## MINUTES OF MEETING OF COMMITTEE OF CHIEF ENGINEERS, R&B DEPARTMENT, MEETING ON 16.4.2005.

Subject: Revision of certain items of bridge work rates

The meeting is convened as per Government memo no.5126/RI/2005, dated 16.4.2005 to study certain rates of bridges in view of no response to the tenders of bridges in the state.

- 1) It is observed that there has been no response in respect of tenders for construction of bridges on State Roads of R&B Department.
- 2) During the past 3 months tenders have been invited for 18 bridges in the state and there was no response for 15 bridges. The issue of lack of response for bridge work has been examined in detailed and it is observed that it is due to following reasons.
  - i) Fluctuation of rates of Steel and Cement.
  - ii) Less Rates for well sinking and centering for cement concrete.
  - iii) Non provision of De-watering charges, vibration charges and water charges.
  - iv) Non provision for other contingencies like watch & ward, site office, staff quarters, Traffic Management etc.,
  - v) Non Provision for LA & LI
  - vi) Non Provision for Q.C. charges, T & P etc to be spent by the contractor.
- 3) Under the present circumstances it is opined that a review has to be made regarding the analysis of rates for various items of work being adopted at the time of preparation of estimates.
- 4) On thorough examination of various issues involved the following suggestions are made to over come the above issue.
  - a) The analysis of rates based on MORT&H standard data for bridge work which is being adopted through out the country in respect of works on National Highways include over head charges at 25% and contractor profit at 10%. But in the data adopted in the R&B department for bridge works the over head charges at 25% and contractor's profit at 10% are not considered as per the Government instructions. However the MORT&H data is adopted excluding over head charges and contractor's profit. Due to this the items which are contingent to the work shown under the over head charges could not be made use of in the departmental estimates for bridges.
  - b) Further, the Government has imposed a sealing of 5% in tender premium and due to which the contractors could not quote their tenders considering all the expenditure that are contingent to the work and not including in estimates.

- 5) Hence it is proposed to consider:
  - a) The present local market rates for steel and cement till the revision of SSR for the year 2005-06 are to be adopted. The present market rate for Cement is Rs.2,600/- per MT and for Steel it is varying from Rs.28,100/- to Rs.29,550/- per MT. The quotations from VSP have been obtained for steel and from ACC, SAGAR Cements for cements and enclosed herewith. It is decided now to take Rs.29,000/- per MT for steel and Rs.2,600/- per MT for cement for preparation of estimates.
  - b) At present no **de-watering charges** are being added in bridge estimates. The rates provided in MORT&H data are on percentage basic which are not workable. Further they are irrational. Hence it is agreed to adopt de-watering charges as per SSR 2004-05 at **Rs.83.50/cum** of concrete wherever de-watering is required.
  - c) In the well sinking, the MORT&H data provides for Crane with grab bucket of 0.75cum. capacity and accessories. In the present R&B data the hire charges of Crane for lifting is considered as Rs.550/- per hour as against the hire charges of Crane with Grab bucket i.e. Rs.2,500/- per hour as per SSR 2003-04. Further, it is also noticed in SSR 2004-05 the item rate for **Crane with Grab bucket** is not provided. The time required for sinking of 8 mts. dia well to a depth of 1m. is 4 (four) hours. The difference of amount for 1m. sinking of well with Crane with Grab bucket and Crane for lifting purpose is Rs.8,580/-. If it is updated to the present SSR rate, the difference may go to Rs.10,000/- RM. Hence it is agreed to adopt the rate of Crane with Grab Bucket at Rs.2500/- per hour since it is the lowest market rate. The market rate as obtained from quotations is found as Rs.2,800/- to Rs.3,000/- per hour.
  - d) In the MORT&H data the provision towards water for mixing in concrete and curing of concrete is not included. It is agreed to provide Rs.25/- per cum. of concrete towards cost of water for mixing and curing including leads and lifts and other related charges. This is arrived from local market rate and also based on CC items in MORT&H data.
  - e) It is agreed to provide 13% towards LA and LI for all bridge works since the labour is to be imported and amenities are to be provided for the labour working at site. In MORT&H data this has been included in the over head charges. This will be allowed subject to submission of a certificate from EE and SE concerned stating that the labour are to be imported to the site.
  - f) The contractor has to spend towards Quality Control tests. This include purchase and maintenance of QC instruments, cost of lab Technicians Minor T &P, Survey instruments, Wastage of materials, that is used for testing etc. Hence it is proposed to include 1% towards Quality Control in each data of CC and steel items.
  - g) The contractor has to spend certain amounts towards Site office, Watch & Ward, Traffic management during construction which includes caution boards, sign boards which has been considered under MORT&H data under over head charges. Now it is proposed to provide 1% towards above provision in all data of the items of bridge works.
  - h) In the MORT&H data the vibration charges for concrete items is also included in the over head charges. Hence it is proposed to provide vibration charges as per current SSR.

- i) In MORT&H data Form work was provided in terms of percentages, which appears less and very approximate. In SSR specific rates are given for all form work which appears rational and close to realistic market rates. Hence it is proposed to provide centering charges given in the SSR for all concrete items wherever form work is required in place of suggestive percentage of MORT&H data.
- 6) It is also noted that even for the small bridge works the increase or decrease in the rates of steel, cement and bitumen has an effect on the rates of respective items. Hence it is proposed to provide price adjustment clause for works costing more than Rs.50.00lakhs and more than 6 months of period of construction. Hence it is proposed to include the following in bid document.

"Every quarter the Committee of Chief Engineers of R&B Department shall decide the rates of steel, cement and bitumen depending up on the market rates by collecting appropriate quotations. The Committee shall sit on first working day of the quarter.

The new rates of steel, cement and bitumen shall be incorporated in the respective items of Technically sanctioned estimates.

The percentage of increase/decrease of the rates of the items involving steel, cement and bitumen over the rates of the technically sanctioned data will be operated on the agreement rates of respective items executed after the date of approval of new rates by the Committee of Chief Engineers (R&B) and contractors shall be paid accordingly".

This will be recommended to Government to permit to provide in bid documents,

- 7) All the above rates are only for bridge works.
- 8) All the above items are approved in the Committee of Chief Engineers (R&B).

Engineer-in-Chief(R&B), Administration & NABARD,

## Hyderabad

Chief Engineer(R&B), Roads.

Chief Engineer(R&B) Buildings

Chief Engineer(R&B), National Highways

Managing Director, APRDC, Ex-Officio Chief Engineer(R&B)

Superintending Engineer(R&B), Quality Control

Superintending Engineer(D&P)

Deputy Chief Engineer(R&B), Roads.

Deputy Chief Engineer(R&B) Buildings

Deputy Chief Engineer(R&B), NABARD

Project Director APSHP