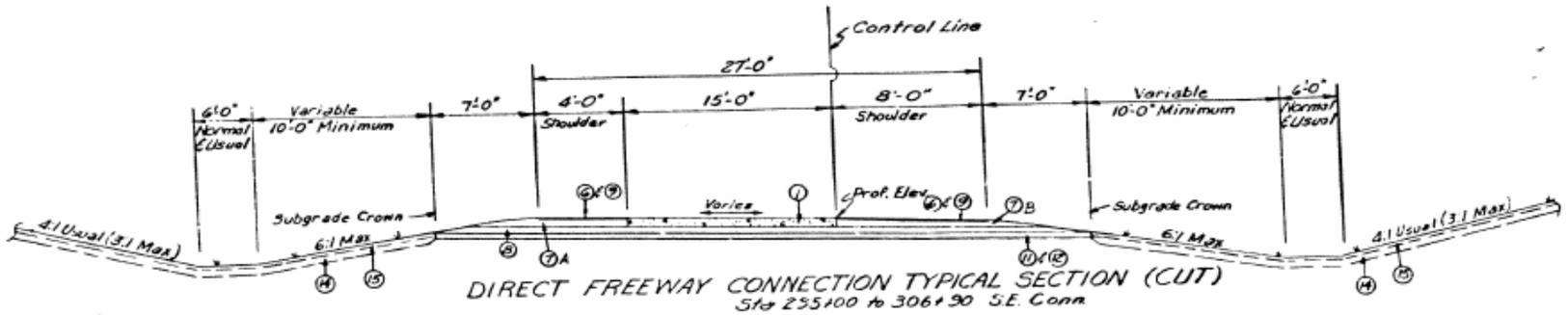
RECOMMENDED FOR APPROVAL

APPROVED: 12/1/71
[signature]
BRIDGE ENGINEER

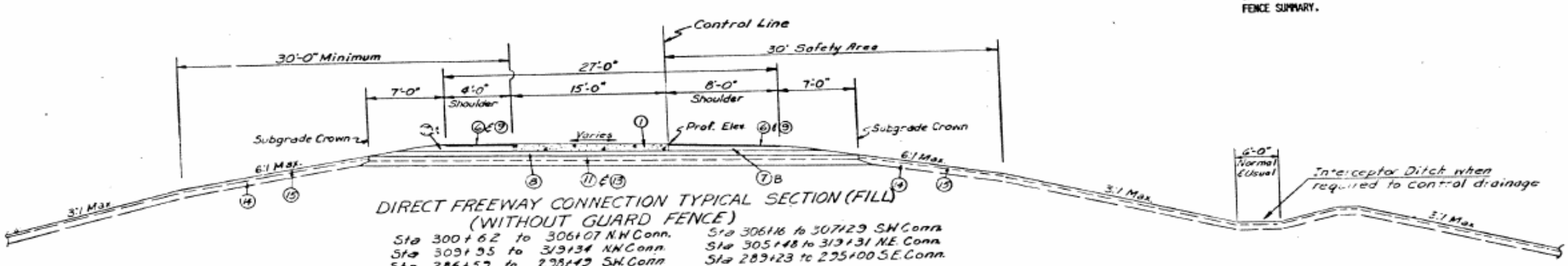
APPROVED

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

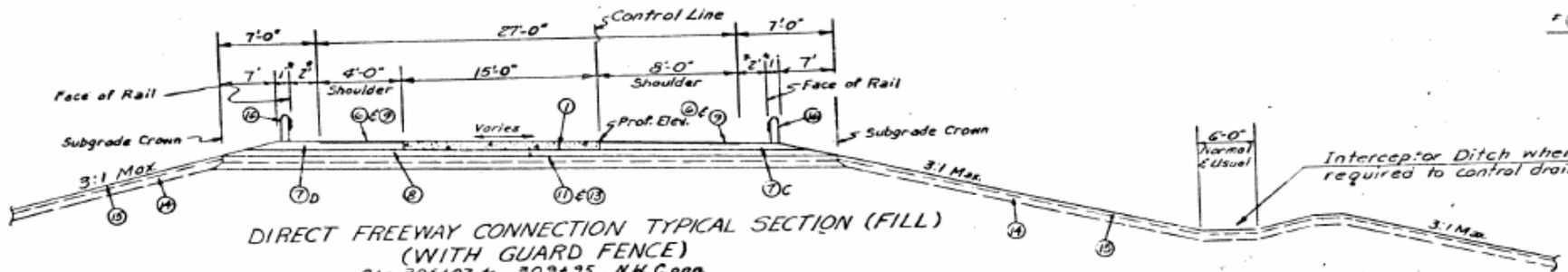


DIRECT FREEWAY CONNECTION TYPICAL SECTION (CUT)
Sta 295+00 to 306+90 S.E. Conn



DIRECT FREEWAY CONNECTION TYPICAL SECTION (FILL)
(WITHOUT GUARD FENCE)

Sta 300+62 to 306+07 N.W Conn.
Sta 309+35 to 313+34 N.W Conn.
Sta 286+52 to 298+43 S.W. Conn
Sta 301+99 to 304+66 S.W Conn.
Sta 306+16 to 307+29 S.W Conn.
Sta 305+48 to 313+31 N.E. Conn.
Sta 289+23 to 295+00 S.E. Conn.



DIRECT FREEWAY CONNECTION TYPICAL SECTION (FILL)
(WITH GUARD FENCE)

Sta 306+07 to 309+35 N.W. Conn.
Sta 298+43 to 301+99 S.W. Conn
Sta 304+66 to 306+16 S.W Conn.

LEGEND

1. 8" CONTINUOUS REINFORCED CONCRETE PAVEMENT (CRCP)
3. 8" CONCRETE PAVEMENT CONTRACTION DESIGN (CPCD)
4. 10" UNIFORM CONCRETE PAVEMENT (CPCD)
6. 125#/S.Y. ASPHALTIC CONCRETE PAVEMENT
7. ASPHALT STABILIZED BASE
8. APPROX. 6" SOIL CEMENT BASE (PLANT MIX)
9. TACK COAT
11. APPROX. 6" SUBGRADE STABILIZED WITH 4% LIME
12. APPROX. 6" UNDERCUT IN ROCK CUTS BACKFILLED WITH SELECT MATERIAL
13. APPROX. 12" SELECT MATERIAL
14. APPROX. 6" TOPSOIL
15. APPROX. 3" (COMPACTED) MULCH SOD, BRDCST, SEEDING AND FERTILIZER
16. GALVANIZED STEEL BEAM GD. FENCE (CL. B) WHERE REQUIRED*
17. 3/4" EXPANSION JOINT MATERIAL
18. EXISTING CONCRETE PAVEMENT
19. JIGGLE BARS
20. BRIDGE COLUMN
21. RIPRAP
22. TRAFFIC BUTTON
23. TYPE I CURB (5")
25. TYPE III CURB (3")
26. 6" PIPE UNDERDRAIN
27. 5" DOWELLED CONCRETE MEDIAN (CL. B CONC.)
28. TYPE II CURB (4")

*REQUIRED WHERE SLOPE OF EMBANKMENT IS GREATER THAN 6:1 WITHIN THIRTY FEET OF THE OUTSIDE FREEWAY LANE LINE AND AS SHOWN ON GALVANIZED STEEL BEAM GUARD FENCE SUMMARY.

℄ (7) Asphalt Stabilized Base Shoulders
(S.Y.'s for Av. Rate are based on Shoulder widths indicated below.)

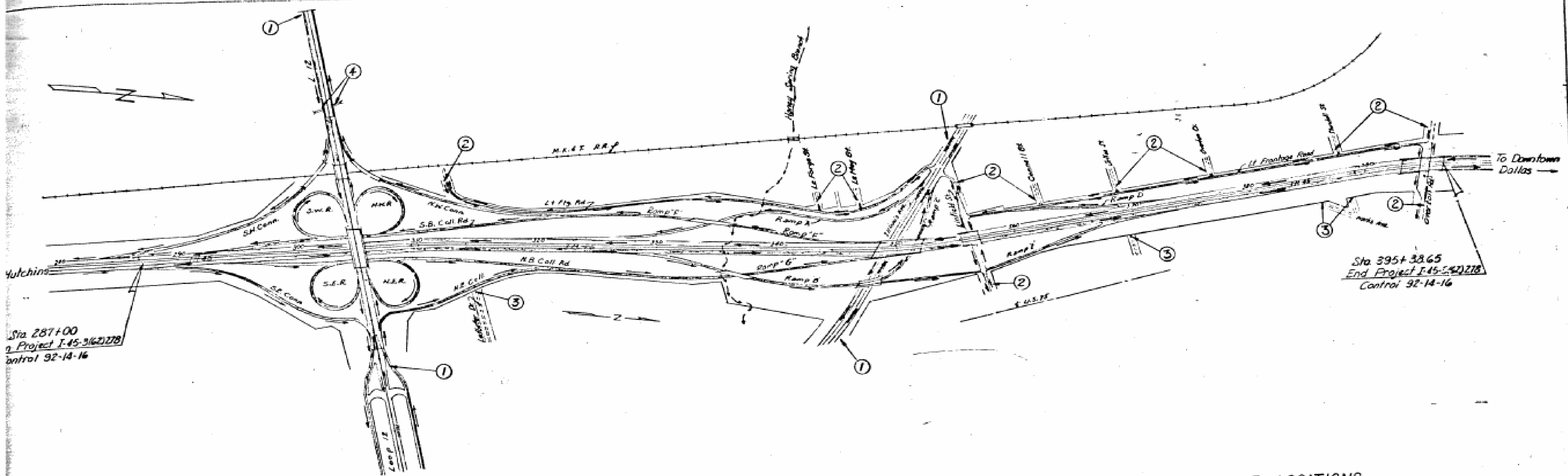
7A	1133# /S.Y.	@ 4'
7B	951# /S.Y.	@ 8'
7C	900# /S.Y.	@ 11'
7D	1012# /S.Y.	@ 6'
7E	844# /S.Y.	@ 8'
7F	971# /S.Y.	@ 4'
7G	856# /S.Y.	@ 6'
7H	735# /S.Y.	@ 9'
7I	633# /S.Y.	@ 13'
7J	1097# /S.Y.	@ 10
7K	990# /S.Y.	@ 8'
7L	1220# /S.Y.	@ 6'

