



CURVE DATA

$R1 = 20'$

$\Delta_1 = \text{VARIABLE}$
 $\Delta_3 = \text{VARIABLE}$

$R2 = W + 10'$

$\Delta_2 = \Delta_1 + 2(\Delta_3)$

$X = \sqrt{20(W + 130)}$

$\Delta_2 = \tan^{-1} \frac{W+10}{20} - \tan^{-1} \frac{W}{X}$

$R3 = 60'$

$\text{TANGENT LENGTH} = R3 \tan \frac{\Delta_2}{2}$

EXAMPLE

W	X	Δ_2
60'	61.64'	10° 14' 11"

NOTES:

1. INTERSECTION BULBS ARE NOT REQUIRED ON STREETS WITH A CENTERLINE RADIUS OF 250' OR MORE.

NO.	REVISED	BY	Alignment for 90° Plus Street Intersections	APPROVED
				 CITY ENGINEER RCE-28191
				DATE: 2-2-99
DRAWN BY: MCP			CITY OF RIPON	STANDARD NO. ST-17
CHECKED BY: DJR				
<small>V:\25_City of Ripon Standards\Standard Specifications\Drawings\Streets\st-17.dwg</small>				