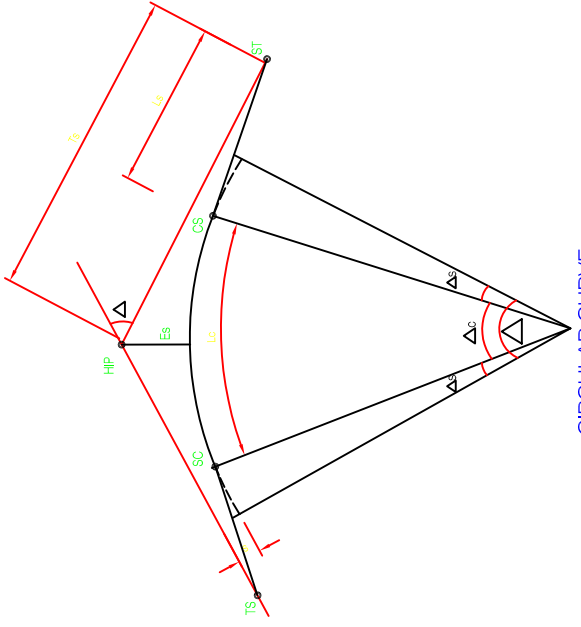


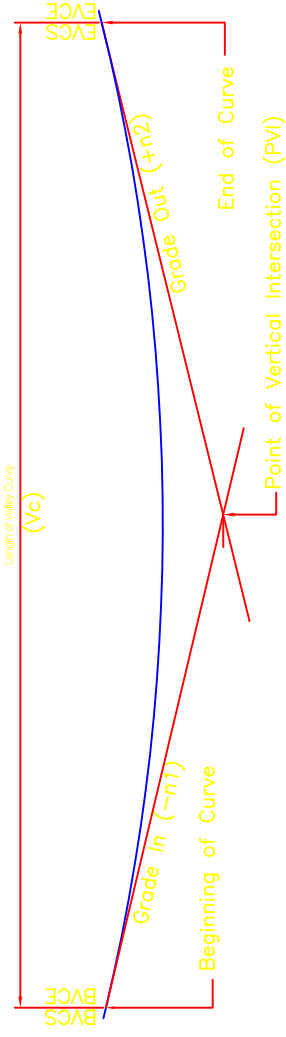
## ELEMENTS OF HORIZONTAL CURVE



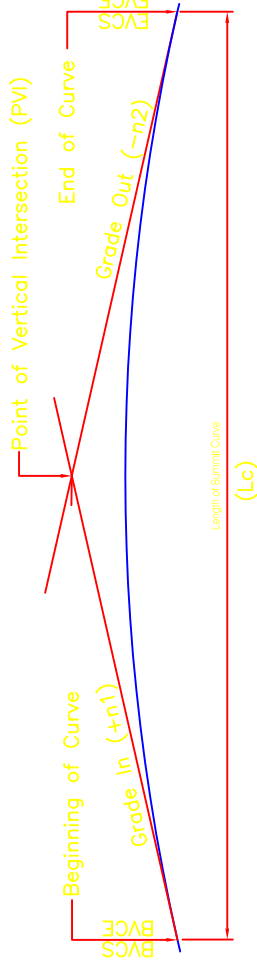
**CIRCULAR CURVE**

- HIP - HORIZONTAL POINT OF INTERSECTION
- $\Delta$  - DEFLECTION ANGLE IN DEGREE
- TS - START OF TRANSITION CURVE
- SC - START OF CIRCULAR CURVE
- CS - END OF CIRCULAR CURVE
- ST - END OF TRANSITION CURVE
- $L_s$  - LENGTH OF TRANSITION CURVE IN METER
- $L_c$  - LENGTH OF CIRCULAR CURVE IN METER
- $E_s$  - APEX DISTANCE IN METER
- $S$  - SHIFT IN METER