3

TYPICAL SECTIONS
SHEET 1 OF 5 SHEETS

Rev 10-6-71

REG. NO.	STATE	FEDERAL PROJECT NO.
6	TEXAS	I 45-3
STATE	COUNTY	



BARRICADE LOCATIONS

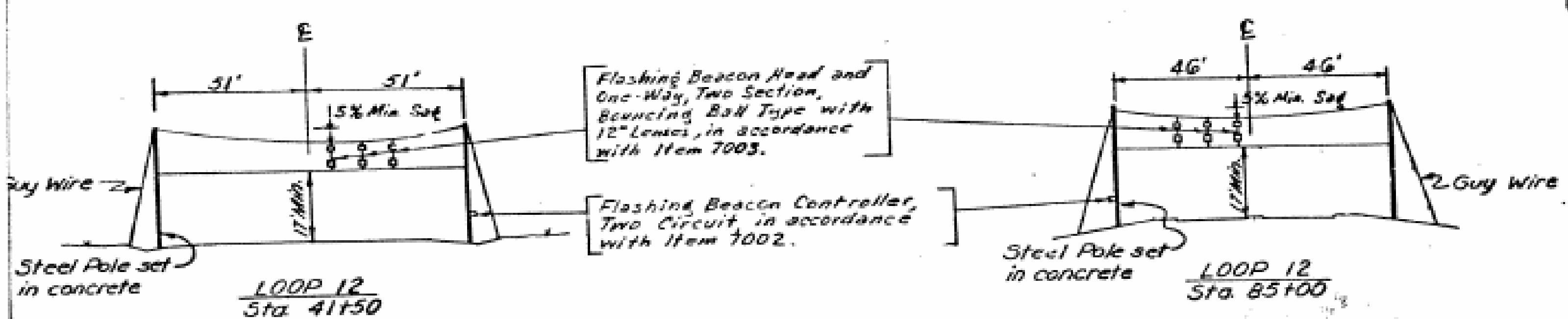
The Contractor shall provide and erect barricades and warning signs in accordance with BC(1)-70, BC(2)-70, BC(3)-70, BC(4)-70, BC(5)-70 and BC(6)-70 Standards at points indicated and at other points as directed by the Engineer.
Construction identification signs for Federal Aid Projects shall be erected in accordance with CIS-71 Standard.

③ CLASS II BARRICADE with Signs R10-2

④ CLASS I (D) BARRICADE To Be Erected At Each Culvert Widening.

① CLASS I (C) BARRICADES with Signs W20-1C, W20-1B, W20-1A, R10-8, G20-2, G20-6 AND C-1.
To Be Placed At Each End Of Construction On Loop 12 And At I1. ar's Avenue.

② CLASS I(C)BARRICADE with Signs W13-4, W21-4A AND G20-2.
To Be Placed At Street Intersections As Directed By The Engineer.



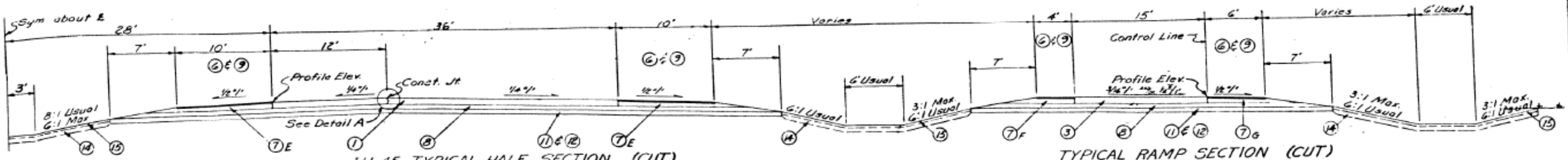
PROPOSED BEACONS ON LOOP 12 @ IH-45

NOTE: At Each Truck Crossing or Road Machinery Crossing, Place Signs W13-4, W21-8, W21-3 AND W11-1 As Directed By The Engineer.

2

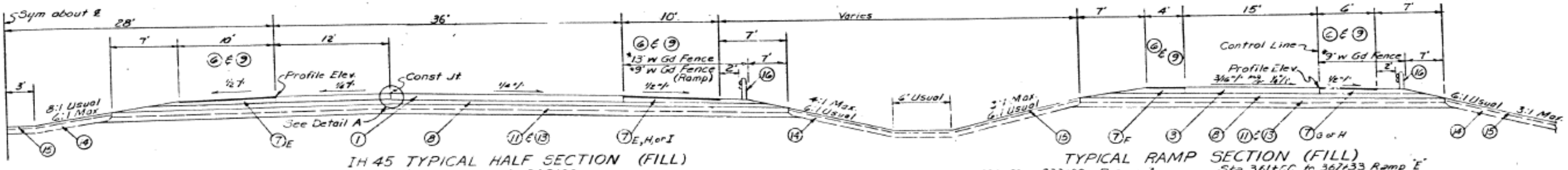
PROJECT LAYOUT

6	TEXAS	I-45-3(62)278	2
18	DALLAS		



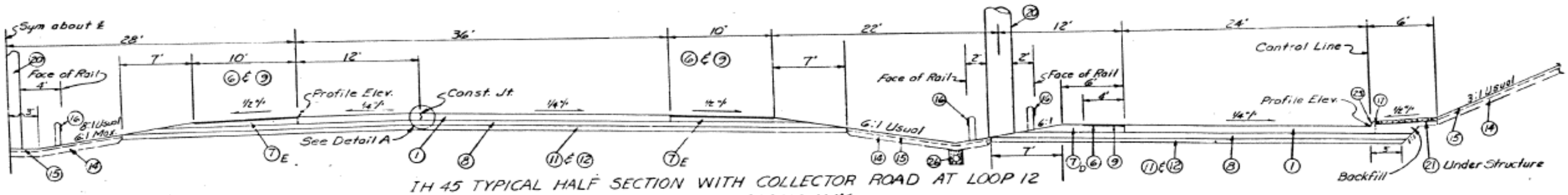
IH 45 TYPICAL HALF SECTION (CUT)
Sta 225+00 to 307+00
Sta 383+00 to 387+00

TYPICAL RAMP SECTION (CUT)
Sta 333+00 to 352+00 Ramp A Sta 358+45 to 361+00 Ramp E

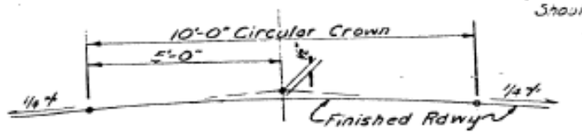


IH 45 TYPICAL HALF SECTION (FILL)
Sta 287+00 to 295+00
Sta 307+00 to 383+00
Sta 387+00 to 396+00

TYPICAL RAMP SECTION (FILL)
Sta 330+20 to 333+00 Ramp A
Sta 329+42 to 357+12 Ramp B
Sta 349+88 to 357+66 Ramp C
Sta 362+01 to 367+50 Ramp D
Sta 361+00 to 367+33 Ramp E
Sta 329+12 to 341+92 Ramp F
Sta 341+50 to 347+21 Ramp G



IH 45 TYPICAL HALF SECTION WITH COLLECTOR ROAD AT LOOP 12
Sta 297+54 to 309+00 Lt M℄
Sta 296+80 to 309+00 Rt M℄



DETAIL A
No Scale

*⑦ Asphalt Stabilized Base Shoulders
(S.Y.'s for Av. Rate are based on Shoulder widths indicated below)

7A	1133 #/S.Y.	@ 6'
7B	951 #/S.Y.	@ 8'
7C	902 #/S.Y.	@ 11'
7D	1012 #/S.Y.	@ 6'
7E	844 #/S.Y.	@ 8'
7F	971 #/S.Y.	@ 4'
7G	856 #/S.Y.	@ 6'
7H	733 #/S.Y.	@ 9'
7I	633 #/S.Y.	@ 13'
7J	1097 #/S.Y.	@ 10'
7K	990 #/S.Y.	@ 8'
7L	1220 #/S.Y.	@ 5'

LEGEND

1. 8" CONTINUOUS REINFORCED CONCRETE PAVEMENT (CRCP)
3. 8" CONCRETE PAVEMENT CONTRACTION DESIGN (CPCD)
4. 10" UNIFORM CONCRETE PAVEMENT (CPCD)
6. 12S#/S.Y. ASPHALTIC CONCRETE PAVEMENT
*7. ASPHALT STABILIZED BASE
8. APPROX. 6" SOIL CEMENT BASE (PLANT MIX)
9. TACK COAT
11. APPROX. 6" SUBGRADE STABILIZED WITH 4% LIME
12. APPROX. 6" UNDERCUT IN ROCK CUTS BACKFILLED WITH SELECT MATERIAL
13. APPROX. 12" SELECT MATERIAL
14. APPROX. 6" TOPSOIL
15. APPROX. 3" (COMPACTED) MULCH SOD, BRDCST, SEEDING AND FERTILIZER
16. GALVANIZED STEEL BEAM GD. FENCE (CL. B) WHERE REQUIRED*
17. 3/4" EXPANSION JOINT MATERIAL
18. EXISTING CONCRETE PAVEMENT
19. JIGGLE BARS
20. BRIDGE COLUMN
21. RIPRAP
22. TRAFFIC BUTTON
23. TYPE I CURB (5")
25. TYPE III CURB (3")
26. 6" PIPE UNDERDRAIN
27. 5" DOWELLED CONCRETE MEDIAN (CL. B CONC.)
28. TYPE II CURB (4")

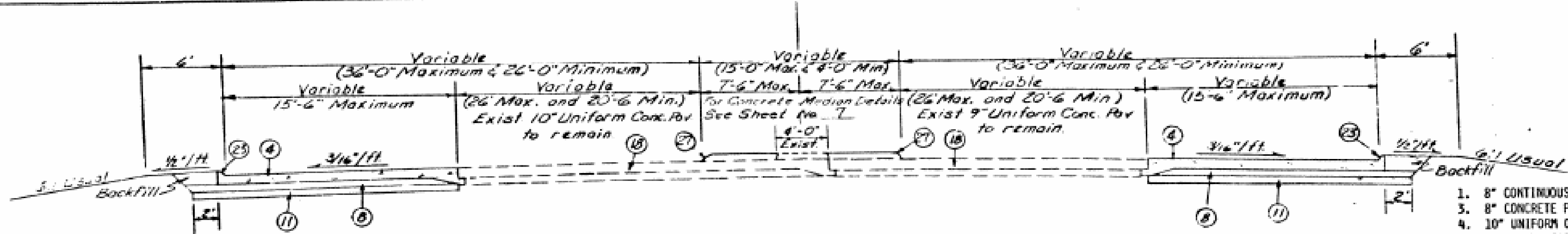
*REQUIRED WHERE SLOPE OF EMBANKMENT IS GREATER THAN 6:1 WITHIN THIRTY FEET OF THE OUTSIDE FREEWAY LANE LINE AND AS SHOWN ON GALVANIZED STEEL BEAM GUARD FENCE SUMMARY.

