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SUPERELEVATION CHECK SHEET (ENGLISH VERSION)

This spreadsheet can be used to check superelevation calculations. It is divided into 3 parts.

Part I is the parameters area where the pertinent data used to calculate the superelevation is entered.

Part II is the Shapemaker table area where the data relating to generating a shapemaker is held.

Part III is the area where a particular cross slope or edge of pavement info for a particular xs can be obtained.

Use the yellow blocks to enter the known data & the blue blocks are the calculated results.

THIS SPREADSHEET CAN NOW HANDLE REMOVE CROWN!!!

SC 219

PART I CALCULATION PARAMETERS

INPUT

Travel lane width: 31.5 ft

MAX se Rate: 0.028 (ft/ft) FROM TABLE

PC Sta: 132+59.00 SEE NOTE

PT Sta: 140+17.00 SEE NOTE

NOTE: DO NOT KEY IN THE + SIGN !!!

Example station 10+00 should be keyed-in as 1000

OUTPUT

Cross slope

(STATION) (%)

BEGIN se HIGHSIDE: 129+96.50 -2.08

END se HIGHSIDE: 142+79.50 -2.08

BEGIN se LOWSIDE: 132+59.00 -2.08

END se LOWSIDE: 140+17.00 -2.08

BEGIN MAX se: 133+04.15 2.80

END MAX se: 139+71.85 2.80

PC/PT se: 0.66 2.08 (-/+)

MAX se rate: 0.88 (ft)

e Norm: -0.66 (ft)

PART II**SHAPEMAKER TABLE****LOWSIDE**

FROM STATION	cross slope (%)	TO STATION	cross slope (%)	TRANS or NON-TRANS	COMMENTS
Beg Constr.	-2.08	132+59.00	-2.08	NT	Normal Crown
132+59.00	-2.08	133+04.15	-2.80	T	Beg Super to Max Super
133+04.15	-2.80	139+71.85	-2.80	NT	Beg Max Super to End Max Super
139+71.85	-2.80	140+17.00	-2.08	T	End Max Super to Normal
140+17.00	-2.08	End Constr.	-2.08	NT	Normal Crown

HIGHSIDE

FROM STATION	cross slope (%)	TO STATION	cross slope (%)	TRANS or NON-TRANS	COMMENTS
Beg Constr.	-2.08	129+96.50	-2.08	NT	Normal Crown
129+96.50	-2.08	133+04.15	2.80	T	Beg Super to Max Super
133+04.15	2.80	139+71.85	2.80	NT	Beg Max Super to End Max Super
139+71.85	2.80	142+79.50	-2.08	T	End Max Super to Normal
142+79.50	-2.08	End Constr.	-2.08	NT	Normal Crown

PART III INDIVIDUAL STA. CALCULATIONS

USE THIS TABLE TO DETERMINE A CROSS SLOPE OR EOP CHANGE IN ELEV (z)

LOWSIDE		HIGHSIDE	
cross slope (%)	change in z (ft)	change in z (%)	cross slope (ft)
-120.61	-37.99	37.99	120.61
-121.40	-38.24	38.24	121.40
-122.19	-38.49	38.49	122.19
-122.99	-38.74	38.74	122.99
-123.78	-38.99	38.99	123.78
-2.08	-0.66	0.66	2.08
208.38	65.64	-65.64	-208.38
208.38	65.64	-65.64	-208.38
208.38	65.64	-65.64	-208.38
208.38	65.64	-65.64	-208.38
108.38	34.14	-34.14	-108.38
109.17	34.39	-34.39	-109.17
109.96	34.64	-34.64	-109.96
110.76	34.89	-34.89	-110.76
111.55	35.14	-35.14	-111.55
112.35	35.39	-35.39	-112.35
-2.08	-0.66	0.66	2.08
-2.08	-0.66	-0.66	-2.08
-2.08	-0.66	-0.66	-2.08
-2.08	-0.656	-0.66	-2.08
-2.08	-0.656	-0.66	-2.08
-2.08	-0.656	-0.66	-2.08

STA	
65+50.00	
65+00.00	
64+50.00	
64+00.00	
63+50.00	
PT Sta 14017.000 PT Sta	
63+00.00	
62+50.00	
62+00.00	
61+50.00	
61+00.00	
60+50.00	
PC Sta 13259.000 PC Sta	
60+00.00	
59+50.00	
59+00.00	
58+50.00	
58+00.00	