

DETAIL FOR JUNCTURE WITH FLEXIBLE TYPE PAVEMENT STRUCTURE

NOTE: ADDITIONAL CONCRETE FOR THICKENED EDGE SHALL BE CONSIDERED INCIDENTAL TO VARIOUS BID ITEM.

DETAIL OF LEAVE-OUT SEE GENERAL NOTES IN REFERENCE TO LEAVE-OUTS.

CONCRETE SLAB -

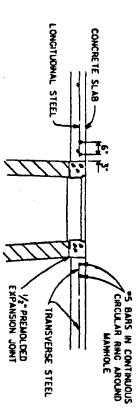
-TRANSVERSE STEEL

95 BARS X 3'-0"

LONGITUDINAL STEEL

LEAVE-OUT

LONGITUDINAL BARS SHALL NOT PROJECT INTO "LEAVE-OUT" FOR INLETS.



SECTION THRU MANHOLE SHOWING ADDED RENFORMING STEEL IN SLAB

REVISED 12/23/86 ADD DETAIL FOR JUNCTURE WITH FLEXIBLE TYPE PAVEMENT STRUCTURE.

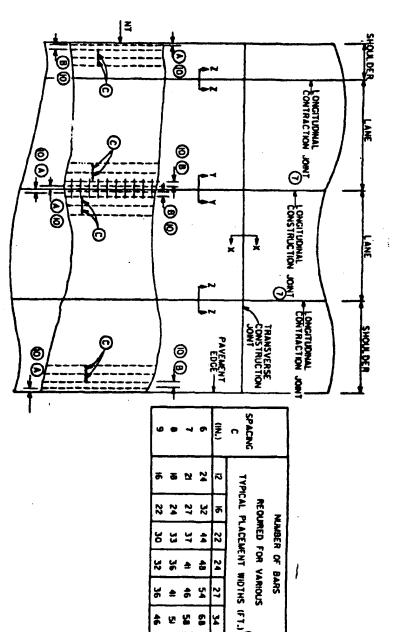
STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION DISTRICT 12

CONCRETE PAVEMENT DETAILS CONTINUOUSLY REINFORCED STEEL BARS

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<b>3</b> 5	2	13	ĸ	-	ð	•	•	(7kg)
5 <b>(</b> )	5 @	5 (j)	<b>\$</b> \$@	• •	6	6	6	LONGITUDINAL BAR SIZE
7	7.5	•	9	7	7	•	9	SPACING C SPACING
<b>თ</b> ₩ ♠	Ø Ø ♣	6 U P	Ø U A	O 10 P	50 N T	0 U A	6	TRANS. BAR SIZE
282	2 S S	E2 33	80 176		2 8 8	23.4 23.4	X <b>3</b> ₽	MAXIMUM PAVEMENT CIVEN TRA SPAC
7 <b>\$</b> \$	75 S	36 57 81	62 88	67 96	05 <b>4.6</b>	53 82	3 2 6	1051
4 % Z	5 % 25	54	5a ± 26	T # 20	3 <b>&amp;</b> 5	2 % %	<b>2</b>	ALLOWABLE QUE WEDTH (FT.) FOR NSVERSE STEEL MGS (FT.)
39.2 39.2	3.5	2.5 5.5 5.5	7 P 80.0	135 D	96.0 96.0	D6.7	120.0 186.0	8 ¥ €

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57

**6** 

LONGITUDINAL AND TRANSVERSE BARS SHALL BE DEFORMED STEEL CONFORMING TO ASTM A-615 OR ASTM A-616 (GRADE 6D) AS NOTED IN THE STANDARD SPECIFICATIONS AND THEREFORE THE PERCENTAGE OF STEEL REQUIRED IS HIGHER THAN THAT FOR WIRE MATS. (GRADE 70 STEEL).

JOINT SEALING MATERIAL METHOD A OR B

E OF LONG. JOHT

- 1/4- MIN.

LONGITUDINAL BARS

TYPICAL PAVEMENT PLAN

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0 FOR PAVEMENTS WITH H"OR 12"M, THICKNESS, CONTRACTORS MAY HAVE THE OPTION OF PLACING TWO LAYERS OF STEEL, THE SMALLER LONGITUDINAL BAR SIZES INDICATED ARE ONLY TO BE USED WHEN TWO LAYERS OF STEEL ARE PLACED, FOR TRANSVERSE BARS, IF ALL OTHER VARIABLES ARE HELD CONSTANT, THE MAXIMUM ALLOWABLE PAVEMENT WIDTH MAY BE DOUBLED WHEN TWO LAYERS OF STEEL ARE USED.