4

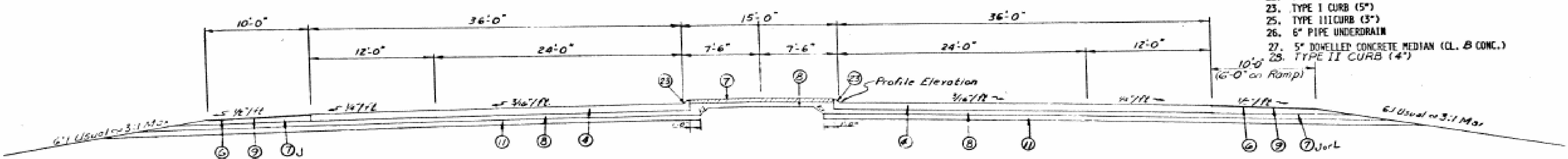
TYPICAL SECTIONS
SHEET 2 OF 5 SHEETS

REV 10-2-71

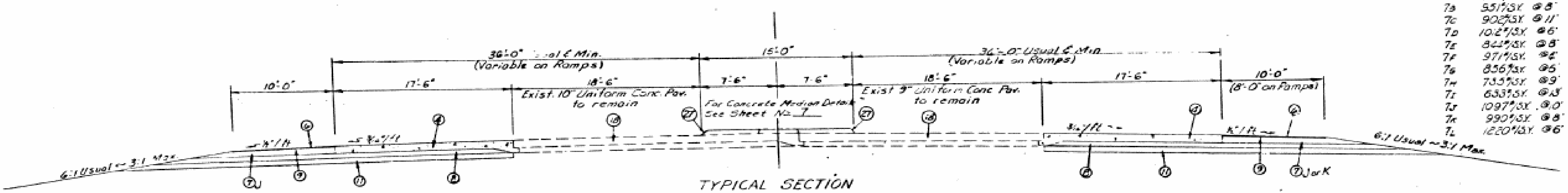
FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.
6	TEXAS	I 45-3(62) 278
STATE DIST. NO.	COUNTY	CONT.	SECT.
18	DALLAS	92	



LOOP 12 TYPICAL SECTION
Sta 73+50 to 76+30



LOOP 12 TYPICAL SECTION
Sta. 57+41 to 61+00
Sta. 65+39 to 72+50
Sta. 53+30 to 57+74



TYPICAL SECTION
LOOP 12 WIDENING
Sta 42+34 to 53+00
Sta 72+50 to 73+50

LEGEND

1. 8" CONTINUOUS REINFORCED CONCRETE PAVEMENT (CRCP)
3. 8" CONCRETE PAVEMENT CONTRACTION DESIGN (CPCD)
4. 10" UNIFORM CONCRETE PAVEMENT (CPCD)
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28. TYPE II CURB (4")

*REQUIRED WHERE SLOPE OF EMBANKMENT IS GREATER THAN 6:1 WITHIN THIRTY FEET OF THE OUTSIDE FREEWAY LANE LINE AND AS SHOWN ON GALVANIZED STEEL BEAM GUARD FENCE SUMMARY.

*(7) Asphalt Stabilized Base Shoulders
(S.Y.'s for Av. Rate are based on Shoulder widths indicated below)

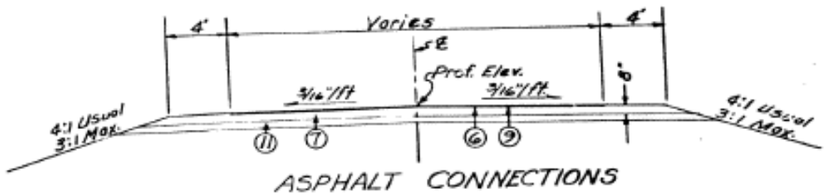
7A	1133#/S.Y.	@4'
7B	551#/S.Y.	@8'
7C	902#/S.Y.	@11'
7D	1012#/S.Y.	@6'
7E	844#/S.Y.	@8'
7F	971#/S.Y.	@6'
7G	856#/S.Y.	@5'
7H	733#/S.Y.	@9'
7I	633#/S.Y.	@13'
7J	1097#/S.Y.	@10'
7K	990#/S.Y.	@8'
7L	1220#/S.Y.	@6'

5

TYPICAL SECTIONS
SHEET 3 OF 5 SHEETS

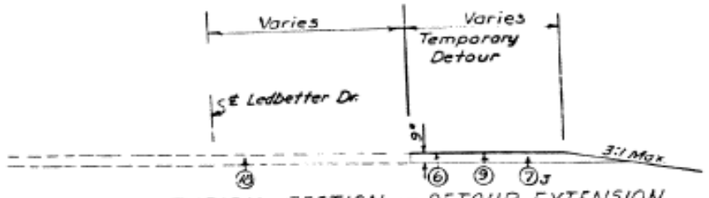
REV. 10-4-71

FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
6	TEXAS	I 45-3(62)278	
STATE DIST. NO.	COUNTY	CONT. SECT.	
18	DALLAS	92	



ASPHALT CONNECTIONS

Sta. 0+00 to Sta. 1+00 & Sta. 6+51 to Sta. 8+45 LINFIELD STREET
Sta. 6+95 to Sta. 7+46 & Sta. 12+00 to Sta. 12+55 OVERTON ROAD



TYPICAL SECTION — DETOUR EXTENSION
LEDBETTER DRIVE AT US HWY 75

LEGEND

1. 8" CONTINUOUS REINFORCED CONCRETE PAVEMENT (CRCP)
3. 8" CONCRETE PAVEMENT CONTRACTION DESIGN (CPCD)
4. 10" UNIFORM CONCRETE PAVEMENT (CPCD)
6. 125#/S.Y. ASPHALTIC CONCRETE PAVEMENT
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9. TACK COAT
11. APPROX. 6" SUBGRADE STABILIZED WITH 4% LIME
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13. APPROX. 12" SELECT MATERIAL
14. APPROX. 6" TOPSOIL
15. APPROX. 3" (COMPACTED) MULCH SOD, BRDCST. SEEDING AND FERTILIZER
16. GALVANIZED STEEL BEAM GD. FENCE (CL. B) WHERE REQUIRED*
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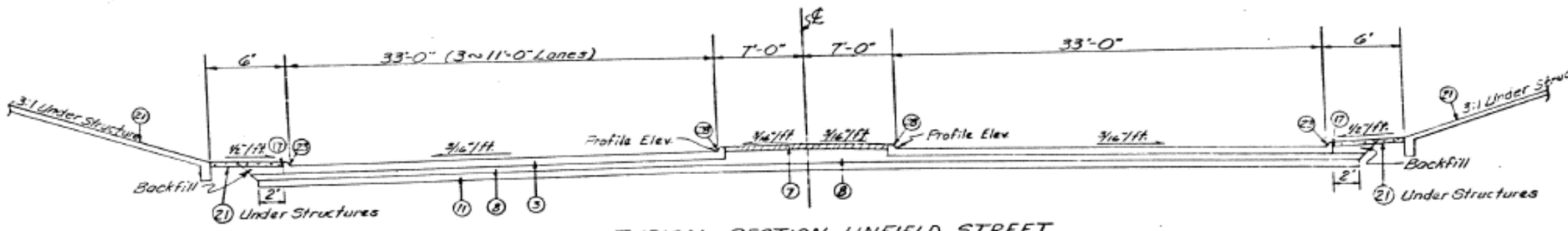
23. TYPE I CURB (5")
25. TYPE III CURB (3")
26. 6" PIPE UNDERDRAIN
27. 5" DOWELLED CONCRETE MEDIAN (CL. B CONC.)
28. TYPE II CURB (4")

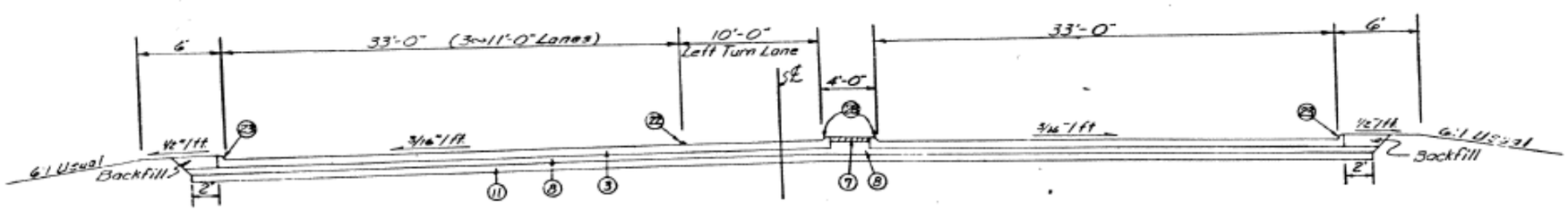
*REQUIRED WHERE SLOPE OF EMBANKMENT IS GREATER THAN 6:1 WITHIN THIRTY FEET OF THE OUTSIDE FREEWAY LANE LINE AND AS SHOWN ON GALVANIZED STEEL BEAM GUARD FENCE SUMMARY.