## ELEMENTS OF VERTICAL CURVE



**VALLEY CURVE**



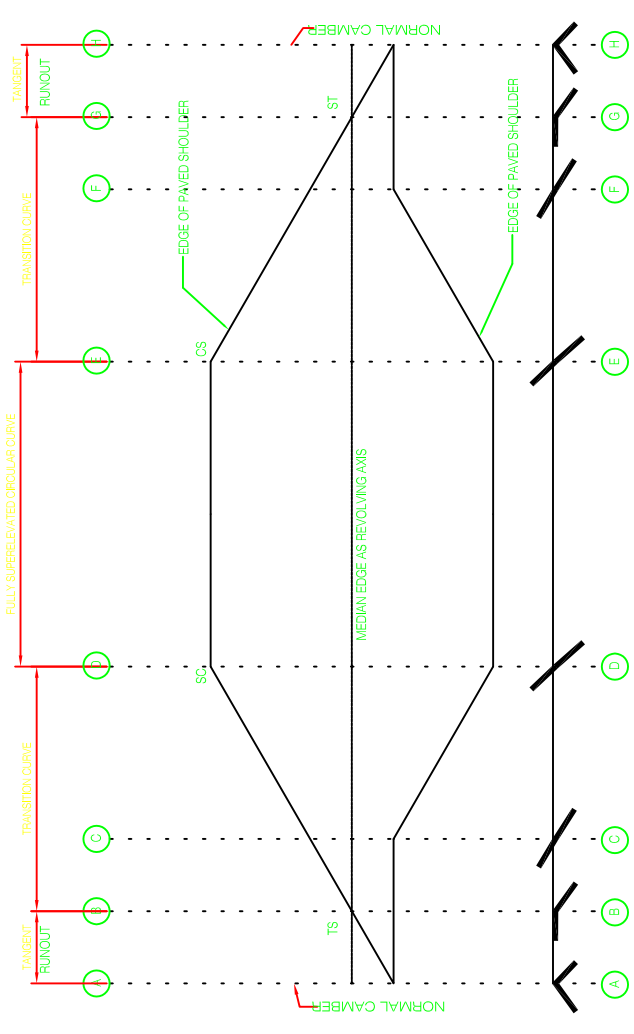
**SUMMIT CURVE**

- PVI STA - CHAINAGE OF POINT OF VERTICAL INTERSECTION
- PVI ELE - ELEVATION OF POINT OF VERTICAL INTERSECTION
- A.D. - ALGEBRIC DIFFERENCE IN %
- K - CONSTANT
- BVCS - CHAINAGE OF BEGINNING OF VERTICAL CURVE
- BYCE - ELEVATION OF BEGINNING OF VERTICAL CURVE
- EVCS - CHAINAGE OF END OF VERTICAL CURVE
- EYCE - ELEVATION IF END OF VERTICAL CURVE
- $V_c$  = LENGTH OF VERTICAL CURVE

## CIRCULAR CURVE WITH TRANSITION

- PC - START OF CIRCULAR CURVE
- PT - POINT OF TANGENCY
- TS- TANGENT DISTANCE
- $\Delta$  - DEFLECTION ANGLE IN DEGREE
- HIP - HORIZONTAL POINT OF INTERSECTION

## DETAILS OF ATTAINING SUPERELEVATION



**FOR CIRCULAR CURVE WITH TRANSITION**

## LEGEND:-

- CROSS SECTION AT AA-NORMAL CAMBER
- CROSS SECTION AT BB-ADVERSE CAMBER REMOVED
- CROSS SECTION AT CC-SUPERELEVATION EQUAL TO CAMBER
- CROSS SECTION AT DD-FULL SUPERELEVATION ACHIEVED

REV.	DATE	DESCRIPTION OF REVISIONS	INITIALS

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PROJECT  
**DPR FOR DEVELOPMENT OF NANDED CITY ROADS UNDER JNNURM**

TYPICAL DETAILS OF CURVE COMPONENTS		PURPOSE FOR TENDER	DRAWING NO.	DATE	REVISION
SCALE	HORZ. - N.T.S. VERT. - N.T.S.	STATUS FOR APPROVAL	2006069/RH/STD-001	13-06-2006	R0
			DRAWN DESIGN	CHECKED	APPROVED
			PRATIBHA	ASHISH	G.H.REDDY
					DR. C.S.S.