WHEN THE DOUBLED STRIKE-OFF\* PROCEDURE IS NOT USED CHAIRS WILL BE REQUIRED TO SUPPORT BOTH LAYERS OF STEEL,

Q FAVENENT WIDTH SHALL BE MEASURED AT RIGHT ANGLES TO THE CENTERLINE AND SHALL INCLUDE ALL MAINLANES, CONNECTORS, RAMPS AND CONCRETE SHOULDERS THAT ARE TIED TOGETHER. TRANSVERSE STEFL REQUIREMENTS AND THE MAXIMUM ALLOWABLE PAVENIENT WIDTH WERE DETERMINED USING SUBGRADE DRAG THEORY (SEE APPINDIX F, SECTION 109 OF THE HICHWAY DESIGN DIVISION OPERATIONS AND PROCEDURES MANUAL) WITH A COEFFICIENT OF SLUJING RESISTANCE OF 1.5, AND AN ILLOWABLE STEEL STRESS (FS) OF 45.0 KSL

Θ TO DETERMINE THE MAXIMUM ALLOWABLE PAVEMENT WIDTH (WI FOR SPACING OTHER THAN THOSE GIVEN, DIVIDE "BAW" GOR THE GIVEN BAR SIZE) BY THE DESIRED TRANSVERSE BAR SPACING (B<sub>S</sub>). TRANSVERSE BAR SPACING SHALL NOT BE LESS THAN 12" NOR GREATER THAN 36".

TEBARS (6)

6

220

ONGITUDINAL BARS

LONGITUDINAL CONTRACTION

LNIO

RANSVERSE

SECTION 2-2

ල ADDITIONAL STEEL AT THE TRANSVERSE CONSTRUCTION JOINTS SHALL BE BARS OF EQUAL DIAMETER; AND A SPACING OF DOUBLE THAT SPECIFIED FOR THE LONGITLIDINAL STEEL OF THE GIVEN THICKNESS. THE LENGTH OF THE BARS SHALL BE 66 TWES THE BAR DIAWETER 1971,

**6** TRANSVERSE TIEBARS AT THE LONGITUDINAL CONSTRUCTION JOINTS SHALL BE BARS OF EQUAL DIAMETER AND SPACING TO THOSE SPECIFIED FOR THE TRANSVERSE STEEL OF THE GIVEN THICKNESS, THE LENGTH OF THE BARS SHALL BE 66 TIMES

Θ THE LONGITUDINAL CONSTRUCTION JOINT CAN BE RELOCATED OR MAY BE REPLACED BY A LONGITUDINAL CONTRACTION JOINT DEPENDING ON THE PLACEMENT WIDTH.

0 IF SILICEOUS RIVER GRAVEL IS USED AS A COARSE AGGREGATE, A CUT OF T/3 SHALL BE REQUIRED

9 WHEN MACHINE-PLACING OF STEEL REINFORCEMENT IS USED, THE USE OF CHAIRS SHALL NOT BE RECLURED, AND TRANSVERSE STEEL MAY BE PLACED ABOVE OR BELOW THE LONGITUDINAL STEEL.

BARS (CONTINUOUS)

FRANSVERSE CONSTRUCTION

JOINT

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TRANSVERSE BARS

SECTION X-X

JONI SEALING MATERIAL NETHOD A DR B

86 D(S)

ADD'L. STEEL BARS (S)

1/2\* 1/2\*

LONGITUDINAL CONSTRUCTION JOINT

11/2

TRANSVERSE BARS

6

SECTION Y-Y

THE NUMBER OF BARS REQUIRED FOR THE VARIOUS PLACEMENT WIDTHS (INDICATED IN 18'SPACING ON BOTH SIDES WITH AN OVERHANG "A". "A" SPACING SHALL BE BETWEEN 3" AND 4".
"B" SPACING SHALL BE BETWEEN 3" AND 9". THE TABLE) INCLUDES 2 BARS AT