*(7) Asphalt Stabilized Base Shoulders
(S.Y.'s for Av. Rate are based on Shoulder Widths indicated below

7A	1133#/S.Y.	@ 4"
7B	951#/S.Y.	@ 8"
7C	902#/S.Y.	@ 11"
7D	1012#/S.Y.	@ 6"
7E	824#/S.Y.	@ 8
7F	971#/S.Y.	@ 4"
7G	856#/S.Y.	@ 6"
7H	735#/S.Y.	@ 9"
7I	633#/S.Y.	@ 13"
7J	1097#/S.Y.	@ 10"
7K	950#/S.Y.	@ 8
7L	1220#/S.Y.	@ 6



TYPICAL SECTION LINFIELD STREET
Sta. 3+20 to Sta. 6+51



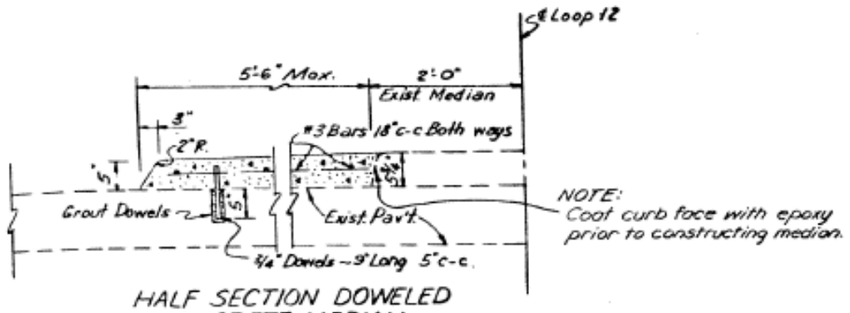
TYPICAL SECTION LINFIELD STREET
AND OVERTON ROAD
Sta. 1+00 to Sta. 3+20 LINFIELD STREET
Sta. 7+46 to Sta. 12+00 OVERTON ROAD

6

TYPICAL SECTIONS
SHEET 4 OF 5 SHEETS

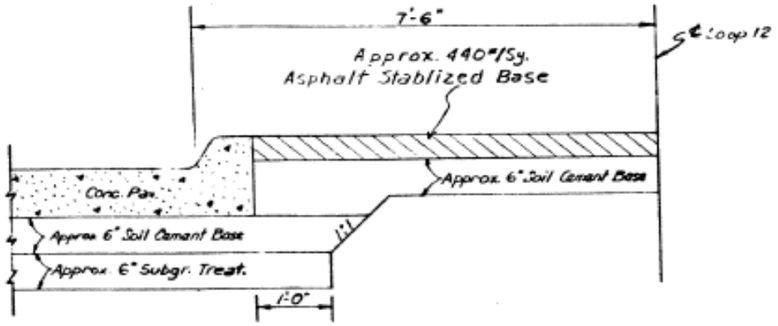
REV. 10-2-71

STATE	FEDERAL PROJECT NO.	SHEET NO.
TEXAS	I 45-3(62)278	6
STATE DIST. NO.	COUNTY	CONT.	SECT.	JOB
	DALLAS	92	74	

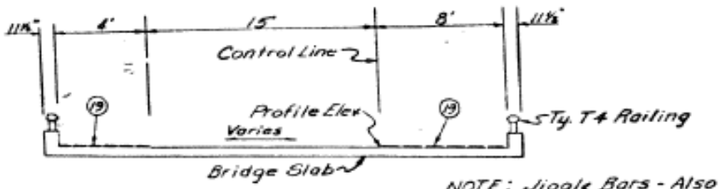


HALF SECTION DOWELED CONCRETE MEDIAN

NOTE: Use dowels only on sections four feet or less.

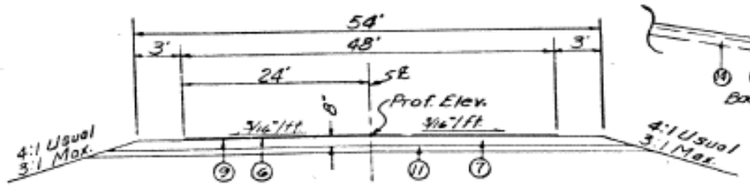


HALF SECTION A.S.B. MEDIAN

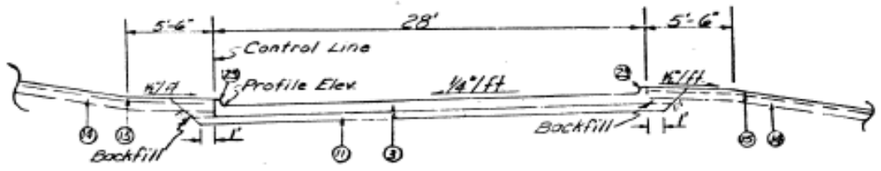


NOTE: Jiggle Bars - Also used on Trinity River Bridge

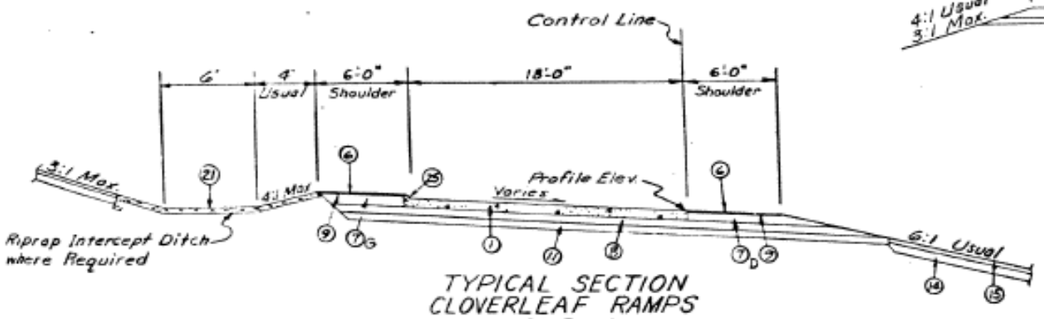
TYPICAL SECTION CONNECTION BRIDGE



DETOUR TYPICAL SECTION TWO WAY TRAFFIC AT LOOP 12

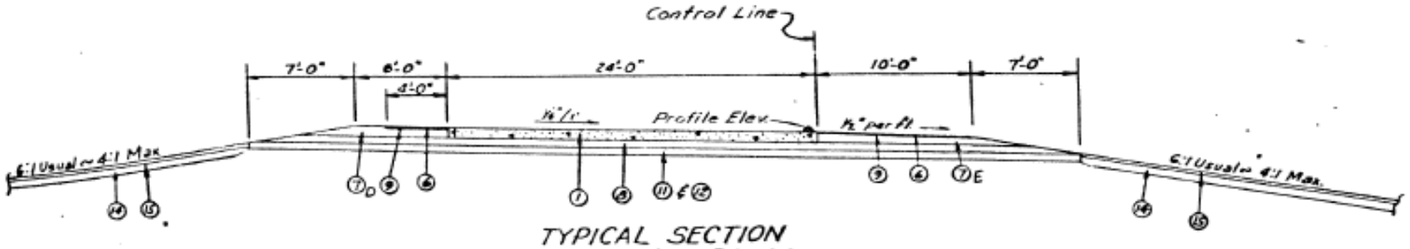


CURBED FRONTAGE ROAD TYPICAL SECTION
Sta 311+31 to 354+52
Sta 357+00 to 394+63



TYPICAL SECTION CLOVERLEAF RAMPS AT LOOP 12

2+38 to 31+41 N.E. Ramp
11+63 to 31+61 S.E. Ramp
Sta 31+00 to 101+45 S.W. Ramp
Sta 11+21 to 31+00 N.W. Ramp



TYPICAL SECTION COLLECTOR ROADS
Sta 309+00 to 323+12 Lt. M℄
Sta 309+00 to 341+50 Rt. M℄

LEGEND

1. 8" CONTINUOUS REINFORCED CONCRETE PAVEMENT (CRCP)
3. 8" CONCRETE PAVEMENT CONTRACTION DESIGN (CPCD)
4. 10" UNIFORM CONCRETE PAVEMENT (CPCD)
6. 125#/S.Y. ASPHALTIC CONCRETE PAVEMENT
* 7. ASPHALT STABILIZED BASE
8. APPROX. 6" SOIL CEMENT BASE (PLANT MIX)
9. TACK COAT
11. APPROX. 6" SUBGRADE STABILIZED WITH 4% LIME
12. APPROX. 6" UNDERCUT IN ROCK CUTS BACKFILLED WITH SELECT MATERIAL
13. APPROX. 12" SELECT MATERIAL
14. APPROX. 6" TOPSOIL
15. APPROX. 3" (COMPACTED) MULCH STD. BRDCST. SEEDING AND FERTILIZER
16. GALVANIZED STEEL BEAM GD. FENCE (CL. B) WHERE REQUIRED"
17. 3/4" EXPANSION JOINT MATERIAL
18. EXISTING CONCRETE PAVEMENT
19. JIGGLE BARS
20. BRIDGE COLUMN
21. RIPRAP
22. TRAFFIC BUTTON
23. TYPE I CURB (5")
25. TYPE III CURB (3")
26. 6" PIPE UNDERDRAIN
27. 5" BONDED CONCRETE MEDIAN (CL. A CONC.)
28. TYPE II CURB (4")

"REQUIRED WHERE SLOPE OF EMBANKMENT IS GREATER THAN 6:1 WITHIN THIRTY FEET OF THE OUTSIDE FREEWAY LANE LINE AND AS SHOWN ON GALVANIZED STEEL BEAM GUARD FENCE SUMMARY.

*(7) Asphalt Stabilized Base Shoulders
(S.Y.'s for Av. Rate are based on Shoulder widths indicated below.)

