

Great North of Scotland Railway notebook-sized, two-page, folded card document “Crossing Leads and Cant on Curves” dated 8 Feb 1921.

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Angle of crossing given from 1 in 6 to 1 in 18, radius in feet for 12, 15, 18, 21 ft and straight lead for same.

Angle	<i>Radius in feet</i>				<i>Straight Lead</i>			
	12ft	15ft	18ft	21ft	12ft	15ft	18ft	21ft
1 in 6	346				46'1"			
1 in 7	475	466			52'4"	54'3"		
1 in 8	628	613			58'3"	60'8"		
1 in 9		783				66'10"		
1 in 10		977				72'9"		
1 in 11		1197	1168			78'5"	81'4"	
1 in 12		1446	1403			83'11"	87'3"	
1 in 13		1725	1665	1630		89'2"	93'0"	95'11"
1 in 14		2038	1954	1907		94'3"	98'6"	101'9"
1 in 15		2387	2273	2210		99'1"	103'10"	107'6"
1 in 16			2625	2540			109'0"	113'1"
1 in 17				2900				118'6"
1 in 18				3290				123'9"

The leads are measured from heel of switches to centre of Crossing (the latter being point where width of V of crossing equals width of rail head). The above leads will give a uniform curve from switch to crossing. If crossings are laid to a longer lead the curve will be quickened at the crossing which is objectionable. A shorter lead quickens the curve at heel of switches which is sometimes beneficial as it introduces a short length of straight at the crossing.