THE TWO SPACINGS COMBINED ("A" AND "B"), LOCATED AT BOTH LONGITUDINAL EDGES OF THE POUR, SHALL PROVIDE THE REMAINING SPACE AND STEEL LOCATION TO ROUND OUT THE PLACEMENT WIDTH,

DOUBLE MAT STEEL PLACEMENT ONLY. THE SMALLER LONGITUDINAL BAR SIZES INDICATED SHALL BE USED WITH THE TWO LAYERS OF STEEL, FOR TRANSVERSE BARS, IF ALL OTHER VARIABLES ARE HELD CONSTANT, THE MAXIMUM ALLOWABLE PAVEMENT WIDTH MAY BE DOUBLED WHEN TWO LAYERS ALL OTHER VARIABLE OF STEEL ARE USED.

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NO EXPANSION JOINTS WILL BE USED EXCE	
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8	Ĕ
	SELLON TRACEICE
EXC.	•

- OBJECTS AS SHOWN ELSEWHERE IN THE PLANS. EPT AT STRUCTURE ENDS OR FIXED
- SLOPE SHALL FOR FURTHER INFORMATION REGARDING THE PLACEMENT OF CONCRETE AND REM-FORCEMENT REFER TO THE GOVERNING SPECIFICATIONS FOR "CONCRETE PAVEMENTS." TO PAVENENT WOTH, PAVENENT THICKNESS AND THE CROWN CROSS-
- THE WHITH BE AS SHOWN ELSEWHERE IN THE PLANS,
- TO THE CENT SHALL BE SPLICED. AREA BOUNDED BY TWO FEET OF PAVEMENT LENGTH MEASURED PARALLEL STERLINE AND TWELVE FEET OF PAVEMENT WIDTH MEASURED PERPENDICULAR VEMENT CENTERLINE, NOT OVER 33% OF THE REGULAR LONGITUDMAL STEEL
- THE LONGITUDINAL STEEL SHALL BE PLACED AT THE VERTICAL SLAB CENTER WITH A TOLERANCE OF  $\frac{1}{2}$  NICH. TRANSVERSE STEEL SHALL BE PLACED DIRECTLY ABOVE OR BELOW THE LONGITUDINAL STEEL. SPLICES SHALL BE A MINIMUM OF 33 TIMES THE NOMINAL STEEL DIAMETER 120%.

MULTIPLE PIECE THE BARS SHALL BE REQUIRED AT THE LONGITUDMAL CONSTRUCTION JOINTS THE MULTIPLE PIECE THE BAR ASSEMBLIES SHALL HAVE STOP TYPE COUPLINGS AND SHALL DEVELOP A MINIMUM ULTIMATE TENSILE STRENGTH EQUAL TO 1-1/2 TIMES THE YELD STRENGTH OF THE TRANSVERSE BARS BEING JOINED. THE BARS SHALL BE DEFORMED REINFORCING BARS. THE BAR ASSEMBLIES MADE FROM STEELS OTHER THAN ASTM GRADE FROVEN TO THE SATISFACTION OF THE ENGINEER THAT THEY ARE IN EVERY RESPECT THE EQUAL OF THE ASSEMBLIES SPECIFIED. LABORATORY TESTING OF THE PROPOSED ASSEMBLIES, AT THE CONTRACTOR'S EXPENSE, MAY BE REQUIRED.

AT TRANSVERSE CONSTRUCTION JOINTS THE REGULAR LONGITUDINAL STEEL SHALL EXTEND A MINIMUM OF FOUR FEET ON EITHER SIDE OF THE JOINT.

VIBRATION WITH HAND-MANIPULATED MECHANICAL VIBRATIORS WILL BE REQUIRED ADJACENT TO ALL TRANSVERSE CONSTRUCTION JOINTS.

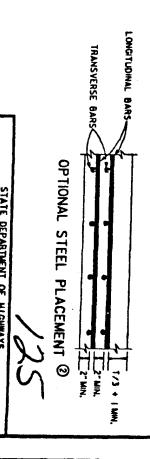
Ş THE CHAIRS UP QUALITY AND TOLERANCES. USED TO SUPPORT THE STEEL SHALL BE OF SUFFICIENT STRUCTURAL D NUMBER TO HOLD THE STEEL MAT WITHN THE PLACEMENT HEIGHT CHAIRS SHALL BE OF A TYPE APPROVED BY THE ENGINEER.