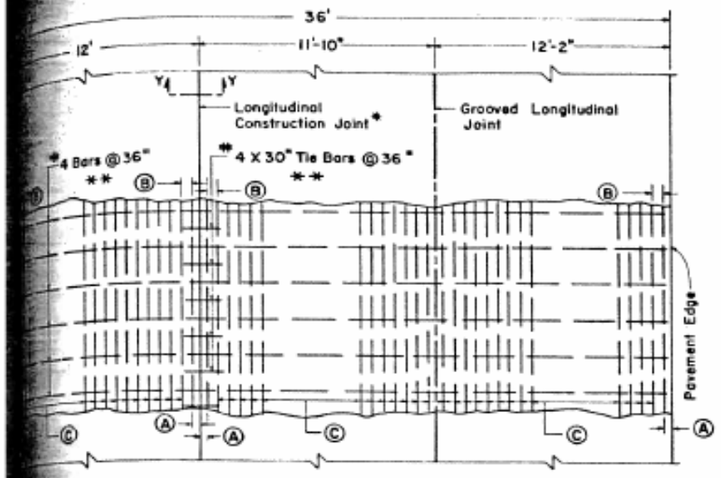
7A	1133#/S.Y.	@ 4'
7B	951#/S.Y.	@ 8'
7C	902#/S.Y.	@ 11'
7D	1012#/S.Y.	@ 6'
7E	844#/S.Y.	@ 8'
7F	971#/S.Y.	@ 4'
7G	856#/S.Y.	@ 6'
7H	735#/S.Y.	@ 9'
7I	633#/S.Y.	@ 13'
7J	1097#/S.Y.	@ 10'
7K	990#/S.Y.	@ 8'
7L	1220#/S.Y.	@ 6'

7

TYPICAL SECTIONS
SHEET 5 OF 5 SHEETS

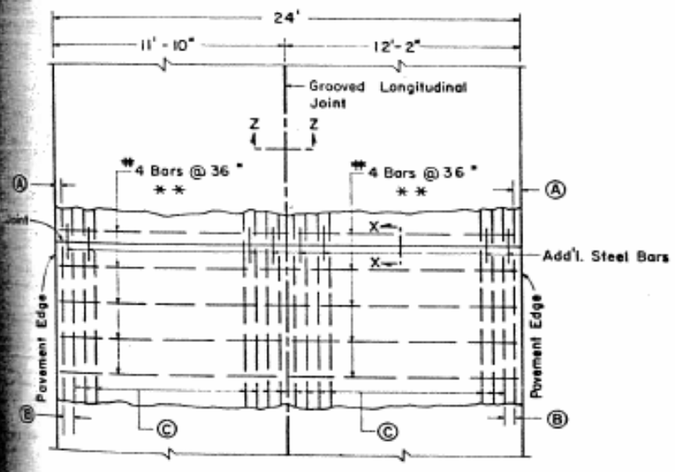
REV. 10 - 3 - 71

FED. AID PROJ. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
	TEXAS	I 45-3(62)278	7
STATE DIST. NO.	COUNTY		
18	DALLAS		

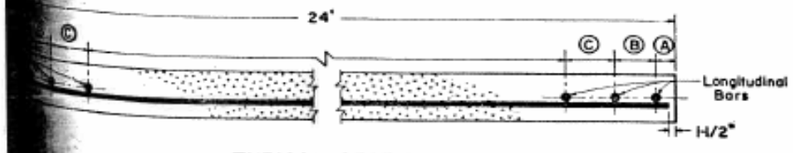


THREE LANE PAVEMENT PLAN
(12 ft. and 24 ft. Placement)

* WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PLACE THE PAVEMENT THE FULL ROADWAY WIDTH AS ONE PLACEMENT. IF SO PLACED, THE LONGITUDINAL CONSTRUCTION JOINT SHOWN SHALL BE REPLACED BY THE GROOVED LONGITUDINAL JOINT.



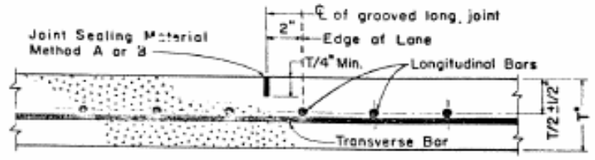
TWO LANE PAVEMENT PLAN
(24 ft. Placement) *



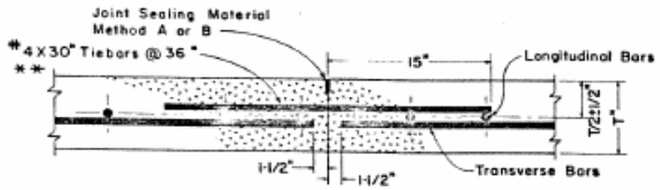
TYPICAL SECTION
(24 ft. Placement)

*LANE WIDTHS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD NOT BE USED IF IN CONFLICT WITH TYPICAL CROSS SECTIONS SHOWN ELSEWHERE IN THE PLANS.

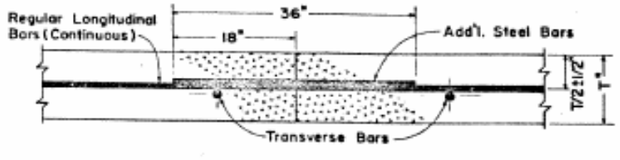
Per Cent Long Steel	Pavement Thickness "T" In.	Bar Size	24 ft. Placement Width: Spacing c-c (A) In	(B) In	(C) In	No. of Bars	Steel #/sy (1)	12 ft. Placement Width: Spacing c-c (A) In	(B) In	(C) In	No. of Bars	Steel #/sy (1)	Add'l Steel @ Trans. Const. Jt.: Size	(2) No. per 24" place. width	(2) No. per 12" place. width	Weight #/ft. based on 12" placement
0.5	10	No.6	3	5	8.5	35	21.72	3	5.25	8.5	18	22.28	3/4"ø x36"	18	9	3.38
	9	No.5	3	4.5	6.5	45	19.60	3	4	6.5	23	20.00	5/8"ø x36"	22	11	2.87
	8	No.5	3	6	7.5	39	17.26	3	5.25	7.5	20	17.65	5/8"ø x36"	20	10	2.61
	7	No.5	3	5	8.5	35	15.69	4	8.5	8.5	17	15.30	5/8"ø x36"	18	9	2.35
	6	No.4	3	4.5	7	42	12.53	3	6	7	21	12.53	1/2"ø x36"	20	11	1.84
0.6	10	No.6	3	7	7.25	40	24.53	3	7.25	7.25	20	24.53	3/4"ø x36"	20	10	3.76
	9	No.6	3	5	8	57	22.84	3	5	8	19	23.41	3/4"ø x36"	19	10	3.76
	8	No.5	3	6.25	6.25	46	20.00	3	6.5	6.25	24	20.78	5/8"ø x36"	23	11	2.63
	7	No.5	3	7	7.25	40	17.65	3	7.25	7.25	20	17.65	5/8"ø x36"	20	10	2.64
	6	No.5	3	5	8.5	35	15.69	3	5.25	8.5	18	16.08	5/8"ø x36"	18	9	2.38



GROOVED LONGITUDINAL JOINT
Section Z–Z



LONGITUDINAL CONSTRUCTION JOINT
Section Y–Y



TRANSVERSE CONSTRUCTION JOINT
Section X–X

(REV.)
** SEE DESIGN DETAIL RC(CPCR)-71A FOR STEEL REQUIREMENTS FOR RAMP CONNECTIONS.

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 REINFORCEMENT 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. WITHIN ANY AREA BOUNDED BY TWO FEET OF PAVEMENT LENGTH MEASURED PARALLEL TO THE CENTERLINE AND TWELVE FEET OF PAVEMENT WIDTH MEASURED PERPENDICULAR TO THE PAVEMENT CENTERLINE, NOT OVER 33% OF THE REGULAR LONGITUDINAL STEEL SHALL BE SPLICED.
5. LONGITUDINAL AND TRANSVERSE BARS SHALL BE STEEL CONFORMING TO ASTM A-615 OR ASTM A-616 (GRADE 60) AS NOTED IN THE SPECIFICATIONS.
6. SPLICES SHALL BE A MINIMUM OF 24 TIMES THE NOMINAL DIAMETER OF THE BAR.
7. BARS OF ASTM DESIGNATIONS: A-615 OR A-616, GRADE 60 STEEL SHALL NOT BE BENT. IF THE CONTRACTOR ELECTS TO BEND THE TIEBARS, THEY SHALL BE STEEL CONFORMING TO ASTM DESIGNATION: A-615, GRADE 40, AND SPACED AT 24" C-C.
8. AT TRANSVERSE CONSTRUCTION JOINTS THE REGULAR LONGITUDINAL BARS SHALL EXTEND BEYOND THE JOINT SO THAT THE BAR SPLICES FOR THE REGULAR LONGITUDINAL BARS SHALL BE A MINIMUM OF FOUR FEET FROM THE CONSTRUCTION JOINT. AT LONGITUDINAL CONSTRUCTION JOINTS, IF THE CONTRACTOR ELECTS TO CONTINUE THE REGULAR TRANSVERSE STEEL THROUGH THE JOINT, THE #4 @ TIEBARS SHOWN HEREON MAY BE DELETED. VIBRATION WITH HAND MANIPULATED MECHANICAL VIBRATORS WILL BE REQUIRED ADJACENT TO ALL TRANSVERSE CONSTRUCTION JOINTS.
9. 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 YIELD 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.
10. THE CHAIRS USED TO SUPPORT THE BAR MAT SHALL BE OF SUFFICIENT STRUCTURAL QUALITY AND NUMBER TO HOLD THE MAT WITHIN THE PLACEMENT HEIGHT TOLERANCES, AND SHALL BE OF A TYPE APPROVED BY THE ENGINEER.
11. IN THE NORMAL 36" PLACEMENT FOR THE TRANSVERSE BARS, CHAIRS SHALL BE PLACED UNDER EVERY TRANSVERSE BAR. THE TRANSVERSE SPACING SHALL BE A 48" MAXIMUM. PLACEMENT MAY BE STAGGERED SO THAT CHAIRS IN ALTERNATE ROWS ARE CENTERED BETWEEN THE CHAIRS IN ADJACENT ROWS.
12. JOINT GROOVE AND SEAL DETAILS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS
13. LONGITUDINAL AND TRANSVERSE STEEL SPACING SHALL NOT VARY MORE THAN ONE-TWELFTH OF THE SPACING SHOWN HEREON.
14. WHEN MACHINE PLACING OF STEEL REINFORCEMENT IS USED, THE USE OF CHAIRS SHALL NOT BE REQUIRED, AND THE TRANSVERSE STEEL MAY BE PLACED EITHER ABOVE OR BELOW THE LONGITUDINAL STEEL.

