



SOUTH CENTRAL RAILWAY

Office of the Principal Chief Engineer
Vth Floor, Rail Nilayam
SECUNDERABAD - 500 025

No.W.506/ESOs

Date: 08-02-2021

ENGINEERING STANDING ORDER No 91

Sub: Preparation of GADs and Completion Drawings of Bridges.

Procedure for preparation of completion drawings is mentioned under para 911 of IRWM which states as under:

'Signed copies should be submitted by Assistant Engineer or the Engineer responsible to the Divisional / Dy. Chief Engineer for works completed to the approved drawings. These should indicate the work as actually carried out, special care being taken that the work below ground in correctly shown and nature of soils met with recorded.'

As per extant practice in South Central Railway, the completion drawings for bridges executed by divisions are signed by the respective SrDEN/DENs and for the works executed by Construction Organization, these are signed by concerned Dy.CEs and CEs. In respect of Bridge works executed by RVNL, the drawings are being countersigned by the respective SrDENs also after the signature of RVNL officials.

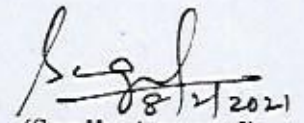
Recently, during CRS inspection of one of the tripling works, it was found that the completion drawing of the bridge was not matching with the approved GAD as well as the actual bridge built at site in respect of dimensions, levels etc. Earlier, there were also instances where the GAD of a new bridge in Doubling/Tripling works affecting the existing bridge was prepared by simply relying on the old completion drawing of the existing bridge without verifying the actual site measurements of the old bridge. This results in errors in old completion plan getting carried forward to the GAD of new bridge also.

To avoid such instances in future, following instructions are issued in respect of preparation of Bridge GADs and Completion drawings:

1. While preparing the GAD of a new bridge in Doubling/Tripling works affecting the existing bridge, all the relevant measurements of existing bridge should be accurately taken at site and incorporated in the GAD before processing for approval.
2. After the completion of a bridge, it should be ensured that the Completion drawing is prepared correctly reflecting the bridge as built at site in respect of all dimensions.
3. Sr.DEN/DENs shall get the dimensions and other important aspects of the structure shown in the completion drawing physically verified at site for any discrepancies during the Joint inspection of section by Open line and Construction/RVNL officials before

CRS inspection. The completion drawings shall be corrected accordingly wherever required.

4. The completion drawing shall also be compared with the approved GAD for any major deviations. All deviations shall be brought to the notice of Team of HODs inspecting the section before it is offered to CRS.
5. If the deviations from the approved GAD are significant (changes in span configuration, foundation type etc.) which require alteration to the approved GAD, the same shall be processed again duly furnishing the reasons for the deviations.
6. For issue the Bridge certificate from Headquarters, approved GADs of all the bridges along with the Completion Plans and Joint Inspection reports shall be submitted.



(Sanjiv Agarwal)

Principal Chief Engineer

C/- CAO/C/SC

C/- CPD/SD, CTE, CBE, CGE, CE/RSW, CE/BRH, CE/W, CE/P&D, CE/SD, CE/TP
& CE/TM.

C/- GM/RITES/SC, CPM/RVNL/SC, CPM/RVNL/MAS.

C/- Sr.DENs/Co-ord/SC, GTL, BZA, HYB, GNT & NED.