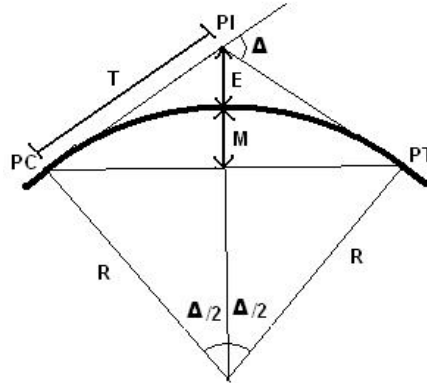


in order to assure safety. If there is an object obstructing the view around a corner or curve, the engineer must work to ensure that drivers can see far enough to stop to avoid an accident or accelerate to join traffic.

## Terminology



BC = beginning of curve

EC = end of curve

R = radius

PC = point of curvature (point at which the curve begins)

PT = point of tangent (point at which the curve ends)

PI = point of intersection (point at which the two tangents intersect)

$T$  = tangent length

$C$  = long chord length (straight line between PC and PT)

$L$  = curve length

$M$  = middle ordinate, now known as HSO – horizontal sightline offset (distance from sight-obstructing object to the middle of the outside lane)

$E$  = external distance

$f_s$  = coefficient of side friction

$u$  = vehicle speed

$\Delta$  = deflection angle [2]

## Geometry

$$T = R \tan\left(\frac{\Delta}{2}\right)$$

$$C = 2R \sin\left(\frac{\Delta}{2}\right)$$