NOTE: THE SPACINGS (B) SHOWN IN THE ABOVE PLACEMENT TABLE ARE THE MAXIMUM ALLOWABLE SPACINGS. WHERE THE PROPOSED PLACEMENT WIDTHS VARY FROM THE BASIC DESIGN WIDTH SHOWN, THE SPACING (B) AND THE ADJACENT SPACING (C) SHALL BE ADJUSTED TO ACCOMMODATE A REINFORCEMENT ARRANGEMENT EQUAL TO OR SLIGHTLY HEAVIER THAN THAT SHOWN AS DIRECTED BY THE ENGINEER.

(1) INCLUDES BOTH REGULAR LONGITUDINAL AND TRANSVERSE BARS BASED UPON 1 FOOT PAVEMENT LENGTHS FOR THE WIDTH INDICATED. ALL TRANSVERSE STEEL IS #4 BARS AT 36" CENTERS. **

(2) THIS SHALL BE THE MINIMUM NUMBER OF ADDITIONAL STEEL BARS TO BE PLACED PER LANE. THE SPACING OF THE ADDITIONAL STEEL BARS SHALL BE VARIED AS DIRECTED IN ORDER TO PROVIDE A MINIMUM CLEARANCE OF 1-3/4" FROM EACH REGULAR LONGITUDINAL REINFORCING BAR

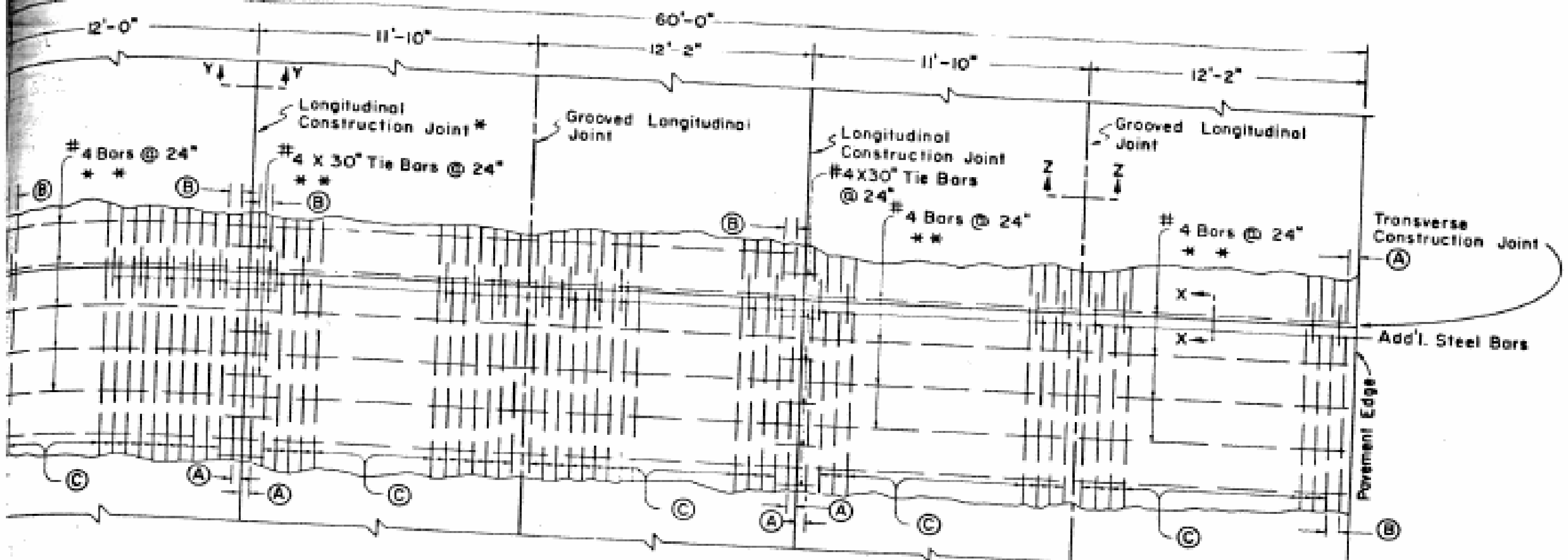
TEXAS HIGHWAY DEPARTMENT

CONCRETE PAVEMENT DETAILS CONTINUOUSLY REINFORCED STEEL BARS

CPCR (B)- 71 (1)

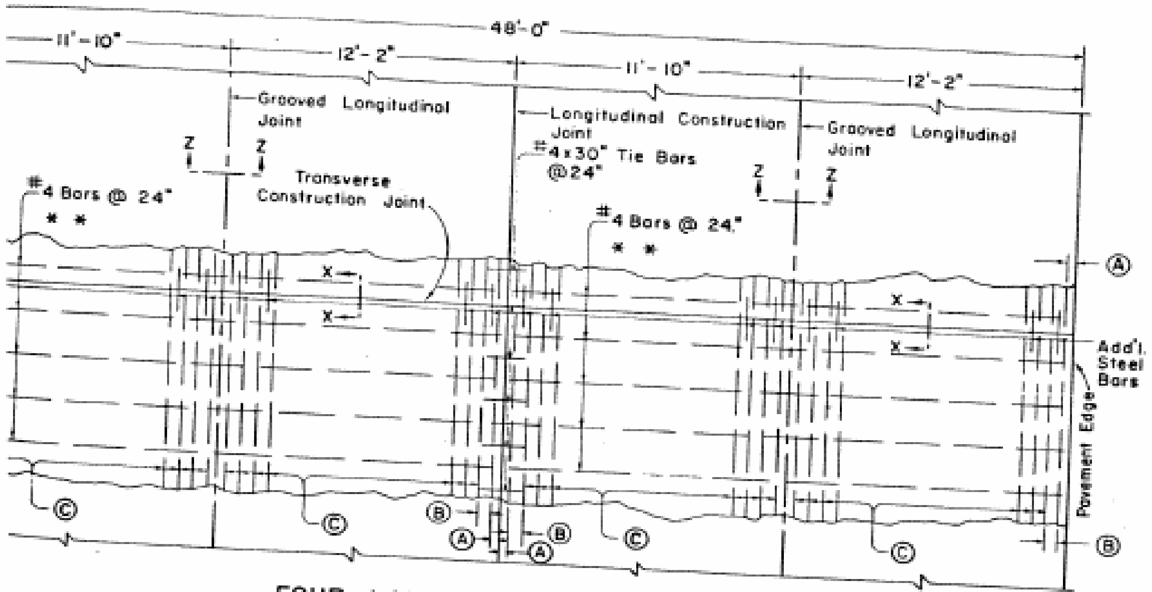
290

DN:	DRAWING	DATE	FED. RD. DIV. NO.		
CK DN:	ORIGINAL	FEB. 1969	6	TEXAS	145-3(62)278 290
DW:	REVISED	DEC. 1, 1969			
CK DW:					
TR:			18	DALLAS	52 14 16 1144
CK TR:					

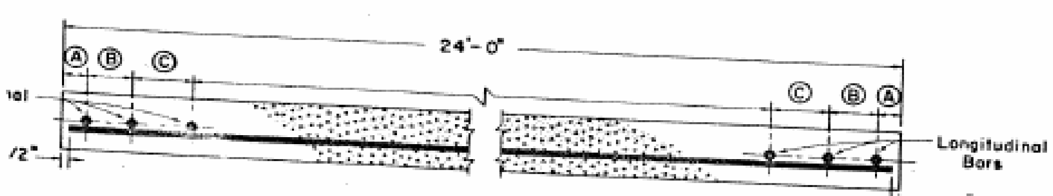


FIVE LANE PAVEMENT PLAN
(12 ft. and 24 ft. Placement)

* WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PLACE THE PAVEMENT THE FULL ROADWAY WIDTH AS ONE PLACEMENT. IF SO PLACED, THE LONGITUDINAL CONSTRUCTION JOINT SHOWN SHALL BE REPLACED BY THE GROOVED LONGITUDINAL JOINT.

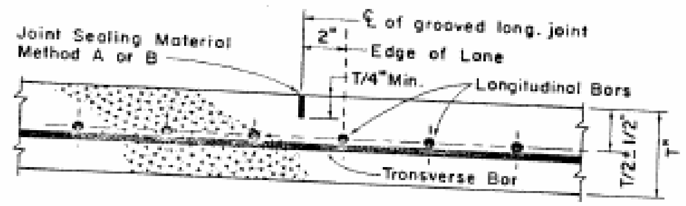


FOUR LANE PAVEMENT PLAN
(24 ft. Placement)

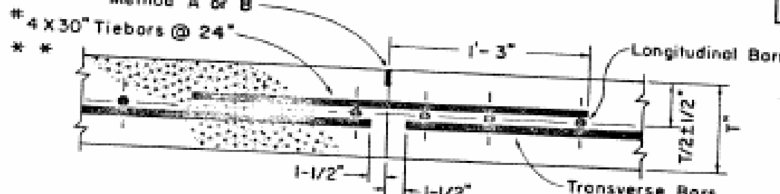


TYPICAL SECTION
(24 ft. Placement)

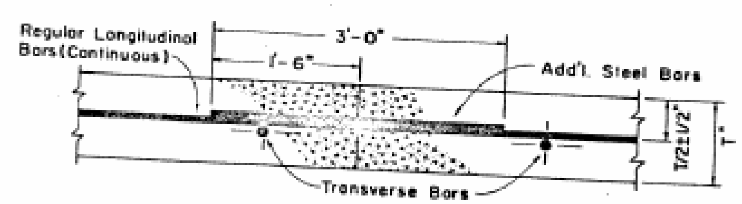
* LANE WIDTHS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD NOT BE USED IF IN CONFLICT WITH TYPICAL CROSS SECTIONS SHOWN ELSEWHERE IN THE PLANS.



