

No. NHI/I/P/35/77

Dated the 5th February, 1981

To

All the State Chief Engineers concerned with National Highways

Sub : Ensuring fluent grade lines at the approaches to the culverts and bridges on National Highways

The need for ensuring fluent grade lines at the approaches to culverts and bridges on all Highways has been long felt, integral to their geometric design and the Ministry has been drawing the attention of all concerned for the incorporation of this very important aspect on the National Highways time and again. In this connection, Ministry's letter No. NHI-37 (2)/70, dated 2.4.1970 (paragraphs 9 (b) (iii), 9 (e) (ii) and (iii) of the technical Memorandum Note attached thereto); reiterated vide letter No. NHI-37 (2)/70, dated 1.2.1971 and again followed up by another circular issued vide letter No. NHI-I/P/35/77 dated 24.12.1977 may be referred to.

2. In spite of very clear instructions on the subject issued and discussions in the various forums laying stress on this aspect particularly in the meetings of the Chief Engineers, it has been observed that the shock-free treatment of approaches has so far not received its due attention it deserves. It may once again be emphasized that any deficiency in the vertical profile at the culverts and bridges, results not only in accident and reduction in speed of traffic on the National Highways but also produce discomfort and some times causes injuries to passengers due to unexpected sudden shock and attracts criticism of the travelling public. It is, therefore, imperative that proper treatment to ensure shock-free fluent grade lines at all existing approaches to culverts and bridges is given by the State PWDs.

3. It is suggested that immediate survey of all the culverts and bridges, where the grade lines on either side are not fluent and shock-free, may be made and properly designed vertical and valley curves provided at each such location depending on the slope of the approaches to the bridges.

GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT
DEPARTMENT OF SURFACE TRANSPORT
(ROADS WING)

2.12.85

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TELEGRAMS
'ROADIND'

TRANSPORT BHAVAN,
No.1, PARADE STREET.

NO. RM/NH.III/P/2/79.

New Delhi, 2.12.1985

To

1. The Chief Engineers of State P.W.Ds
Union Territories,
dealing with National Highways and other
Centrally Financed Roads.
2. The Director General(Works),
Central P.W.D.,
Nirman Bhavan,
New Delhi.
3. Director General(Border Roads),
Kashmir House,
New Delhi.

Subject:- Keeping proper record of completion drawings
for bridges on NHs and other Centrally Financed Road

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Sir,

It has been observed that completion drawings of even some major bridges, are not available for reference during the service stage of the bridge. In order to ensure adequate maintenance during the service stage of a bridge, it is very necessary that a proper record of the completion drawings is kept for immediate and ready reference as and when it becomes necessary. For this purpose the following procedure is suggested:-

- (i) In respect of major bridges involving alternative designs, a para may be included in the notice inviting tenders for such bridges that soon after the completion of the bridge, the contracting firm will have to supply 4 copies of completion drawings for different components of the bridge duly bound and also supply the original tracings of the completion drawings to the State P.W.D.

One set of the completion drawings is to be sent to Roads Wing and other three sets are to be kept in the Offices of Executive Engineer, Superintending Engineer and Chief Engineer. The tracings of completion drawings are to be kept in the office of Chief Engineer.

(ii) *inf* In respect of other bridges, the folders contain the completion drawings are to be kept in the offices of the Executive Engineer, Superintending Engineer and Chief Engineer of the Dept.

2. To meet the expenditure on the completion drawings and photographs etc., it is suggested that henceforth a separate item may be put down in the estimates relating to bridge projects.

3. It is requested that necessary instructions in this regard may please be issued to all concerned.

Yours faithfully,

[Signature]
(R. L. KARPOOR)
CHIEF ENGINEER (BRIDGES)
for DIRECTOR GENERAL (ROAD DEVELOPMENT)

Copy forwarded for information and necessary action to:-

- (i) All Regional Officers and Engineer Liaison Officers.
- (ii) All Technical Officers at the Headquarters.
- (iii) Desk Officer - I (10 copies).

[Signature]
(R. L. KARPOOR)
CHIEF ENGINEER (BRIDGES)
for DIRECTOR GENERAL (ROAD DEVELOPMENT)

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