

**No.NH-33054/7/92-S&R*****Dated, the 16 February, 1993*****To**

**The Chief Engineers of all States & Union Territories (dealing with National Highways); Chairman, National Highways Authority of India; Director General Border Roads; Director General (Works), Central Public Works Department**

**Subject: Setting out of horizontal/vertical curves and junctions**

It has been observed during the inspection that adequate care is not exercised while setting out horizontal/vertical curves and junction layouts for National Highway works.

2. It appears that proper methodology for this purpose, as contained in the guidelines in IRC:38 and IRC Special Publication No.23 is not being followed. It will be appreciated that this will not only defeat the purpose of geometric design for highways but also cause inconvenience and discomfort to road users and may lead to accidents. The importance of adhering to the provisions already indicated in these publications therefore needs to be reiterated.

3. It is also felt that the layout of the horizontal/ vertical curves and junctions should be set out under the direct supervision of a responsible officer preferably by the Polar Deflection Method and the layout not approved by a senior technical officer before commencing work. The Ministry would like to suggest that a dependable Quality Assurance mechanism must be instituted for the purpose. For all curves, particularly at junctions, each P.W.D. should make it mandatory that the layouts will be demarcated minimum at the level of Assistant Engineer with cross checking by one higher level namely Executive Engineer. Both the officers should be required to record a certificate in writing about verification of the layouts in person before the implementation proceeds further.

4. It is requested that these instructions be brought to the notice of all officers dealing with National Highway works.

---