Ņ LONGITUDINAL JOINTS, GROOVE AND SEAL DETAILS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS. THE SPACING SHOWN HEREDAL AND TRANSVERSE STEEL SPACING SHALL NOT VARY MORE THAN ONE-

IF WIDTHS OCCUR, OTHER THAN THE TYPICAL WIDTHS SHOWN, INDIVIDUAL BARS (WIRES) OF THE SIZE SPECIFIED HEREON MAY BE ADDED OR REMOVED TO OBT. THE APPROPRIATE WIDTH, SPACING REQUIREMENTS SHALL NOT BE EXCEEDED, HOWEVER.

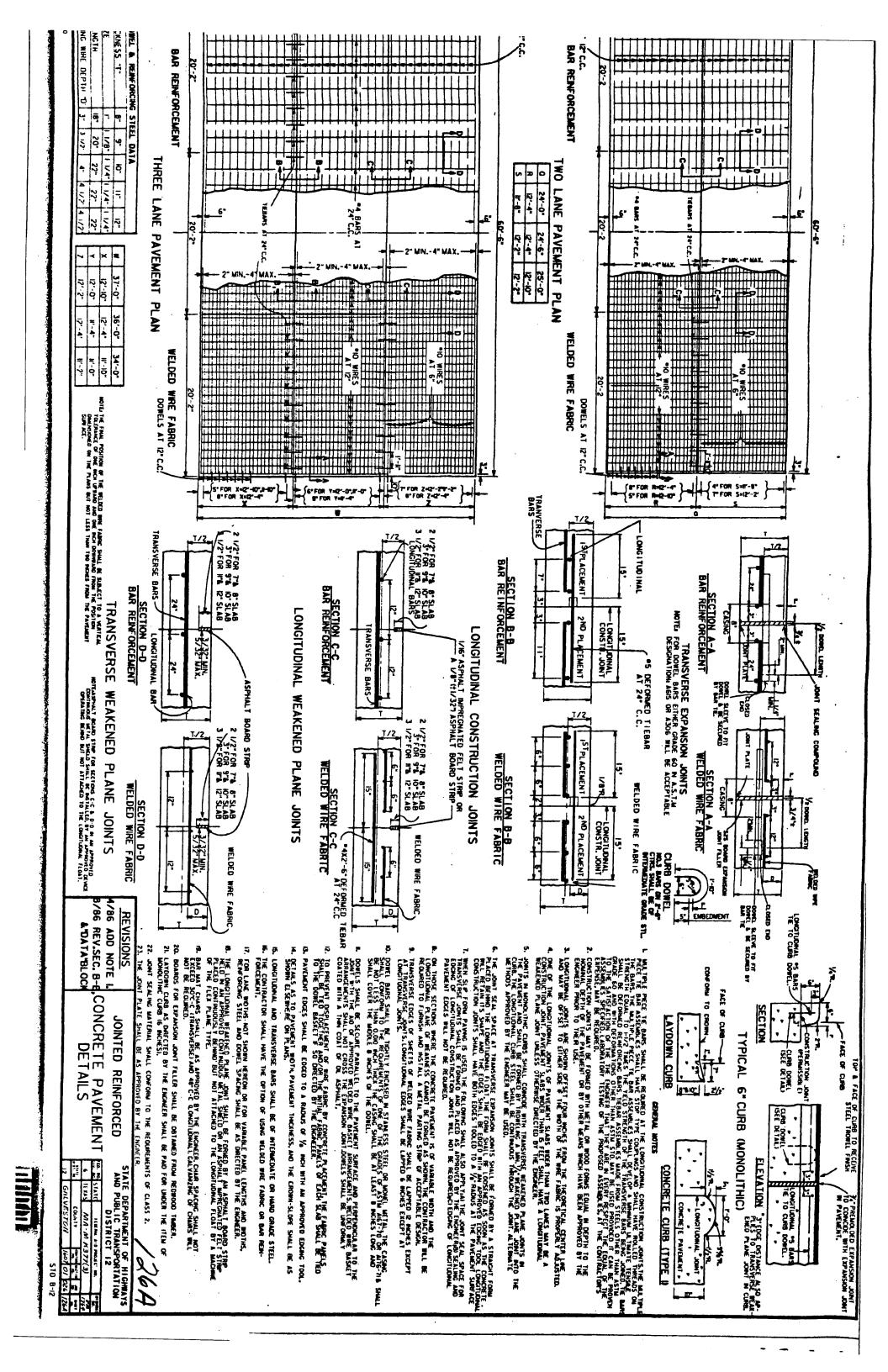
7 LONGITUDINAL JOINTS ARE SHOWN OFFSET FOUR INCHES FROM THE THERORETICAL LANG LINE AND MAY BE OFFSET TO EITHER SIDE IF THE SPACING OF REINFORCING STEEL IS PROPERLY ADJUSTED,

