GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2011/CE-I/BR/BSC/81/seminar/Pt 2
New Delhi

Principal Chief Engineer, All Indian Railways
General Manager (Const.), N.F.Railway, Guwahati.
CAO/Const., All Indian Railways.

Managing Director, Konkan Railway Corporation Ltd, Navi Mumbai.
Managing Director, IRCON, New Delhi.
Managing Director, RITES, New Delhi.
Managing Director, DMRC, Metro Bhawan, Barakhamba Road, New Delhi.
Managing Director, CONCOR, New Delhi.
Managing Director, RVNL, New Delhi.
Managing Director, DFCCIL, New Delhi.

Director, IRICEN, Pune.
Director, IRIEEN, Nasik.
Director, IRISET, Secunderabad.
Director, IRIMEE, Jamalpur.
Director, IRITM, Manak Nagar, Lucknow.
Director General, National Academy of Indian Railways, Vadodara.

FA & CAO, All Indian Railways.
Director General, RDSO/Alambagh, Lucknow.
Chief Commissioner of Railway Safety, Lucknow.

Genl. Secy., AIRF, Rail Bhavan.
Genl. Secy., NFIR, Rail Bhavan.
Genl. Secy., IRPOF, Rail Bhavan.
Genl. Secy., FROA, Rail Bhavan.
Genl. Secy., AIRPFA, Rail Bhavan.
Genl. Secy., DAI (Railways) Rail Bhawan, New Delhi.

Sub: Advance Correction Slip No.29 to Indian Railways Bridge Manual.

Ministry of Railways (Railway Board) have decided that correction/addition
as indicated in the enclosed Advance Correction Slip No.29 dated 15.04.2014 to
relevant paras of the IRBM be made.

Receipt of this letter may please be acknowledged.

DA: As above

(V.K. Jain)
Director Civil Engg.(B&S),
Railway Board
1. Replace existing Para 312(2) as under:

2. In the case of arch bridges, minimum clearance measured to the crown of the intrados of the arch shall be as under:

<table>
<thead>
<tr>
<th>Span of arch</th>
<th>Clearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 4m</td>
<td>Rise or 1200 mm whichever is more.</td>
</tr>
<tr>
<td>4.0m to 7.0m</td>
<td>2/3 rise or 1500 mm whichever is more.</td>
</tr>
<tr>
<td>7.1m to 20.0m</td>
<td>2/3 rise or 1800 mm whichever is more.</td>
</tr>
<tr>
<td>Above 20.0m</td>
<td>2/3 rise.</td>
</tr>
</tbody>
</table>

2. Replace existing Para 312(4) as under:

4. While rebuilding bridges on existing line or building new bridges on these or new lines, the clearance stipulated above can be relaxed by Principal Chief Engineer/Chief Bridge Engineer with the consideration to the past history, to the extent shown below provided:

a) adoption of the prescribed values of clearance would result in heavy expenditure and/or serious difficulties in construction, and

b) the clearance can be safely reduced from those stipulated in sub para 1 above.

<table>
<thead>
<tr>
<th>Discharge (Cumecs)</th>
<th>Reduced clearance (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3</td>
<td>300</td>
</tr>
<tr>
<td>3 to 30</td>
<td>300 – 400 (Pro-rata)</td>
</tr>
<tr>
<td>31 to 300</td>
<td>400 – 1200 (Pro-rata)</td>
</tr>
</tbody>
</table>

3. Add new Para 313 (4) as under:

4. However, in case of syphon bridges the provision for free board as per para 313(1) need not be considered where a spillway is provided on one bank of the channel at a suitable point upstream within or outside the Railway Boundary so that as and when the channel rises over the danger mark, the water from the channel will flow out. A small drain also has to be provided from the point of spillway to the nearest bridge to lead the water from the channel in case of overflow from the spillway.