GROOVED LONGITUDINAL JOINT
Section Z-Z



LONGITUDINAL CONSTRUCTION JOINT
Section Y-Y



TRANSVERSE CONSTRUCTION JOINT
Section X-X

** SEE DESIGN DETAIL RC (CPCR1-71)(Ramp) FOR STEEL REQUIREMENTS NEAR RAMP CONNECTIONS.

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 REINFORCEMENT, 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. WITHIN ANY AREA BOUNDED BY TWO FEET OF PAVEMENT LENGTH MEASURED PARALLEL TO THE CENTERLINE AND TWELVE FEET OF PAVEMENT WIDTH MEASURED PERPENDICULAR TO THE PAVEMENT CENTERLINE, NOT OVER 33% OF THE REGULAR LONGITUDINAL STEEL SHALL BE SPLICED.
5. LONGITUDINAL AND TRANSVERSE BARS SHALL BE STEEL CONFORMING TO ASTM A-615 OR ASTM A-616 (GRADE 60) AS NOTED IN THE SPECIFICATIONS.
6. SPLICES SHALL BE A MINIMUM OF 24 TIMES THE NOMINAL DIAMETER OF THE BAR.
7. BARS OF ASTM DESIGNATIONS: A-615 OR A-616, GRADE 60 STEEL SHALL NOT BE BENT. IF THE CONTRACTOR ELECTS TO BEND THE TIEBARS, THEY SHALL BE STEEL CONFORMING TO ASTM DESIGNATIONS: A-615, GRADE 40 AND SPACED 22" C-C, FOR 37" TO 60" PAVEMENT WIDTHS.
8. AT TRANSVERSE CONSTRUCTION JOINTS THE REGULAR LONGITUDINAL BARS SHALL EXTEND BEYOND THE JOINT SO THAT THE BAR SPLICES FOR THE REGULAR LONGITUDINAL BARS SHALL BE A MINIMUM OF FOUR FEET FROM THE CONSTRUCTION JOINT. AT LONGITUDINAL CONSTRUCTION JOINTS IF THE CONTRACTOR ELECTS TO CONTINUE THE REGULAR TRANSVERSE STEEL THROUGH THE JOINT, THE #4 TIEBARS SHOWN HEREON MAY BE DELETED. VIBRATION WITH HAND MANIPULATED MECHANICAL VIBRATORS WILL BE REQUIRED ADJACENT TO ALL TRANSVERSE CONSTRUCTION JOINTS.
9. 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 YIELD 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.
10. THE CHAIRS USED TO SUPPORT THE BAR MAT SHALL BE OF SUFFICIENT STRUCTURAL QUALITY AND NUMBER TO HOLD THE MAT WITHIN THE PLACEMENT HEIGHT TOLERANCES, AND SHALL BE OF A TYPE APPROVED BY THE ENGINEER.
11. IN THE NORMAL 24" PALCEMENT FOR THE TRANSVERSE BARS, CHAIRS SHALL BE PLACED UNDER EVERY TRANSVERSE BAR. THE TRANSVERSE SPACING SHALL BE A 48" MAXIMUM. PLACEMENT MAY BE STAGGERED SO THAT CHAIRS IN ALTERNATE ROWS ARE CENTERED BETWEEN THE CHAIRS IN ADJACENT ROWS.
12. JOINT GROOVE AND SEAL DETAILS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
13. LONGITUDINAL AND TRANSVERSE STEEL SPACING SHALL NOT VARY MORE THAN ONE-TWELFTH OF THE SPACING SHOWN HEREON.
14. WHEN MACHINE PLACING OF STEEL REINFORCEMENT IS USED, THE USE OF CHAIRS WILL NOT BE REQUIRED, AND THE TRANSVERSE STEEL MAY BE PLACED EITHER ABOVE OR BELOW THE LONGITUDINAL STEEL.

*Per Cent Long Steel	Pavement Thickness "T" in.	Bar Size	24 ft. Placement Width: Spacing c-c Ⓐ in	Ⓑ in	Ⓒ in	No. of Bars	Steel #/sy ①	12 ft. Placement Width: Spacing c-c Ⓐ in	Ⓑ in	Ⓒ in	No. of Bars	Steel #/sy ①	Add'l Steel @ Trans. Const. Jt.: Size	② No. per 24' place. width	② No. per 12' place. width	Weight #/ft. based on 12' place.
0.5	10	No.6	3	5	8.5	35	22.72	3	5.25	8.5	18	23.28	3/4"øx36"	18	9	3.38
	9	No.5	3	4.5	6.5	45	20.61	3	4	6.5	23	21.00	5/8"øx36"	22	11	2.87
	8	No.5	3	6	7.5	39	18.26	3	5.25	7.5	20	18.65	5/8"øx36"	20	10	2.61
	7	No.5	3	5	8.5	35	16.70	4	8.5	8.5	17	16.30	5/8"øx36"	18	9	2.35
	6	No.4	3	4.5	7	42	13.53	3	6	7	21	13.53	1/2"øx36"	20	11	1.84
~~0.6~~	~~10~~	~~No.6~~	~~3~~	~~7~~	~~7.25~~	~~40~~	~~25.52~~	~~3~~	~~7.25~~	~~7.5~~	~~20~~	~~25.52~~	~~3/4"øx36"~~	~~20~~	~~10~~	~~3.76~~
	~~9~~	~~No.6~~	~~3~~	~~5~~	~~8~~	~~37~~	~~23.85~~	~~3~~	~~5~~	~~8~~	~~19~~	~~24.41~~	~~3/4"øx36"~~	~~19~~	~~10~~	~~3.76~~
	~~8~~	~~No.5~~	~~3~~	~~6.25~~	~~6.25~~	~~46~~	[illegible]	~~3~~	~~8.5~~	~~6.25~~	~~24~~	~~21.78~~	~~5/8"øx36"~~	~~23~~	~~11~~	~~2.87~~
	~~7~~	~~No.5~~	~~3~~	~~7~~	~~7.25~~	~~40~~	~~18.65~~	~~3~~	~~7.25~~	~~7.25~~	~~20~~	~~18.65~~	~~5/8"øx36"~~	~~20~~	~~10~~	~~2.61~~
	~~6~~	~~No.5~~	~~3~~	~~5~~	~~8.5~~	~~35~~	~~16.70~~	~~3~~	~~5.25~~	~~8.5~~	~~16~~	~~17.09~~	~~5/8"øx36"~~	~~18~~	~~9~~	~~2.35~~

NOTE: THE SPACINGS Ⓑ SHOWN IN THE ABOVE PLACEMENT TABLE ARE THE MAXIMUM ALLOWABLE SPACINGS. WHERE THE PROPOSED PLACEMENT WIDTHS VARY FROM THE BASIC DESIGN WIDTH SHOWN, THE SPACING Ⓑ AND THE ADJACENT SPACING Ⓒ SHALL BE ADJUSTED TO ACCOMMODATE A REINFORCEMENT ARRANGEMENT EQUAL TO OR SLIGHTLY HEAVIER THAN THAT SHOWN AS DIRECTED BY THE ENGINEER.

1. INCLUDES BOTH REGULAR LONGITUDINAL AND TRANSVERSE BARS BASED UPON 1 FOOT PAVEMENT LENGTHS FOR THE WIDTH INDICATED. ALL TRANSVERSE STEEL IS #4 BARS AT 24" CENTERS.**
2. THIS SHALL BE THE MINIMUM NUMBER OF ADDITIONAL STEEL BARS TO BE PLACED PER LANE. THE SPACING OF THE ADDITIONAL STEEL BARS SHALL BE VARIED AS DIRECTED IN ORDER TO PROVIDE A MINIMUM CLEARANCE OF 1-3/4" FROM EACH REGULAR LONGITUDINAL REINFORCING BAR.

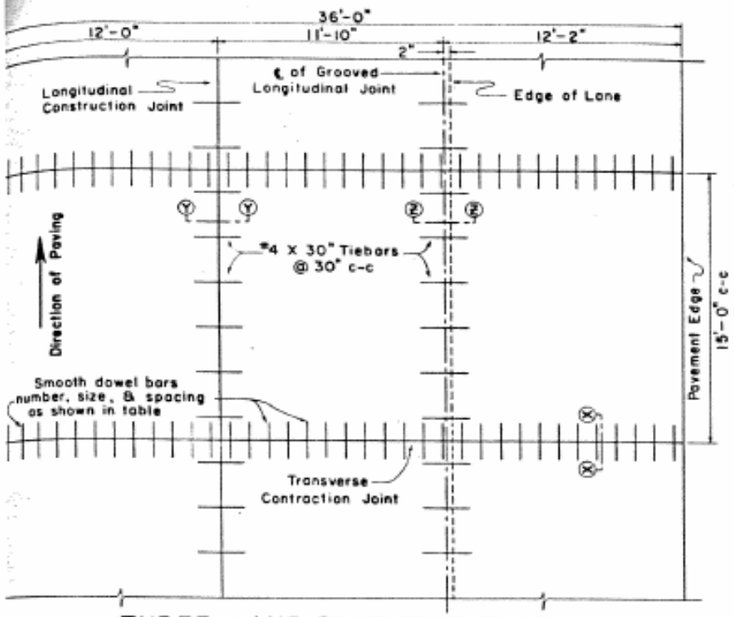
TEXAS HIGHWAY DEPARTMENT

CONCRETE PAVEMENT DETAILS CONTINUOUSLY REINFORCED

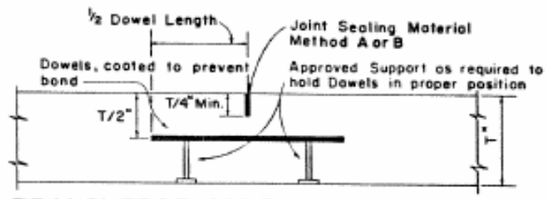
STEEL BARS

CPCR (B)-71 (2) 291

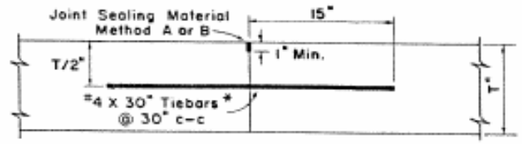
DN	DRAWING	DATE
CK DN		FEB. 1969
DW		



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

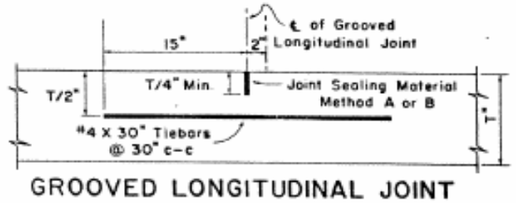


TRANSVERSE CONTRACTION JOINT
Section X-X

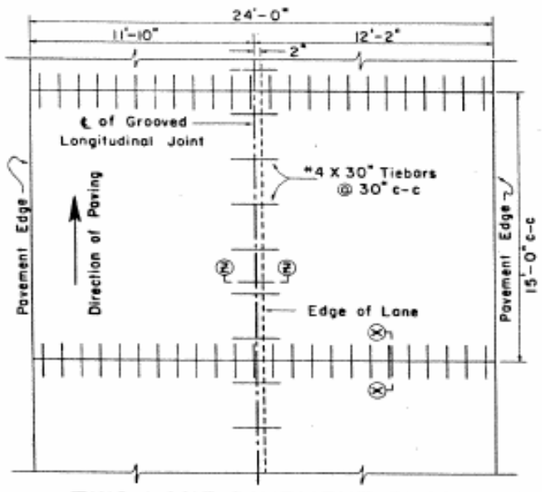


LONGITUDINAL CONSTRUCTION JOINT
Section Y-Y

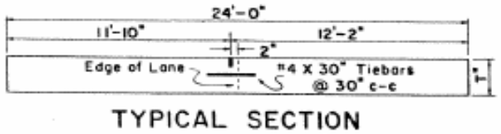
*WITH THE APPROVAL OF THE ENGINEER, MULTIPLE-PIECE TIEBARS (THREADED COUPLING OR OTHER ADEQUATE DEVICE) MAY BE USED TO FACILITATE CONSTRUCTION PROVIDED THE SYSTEM DEVELOPS A FORCE EQUAL TO 1 1/2 TIMES THE MINIMUM FORCE OF THE TIEBER SHOWN. THE SPACINGS FOR THE SYSTEM SHALL BE LESS THAN OR EQUAL TO THE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



