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SC 219



**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!!!**

**PART I      CALCULATION PARAMETERS**

INPUT		OUTPUT		Cross slope
		(STATION)		(%)
Travel lane width:	31.5 ft	BEGIN se HIGHSIDE:	101+37.81	-2.08
		END se HIGHSIDE:	112+99.16	-2.08
MAX se Rate:	0.045 (ft/ft) FROM TABLE	BEGIN se LOWSIDE:	104+00.31	-2.08
PC Sta:	104+58.06 SEE NOTE	END se LOWSIDE:	110+36.66	-2.08
PT Sta:	109+78.91 SEE NOTE	BEGIN MAX se:	105+52.56	4.50
		END MAX se:	108+84.41	4.50
NOTE: DO NOT KEY IN THE + SIGN !!!		PC/PT se:	0.95	3.00 (-/+)
Example station 10+00 should be keyed-in as 1000		MAX se rate:	1.42 (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	104+00.31	-2.08	NT	Normal Crown
104+00.31	-2.08	105+52.56	-4.50	T	Beg Super to Max Super
105+52.56	-4.50	108+84.41	-4.50	NT	Beg Max Super to End Max Super
108+84.41	-4.50	110+36.66	-2.08	T	End Max Super to Normal
110+36.66	-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	101+37.81	-2.08	NT	Normal Crown
101+37.81	-2.08	105+52.56	4.50	T	Beg Super to Max Super
105+52.56	4.50	108+84.41	4.50	NT	Beg Max Super to End Max Super
108+84.41	4.50	112+99.16	-2.08	T	End Max Super to Normal
112+99.16	-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)	STA	change in z (%)
-73.30	-23.09	65+50.00	23.09
-74.09	-23.34	65+00.00	23.34
-74.89	-23.59	64+50.00	23.59
-75.68	-23.84	64+00.00	23.84
-76.47	-24.09	63+50.00	24.09
-3.00	-0.95	<b>PT Sta</b> 10978.910 <b>PT Sta</b>	0.95
163.00	51.35		-51.35
163.00	51.35		-51.35
163.00	51.35		-51.35
163.00	51.35		-51.35
63.00	19.85	63+00.00	-19.85
63.79	20.10	62+50.00	-20.10
64.59	20.35	62+00.00	-20.35
65.38	20.60	61+50.00	-20.60
66.18	20.85	61+00.00	-20.85
66.97	21.10	60+50.00	-21.10
-3.00	-0.95	<b>PC Sta</b> 10458.060 <b>PC Sta</b>	0.95
-2.08	-0.66	60+00.00	-0.66
-2.08	-0.66	59+50.00	-0.66
-2.08	-0.656	59+00.00	-0.66
-2.08	-0.656	58+50.00	-0.66
-2.08	-0.656	58+00.00	-0.66