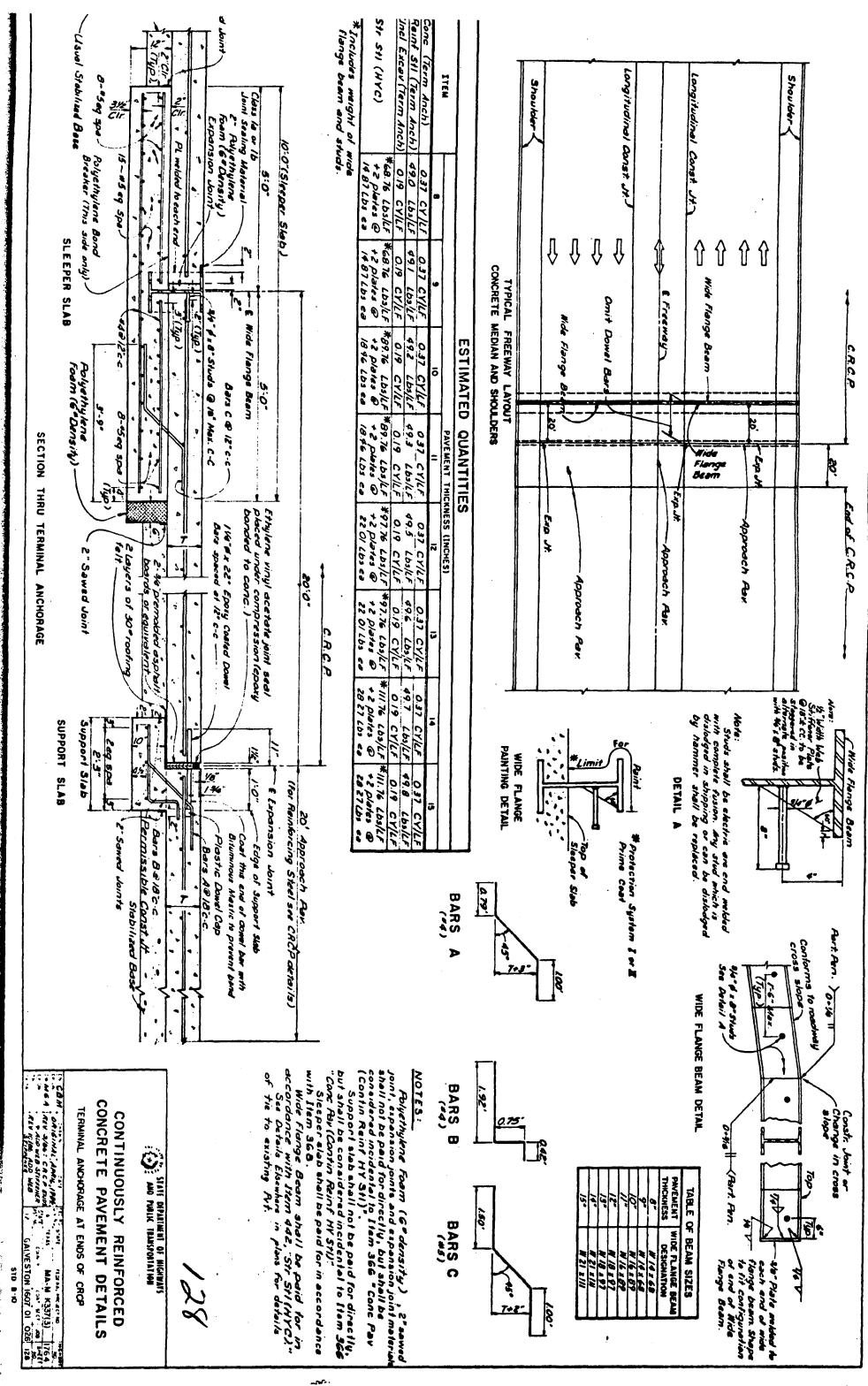
Ģ SEE STANDARD JS-75 "CONCRET SHOWN HEREN, RETE PAYING DETAILS, JOINT SEALS, FOR JOINT SEALING DETAILS NOT



