No. 2015/W-I/Gen./Corr.GM Pt. New Delhi, dt. 29.09.2015

General Managers,
All Indian Railways.

Sub: 77 Doubling, Two New Lines, one Gauge Conversion projects included in Budget 2015-16.

Ref: Board’s letter No. 2015/W-I/Gen./Corr.GM dt. 24.03.2015.

Detailed instructions have been issued vide Board’s letter under reference for preparation of Detailed Estimate for 77 Doublings, two New Lines and one Gauge Conversion project which have been included in Budget 2015-16 conditionally subject to obtaining requisite clearances. It was mentioned that only those items directly connected to the work be included in the estimate and if it is felt that after commission of Doubling/Tripling/Quadrupling certain additional facilities would be required, those may be proposed as a separate work under relevant Plan Head.

It has been observed in few DPRs that requisite due diligence have not been done to bring about economy in construction and avoid time over run during construction stage. In case of no. of projects specially tripling significantly large land acquisition has been proposed. Such large scale land acquisitions are not only costly affair but it is very time consuming and fraught with danger of delaying the project. The extent of land acquisition can be minimized by providing toe/retaining wall. More often than not major bridges have been planned on diversions. Apart from additional requirement of land, diversion will create avoidable maintenance difficulties due to introduction of reverse curves on approaches.

While planning for the projects, Railways should follow the guidelines which are as under:

1. Effort should be made to keep land acquisition to bare minimum. Acquisition of land should be limited only upto the toe of the bank. The possibility of further reduction in acquisition may also be explored by way of providing toe/retaining wall. This will also reduce the barrel length of bridges. In fact, acquisition of land should be resorted to only as an exception if it is not feasible/ highly uneconomical to provide toe/retaining wall.

2. In case of bridges, it should be ensured that Doubling/Third line/Forth line are laid on straight alignment and not on diversion. If required, railways can use of sheet piles during construction to ensure this. This will also help in keeping the requirement of speed restriction to bare minimum. The bridges should be laid on diversion only if no technological solution could be found and should be resorted to only in as an exception.
3. At location, where the embankment or bridges have been abandoned after gauge conversion or laying diversion, effort should be made to use those embankment and foundation of such bridges where ever possible to reduce cost of construction.

4. In case of certain Doubling/Tripling projects, it would be desirable to ease out the gradient, curvature etc. necessitating construction on detours/diversion. The extent of land acquisition for such cases can also kept to bare minimum by proposing such diversions on viaduct.

All 77 doubling projects which will be financed through EBR (IF) are amenable to execution by EPC mode of contracting as funding is assured. However, the issue such as size of EPC contract, its suitability in a particular area etc. needs to be ascertain beforehand. It is advisable that the railway may either call for EOI's or can convene a meeting of leading construction agencies to elicit their views. This will not only help in deciding the size of EPC contract depending upon the capacity of agencies to ensure reasonable competition but will also help in ascertaining whether the EPC mode of contracting is suitable in a particular area. To start with, each Railway should make effort to award one or two EPC contracts.

All these projects have to be essentially completed in time bound manner within reasonable period. Requirement of speed restriction for construction of bridges have been a major area of concern as it has significant impact on the completion period. It has been observed that as a matter of routine, on some of the railways, a note indicating imposition of speed restriction during construction is appended in GAD by open line at the time of approval. The issue of requirement of speed restriction for construction of bridges should not dealt as a routine affair but same should be deliberated threadbare and final decision in this regard should be taken jointly by PCE and CAO.

This issues with the approval of Member Engineering.

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