

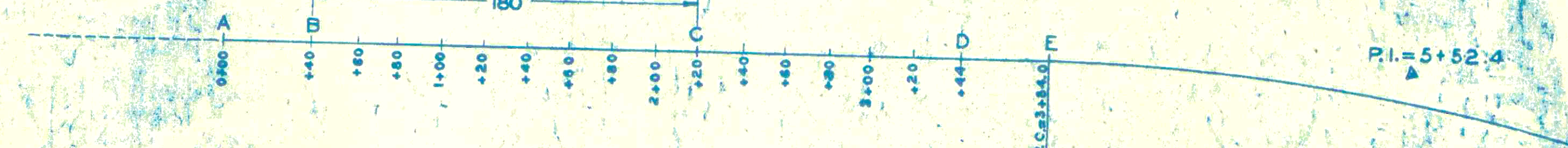
ALL CURVES ARE TO BE SUPER-ELEVATED TO THE NEAREST (30) THIRTY MINUTES ACCORDING TO THE TABLE

TO THE TABLE

SUPERELEVATION TABLE

DEGREE CURVE	RADIUS CURVE	Superelevation in ft. per ft. of Surfacing	TOTAL SUPERELEVATION			LENGTH OF APPROACH		
			18' Surfacing	20' Surfacing	22' Surfacing	18' Surfacing	20' Surfacing	22' Surfacing
1'-00"	5729.65	0.0143	0.26	0.29	0.31	92	98	102
1'-30"	3819.83	0.0214	0.39	0.43	0.47	118	126	134
2'-00"	2864.93	0.0288	0.52	0.58	0.63	144	156	166
2'-30"	2292.01	0.0358	0.64	0.72	0.78	168	184	198
3'-00"	1910.08	0.0429	0.77	0.86	0.94	194	212	228
3'-30"	1637.28	0.0501	0.90	1.00	1.10	220	240	260
4'-00"	1432.69	0.0574	1.03	1.15	1.26	246	270	292
4'-30"	1273.57	0.0646	1.16	1.29	1.42	272	298	324
5'-00"	1146.28	0.0721	1.30	1.44	1.59	300	328	358
5'-30"	1042.14	0.0790	1.42	1.58	1.73	324	356	388
6'-00"	955.37	0.0859	1.54	1.72	1.89	348	384	418
6'-30"	AND OVER TO BE SUPERELEVATED SAME AS 6'-00"							

PLAN SHOWING APPROACH FROM ZERO TO MAXIMUM SUPERELEVATION ILLUSTRATED WITH A 6'-00" CURVE



The amount of superelevation at any point between 'B' and 'D' may be obtained by the following method: where 'C' equals the point at which the superelevation is desired. Take the distance B-C and divide by 20 which is the distance required for each tenth foot increase in superelevation. This quotient plus one (1) gives the total superelevation at 'C' in tenths of a foot.

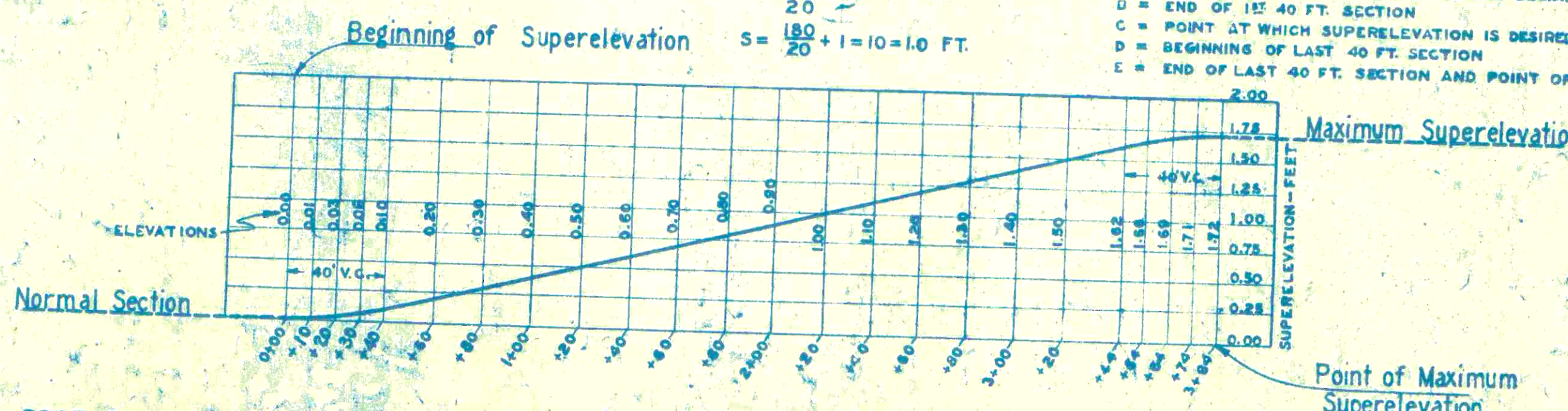
The increase in superelevation between 'A' & 'B' and 'D' & 'E' will be one tenth of a foot in all cases or the total superelevation at 'B' will always be one tenth of a foot. In all cases the maximum superelevation will be applied throughout the length of the horizontal curve.