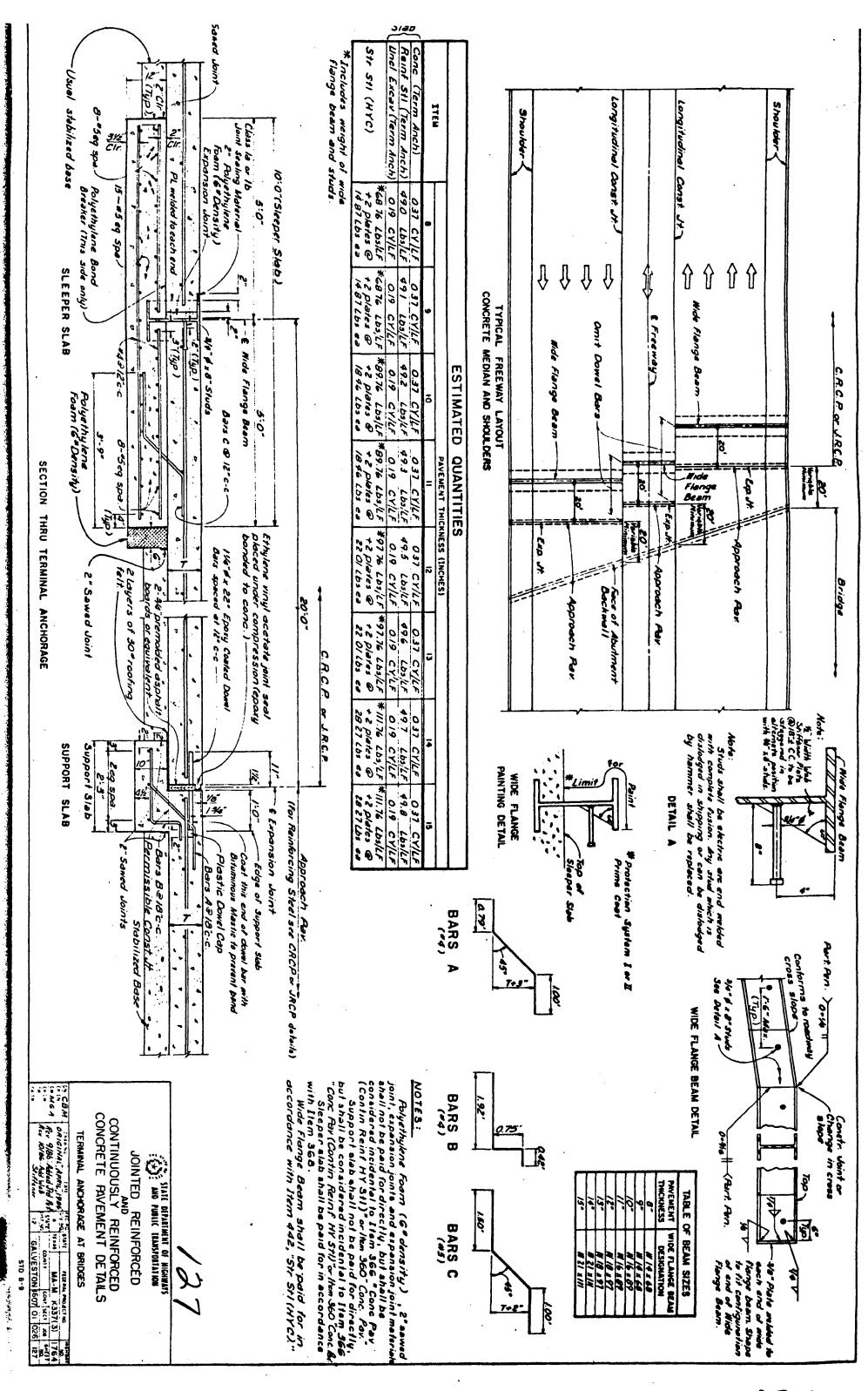
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VE'S	CRCP (B) - 85 (MODIFIED)	CONTINUOUSLY REINFORCED  STEEL BARS	CONCRETE PAVEMENT DETAILS	STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION DISTRICT 12

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