NO.NHIII/Misc/51/73   Dated the 19th Oct. 1973

To

The Chief Engineer of All State PWDs and Union Territories (dealing with roads).

Sub : Proper location of culverts and bridges, and selection of appropriate designs of parapet/handrail for these, so that the structures fit in well with the roadside.

The necessity of so locating culverts and bridges that these become an intergal part of the road alignment and result in a fluent grade line has been stressed by this Ministry earlier. Copies of Ministry's circular letters No. NHI-41 (18)/70, dated the 12th August, 1970 and No. NHI-40 (3)/71, dated the 29th January 1971 having a bearing on this subject are enclosed for ready reference.

2.   Yet, it has been noticed that culverts and bridges in many cases continue to be arbitrarily sited with the result these do not fit in well with the horizontal and vertical profile of the road and undesirable kinks and humps are created in the alignment. To avoid this it is again emphasised that due care should be exercised in locating these structures keeping the overall fluency of the alignment in mind.

3.1.   Apart from proper location, the parapets and hand rails of culverts and bridges should be of suitable design so that the whole structure is aesthetically pleasing. The parapets of culverts should be of solid type with approximate dimensions of 400 mm (width) and 500 mm (height) which could be adjusted depending on the materials used.

3.2.   For uniformity and good appearance, the handrails for bridges should conform as far as possible to the Ministry's type designs given in drawing Nos. BD/4-69, BD/5-69, BD/6-69, BD/1-71, BD/2-71 and BD/3-71, which have already been circulated amongst the State Chief Engineers. The drawings of '69 series are for bridges without footpaths and those of '71 series are for bridges which have footpaths.

4.   It is requested that contents of this circular may be brought to the notice of all officers in your department dealing with National Highway and/or other centrally aided works.