GROOVED LONGITUDINAL JOINT
Section Z-Z



TWO LANE PAVEMENT PLAN



TYPICAL SECTION
(24 ft. Placement)*

* 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 SCREENED 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 PC (CPCD-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.)

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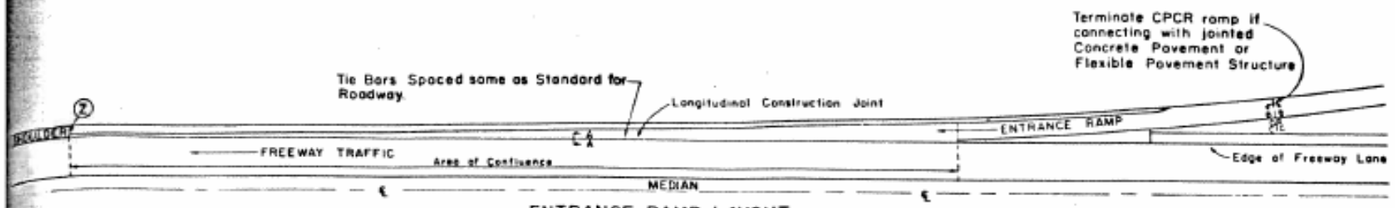
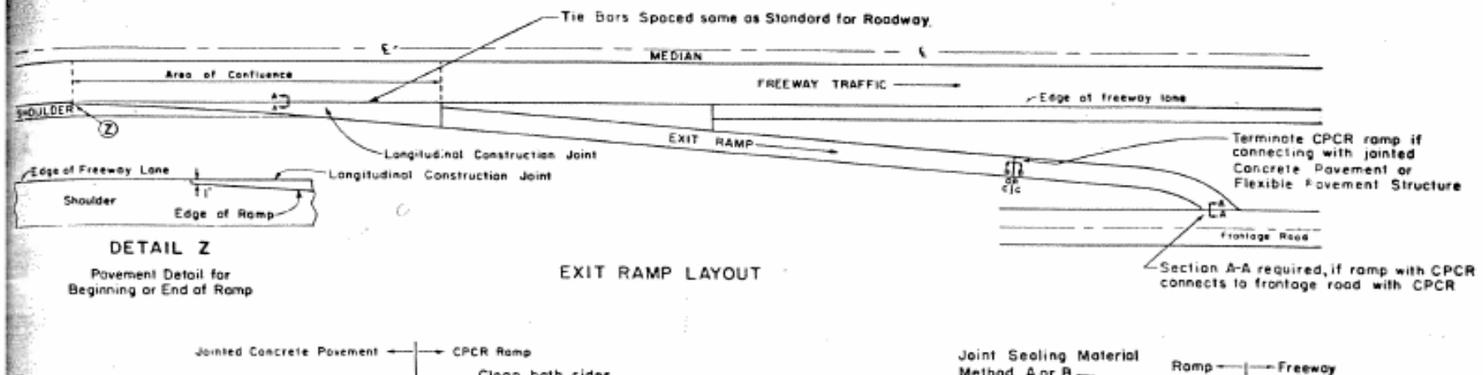
ON:	DRAWING	DATE	FED. AID PROJ. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK. ON:	Original	Feb. 1969		TEXAS	I 45-3(62)278	292
DW:			STATE DIST. NO.	COUNTY	CONT.	SECT.	JOB	HIGHWAY NO.
CK. DW:			18	DALLAS	62	14	16	IH45
TR:								
CK. TR:								



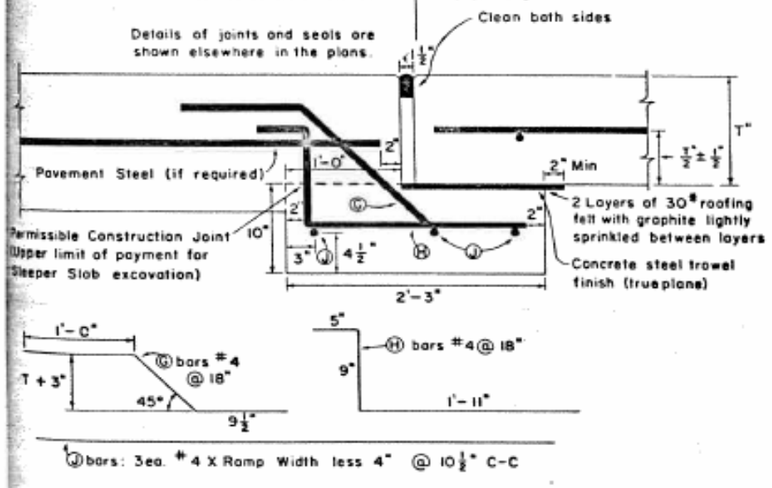
ENTRANCE RAMP LAYOUT



DETAIL Z

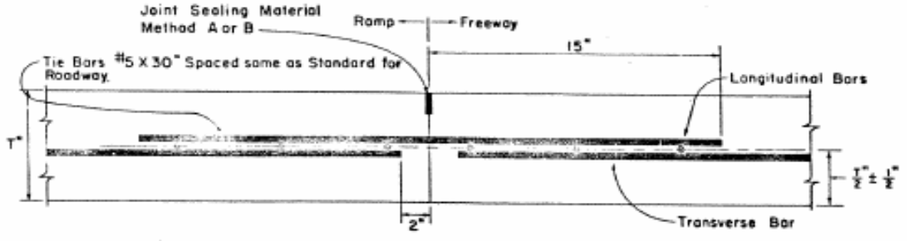
Pavement Detail for Beginning or End of Ramp

EXIT RAMP LAYOUT



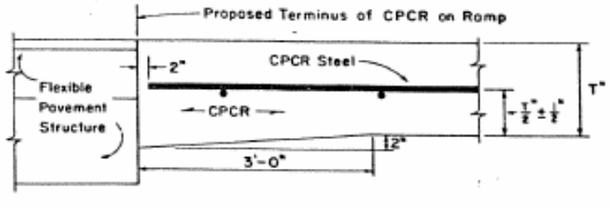
RAMP TERMINUS DETAIL FOR JUNCTURE WITH JOINTED CONCRETE PAVEMENT STRUCTURE

Section C-C



LONGITUDINAL CONSTRUCTION JOINT

Section A-A



DETAIL FOR JUNCTURE WITH FLEXIBLE TYPE PAVEMENT STRUCTURE

Section B-B

GENERAL NOTES

1. FOR FURTHER INFORMATION REGARDING THE PLACEMENT OF CONCRETE AND REINFORCEMENT REFER TO THE GOVERNING SPECIFICATION FOR CONCRETE PAVEMENT.
2. RAMP DETAILS ARE TYPICAL ONLY. GEOMETRIC DETAILS AS TO ALIGNMENT, PAVEMENT WIDTH, PAVEMENT THICKNESS, AND THE CROWN CROSS SLOPE SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
3. THE DESIGN REQUIREMENTS FOR THE PAVEMENT STRUCTURE, I.E. BAR SPACING, BAR SIZE, LAP REQUIREMENTS, ETC., SHALL BE AS SHOWN ON THE APPROPRIATE CPCR DESIGN DETAIL.
4. IF THE CONTRACTOR ELECTS TO CONTINUE THE REGULAR TRANSVERSE STEEL THROUGH THE JOINT AT THE LONGITUDINAL CONSTRUCTION JOINTS, THE NUMBER 5 HOUND TIEBAR AS SHOWN HEREON MAY BE DELETED. THE LOCATION OF THE RAMPS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
5. THE SEQUENCE OF OPERATION IN PLACING THE RAMP SHALL BE AS DIRECTED BY THE ENGINEER. THE LONGITUDINAL STEEL SHALL BE PLACED IN A DIRECTION APPROXIMATELY PARALLEL TO THE DIRECTION OF THE RAMP.
6. **LONGITUDINAL AND TRANSVERSE STEEL SPACING SHALL NOT VARY MORE THAN ONE TWELFTH OF THE SPACING SHOWN HEREON.**
7. **IN THE AREA OF CONFLUENCE TRANSVERSE BARS AND TIE BARS (MAIN LANES AND RAMPS) WILL BE #5 BARS WITH SPACING SAME AS THAT IN STANDARD FOR ROADWAY.**

TEXAS HIGHWAY DEPARTMENT

RAMP CONNECTIONS FOR CONCRETE PAVEMENT CONTINUOUSLY REINFORCED

RC (CPCR)-71 (REV.)

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DN	DRAWING	DATE	FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK. DN.	ORIGINAL	FEB. 1969	6	TEXAS	I45-3(62)278	293
DW.			STATE DIST. NO.	COUNTY	CONT. SECT. JOB	HIGHWAY NO.
CK. DW.			18	DALLAS	92:14:16	IH45
TR.						
CK. TR.						