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Fast Track Construction of ROB's on BOT basis.

Synopsis: *The NHAI and various Road authorities are rapidly expanding their road networks, and smoothening the traffic on existing ones. Often such works entail provision of ROB's across Railway track. Such ROB's are executed fully by the sponsoring Road authority BOT basis. This is distinct from the ROB's that Railways construct/ sponsor at their own initiative to eliminate high TVU or hazardous LC's. This paper is seeking to suggest improvements in systems to expedite the construction of ROB's on BOT basis*

First we appreciate Railway Board's efforts for issuing many policy letters in last 5 years to encourage Construction of ROB's. Railway wants to eliminate existing Level crossing by providing ROB/RUB or any other suitable arrangement as per the site condition. NHAI/State Government are constructing many ROB's in lieu of Existing LC with heavy ATVU, as also a part of their expanding road network on BOT basis. In such ROB's, Railway is not bearing any Construction cost.

While the execution of ROB's with elimination of LC's whether through Railway sponsorship or through BOT are advantageous to the Railways, the progress of BOT ROB's is not adequate because possibly there is no close monitoring at Railway Management level, and the Railway officers do not feel they 'own it'.

The delay in the construction of the ROB's takes place at many stages.

- (1) Preparation and approval of GAD
- (2) Estimate approval by Railway
 - (a) For ROB structure
 - (b) For shifting railway utilities
- (3) Approval of structural drawing
- (4) Preliminary arrangement by Railways
- (5) Permission to work (Traffic blocks)

We hereby identify the problems on each stage and give some suggestions for amelioration

Preparation and approval of GAD –

The preparation of GAD goes through many iteration, with suggestions of change of span configuration/ pier locations emanating at various levels. Railway should not be unreasonably

restrictive in founding piers in Railway Land. These restrictions come about only after the GAD has been submitted by the road authority.

Suggested - Joint site visit feasibility report signed by all stakeholders shall be submitted to CBE for Constructing ROB/RUB as per site constraints including Railway boundary and future expansion.

Estimate approval by Railway (ROB Proper) -

Railways vets the Construction cost of ROB proper since the departmental charges are pegged to this cost. This causes unnecessary effort and delay on the part of the Railways. The Railways interest in this part of the estimate is merely arising out of the Railway's Supervision/Maintenance charges being pegged to this cost.

Suggested – Since the Railway charges are in any case an ad-hoc percentage of the structural cost, the process could be very much simplified by Railway Board issuing a per square metre of plan area cost, which could be used for the limited purpose of determining the Railways charges. This would very much expedite the Estimate approval, or rather the Railway will not at all have to delve into this aspect of the estimate.

Estimate approval by Railway (Cost of Shifting of Railways Utilities)

Some preparatory works like shifting of Level Crossing, S&T Cables, OHE mast etc. need to be executed by Railways for which various Railway departments prepare Estimates for cost to be borne by Road Authority.

Often these are not only delayed but seemingly frivolous cost like vehicles computers are included. These estimates are also readily vetted by Railways finance since some else is paying. (And possibly there is provision for finance department too).

Suggested - Railway may increase % Supervision charges which may be rechristened as 'Supervision and Enabling charges'. Railway Finance will become more stringent in eliminating 'frills'. In the long run, these charges will balance out over various works. It will insulate the BOT proponent from the vagaries/whims of the Railway personnel in the field.

Approval of Structural Drawings

Railways insist upon Structural drawings being proof checked by IIT/NIT. This itself causes substantial delay in various stages like obtaining commercial offer and having actual checking done.

Superstructure is already largely Standardized. Only substructure and special bridge have to be designed & checked.

Suggested: Depute a panel of 2-4 reputed Consultants (who are better versed with Railways) for proof checking, which will be independent of the designer and further not allowed to design any ROB to ensure effective proof checking. RITES specialised design wings may also proof check, with full accountability.

Preliminary arrangement by Railways

The existing procedure requires that the main estimate for the ROB which also incorporates the Railways part estimate for the utility shifting is first approved by Railway then Sanction by Road authority. Tender for the utility works are only invited after the estimate is sanctioned and deposit of money with railways.

Suggested: Earlier we have suggested that Supervision charges be delinked from the actual cost in estimate. The Railways charges will be readily computable once the GAD is finalised.

The Road authority can make an adhoc deposit of the “Supervision and Enabling Charges” and give in principle go ahead for the utility diversion works to take place at the stage of GAD approval.

Permission to work (Traffic blocks)

Often Railway/CRS require the preliminary works to have been completed before taking up main structural works.

Suggested: The Earlier suggestion of advance execution of enabling works will smooth the bottle neck since it is expected that the utility diversion works would commence well before the detailed structural designs are available. This would greatly expedite the start of the works.