$\Delta = 20'-00"$   
 $D = 6'-00"$   
 $T = 168.4'$   
 $L = 333.3'$   
 $E = 14.7'$   
 Maximum S.E. for 6'-00" curve with 20' Surfacing equals 1.72 (See table)

**EXAMPLE**

$S = \frac{BC}{20} + 1$   
 $S = \frac{180}{20} + 1 = 10 = 1.0 \text{ FT.}$

- S = SUPERELEVATION IN TENTHS OF FEET
- 20 = DISTANCE REQUIRED FOR ONE TENTH FT. INCREASE OF S.E. BETWEEN 'B' AND 'D'
- A = BEGINNING OF 1ST 40 FT. SECTION AND BEGINNING OF SUPERELEVATION
- D = END OF 1ST 40 FT. SECTION
- C = POINT AT WHICH SUPERELEVATION IS DESIRED
- B = BEGINNING OF LAST 40 FT. SECTION
- E = END OF LAST 40 FT. SECTION AND POINT OF MAXIMUM SUPERELEVATION



PROFILE OF APPROACH FOR A 6'-00" CURVE WITH 20 FT. SURFACING SHOWING INCREASE IN SUPERELEVATION ALONG THE OUTER EDGE OF SURFACING. FOR ALL CURVES THE FIRST AND LAST 40 FT. SECTIONS ARE TO BE COMPUTED AS 40 FT. VERTICAL CURVES.

**NOTE**

In any case where conditions do not permit a long approach as shown on this sheet, the Resident Engineer is to adjust same to meet the conditions.

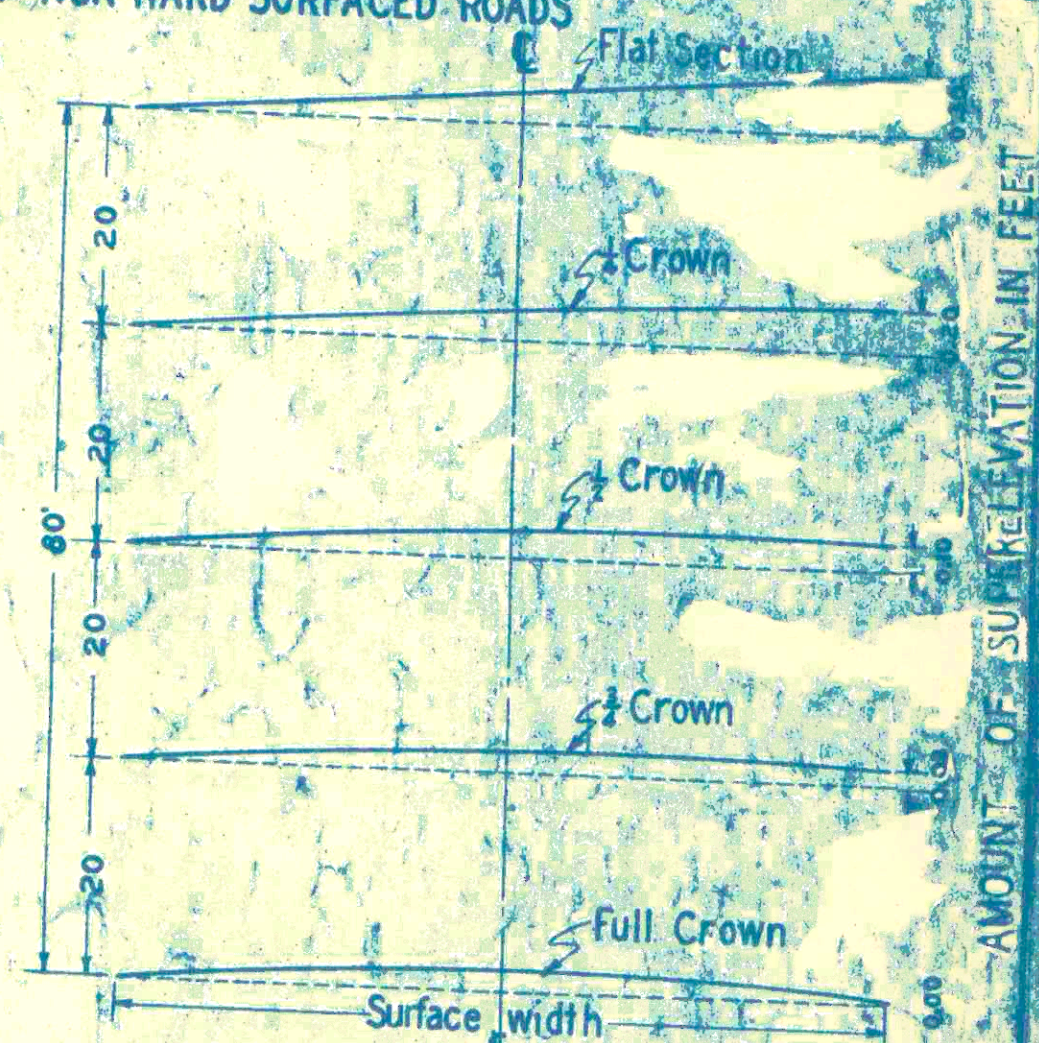
Where unusual conditions make it desirable, superelevation may be obtained by revolving the surface about the center-line instead of the inside edge, the amount of superelevation to be the same as shown in the table.

**METHOD OF ELIMINATING NORMAL CROWN. FOR USE ON NON-HARD SURFACED ROADS**

**NOTE**

In case of all Conc. Surfaced sections the normal roadway crown will be retained throughout the superelevated section. For all types other than Conc. Surface the roadway crown will decrease gradually from the point where the superelevation begins reaching a flat section eighty feet from the beginning of the super-elevation toward the curve.

For all types other than Conc. Surface the subgrade crown is to be omitted throughout the superelevated section.



**SUPERELEVATION STANDARD FOR ALL TYPES OF SURFACING**  
 SOUTH CAROLINA HIGHWAY DEPARTMENT  
 COLUMBIA, S. C.

Original approved 9-16-29  
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