121.5.26

# No. RW/NH-31019/4/94/D.O.-II

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# Dated The 7th September, 1999

The Secretaries of all State PWD; All Chief Engineers Dealing with NH's and other Centrally sponsored schemes; Chairman, National Highways Authority of India; Secretary (BRDB); Director General Border Roads

Subject : Sanction of revised estimates for National Highway works

It has been observed that Revised Estimates are generally not being submitted by the State PWD to the Ministry in time. As per the existing guidelines, review of the likely completion cost for each project is required to be done by the State PWD as soon as 50 per cent or more progress is achieved on the work and revised estimate, if found necessary should be submitted to the Ministry immediately thereafter. In any case the revised estimate is required to be submitted as soon as the anticipated completion cost exceeds the original sanctioned amount beyond the permissible limit. However, in practice, submission of the revised estimates is generally delayed by the State PWDs who often come up with the RCEs only when the expenditure has exceeded the permissible limit. As a result the liabilities of these works beyond the original sanction get accumulated affecting the Bank of Sanction of projects. Besides, delay in submission of RCEs and corresponding delay in making payments to the contractors for want of sanction of the RCE often result in avoidable time and cost over run.

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2. With a view to improving the position regarding sanction of RCEs and thereby improving financial discipline and ensuring timely reimbursement of expenditure, it has now been decided that the revised estimate for any work shall be submitted by the State PWD within one month of the date a revision of its cost is found necessary based on tender or within three months of the date a revision is found necessary during the periodic critical review meetings being held in the Ministry.

3. It is also reiterated that the revised estimates should be submitted in complete shape along with all the essential documents to facilitate prompt scrutiny of the same in the Ministry and to avoid delay in correspondences for seeking various details/clarifications from time-to-time. The Ministry has already prescribed a check list for ensuring this, which is required to be appended to each revised estimate. A copy of the same is again enclosed for reference.

4. In case of requirement of clarifications on the RCEs the same shall be done by the State PWD within one month of receipt of the Ministry's observations. However, in the event of requirement of resubmission of RCEs, the same shall be done in two months.

5. In case the revised estimates in complete shape along with the check list are not submitted within the specified time frame as mentioned in para 2 above and if clarifications are not submitted within one month, the same will be considered for sanction only after deleting any agency charges on the additional cost beyond original earlier revised sanction. The State PWD themselves will be fully responsible for the consequent financial loss to the State Government.

It is requested that the contents of this letter may be communicated to all concerned officers of the State PWD with specific instructions to strictly adhere to the above time frame for submission of the RCEs.

[Enclosure to Ministry's Circular No. RW/NH-31019/4/94/D.O.-II dated 7.9.1999]

## Finance Wing

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## **Revised Cost Estimate**

# Name of the Work:

(a)	Whether the main file where the original estimate was sanctioned linked.	Yes/No/NA
	Reasons for cost over-run and time over-run given.	Yes/No/NA
(b) (a)	History of events of the case given.	Yes/No/NA
(c) (d)	Whether any excess expenditure has been incurred over the permissible limits.	Yes/No/NA
ζ, γ	If yes, then source from which this was met may be indicated.	
(e)	In case of completed works whether the liability to be cleared has been indicated.	Yes/No/NA
(*) (f)	Whether completion report in respect of completed work has been received.	Yes/No/NA
(r) (g)	Whether the work is included in the list of ongoing works costing less than Rs. 5 crores with adequate provision.	Yes/No/NA
	If no, than source from which this was met may be indicated.	
(h)	Whether the sub total of provision kept for each individual on-going work tallies with the collective budget provision kept in the Demand for grants	Yes/No/NA
(i)	Whether the list of proposed works and ongoing works been prioritised by RW.	Yes/No/NA
(j)	Whether the proposal is on tender bases.	Yes/No/NA
	If Yes, then how much % of excess over the original sanctioned estimate.	
(k)	Whether Technical Note/Sanctioned Letter/Note for Finance placed on file.	Yes/No/NA

(1) In case the work costs more than Rs. 5 crores whether it has been given in the same format as per EFC. Yes/No/NA

If yes, whether the relevant details attached: IRR: Need for additional staff.

Break-up of cost overrun per cent wise over original sanctioned cost and RCEs:

(m) Already approved physical and financial progress of work:

Year ...... Physical (Com.) ..... Financial (Cum) (Rs. in takhs)

(n) Revised physical & financial progress of work:

Year ...... Physical (Com.) ...... Financial (Cum.) (Rs. in lakhs)

(o) Additional effect on BOS due to the RCE Rs. ..... lakhs.

(p) If the time overrun delay is due to the State PWD:

(i) Whether responsibility has been fixed.

(ii) Whether agency charges has been deducted

Yes/No/NA Yes/No/NA

Yes/No/NA

# CHECK LIST : NATIONAL HIGHWAYS (ROAD WORKS) REVISED ESTIMATES

# ESTIMATE REPORT

I.

1.

1. Does the report explain the need of revising the estimate and give detailed reasons for change in scope, specifications, rates, etc. and furnish information on the alternatives consdiered?

2. Does the report quote the letters of the Roads Wing approving changes in scope, in horizontal and vertical profiles, in dimensions, in specifications, etc., and approving higher rates through tenders? (In case any tender rate higher than the estimated rate has been accepted by the State authorities, the delegated powers unders which the same has been done may please be quoted and where a higher tender rate has been accepted beyond the delegated power, the reasons for not taking approval of the Centre may please be given.)

3. For provisions of restoring damage by rains, floods, etc. does the report quote the letters intimating the damages on occurrence and explain as to why restoration of the damages could not be a responsibility of the contractor?

4. Does for the completed works, the report give reasons for not submitting the revised estimate in time?

5. Does the report narate briefly the audit objections of significance on the work pending clearance? (It may be clearly understood that the Roads Wing reserves the right of reviewing a provision in case due to lack or inadequacy of information, etc. from the State Authorities, the provision, even though under objection by the State Accountant General, gets accepted in the revised estimate.)

6. Does the report give the date of start the target date or completion, etc?

## II. CERTIFICATES

Does the revised estimate contain the following certificates:

- (i) That the estimate has been checked cent percent arithmetically by a responsible officer of the State Government.
- (ii) That the land acquisition rates are as ascertained from the competent land acquisition authority.
- (iii) That the estimate does not provide for the cost of land belonging to the State Government and that this land will be available free of cost for the National Highway.
- (iv) That the compensation rates for land acquisition do not include agency charges and as such agency charges have been provided separately.

# III. COMPLIANCE WITH TECHNICAL AND INSPECTION NOTES

Does the estimate contain reports of compliance with the technical and inspection notes of the Roads Wing issued to-date. 121.5/23

# STATEMENT COMPARING THE ORIGINAL AND REVISED PROVISIONS GIVING IV. EXCESSES AND SAVING AND THE REASONS THEREON

Does the estimate contain a comparative statement in the form enclosed and given in detail the reasons for excesses and savings?

ABSTRACT COST V.

1.

Has it been seen that the estimate provides for the following wherever needed :

- Erosion control measures
- Rolling where emankment is high

Rumps for intercepted State Roads

Has it been seen that there is no major lump provision? 2.

Has it been indicated as to which rates are based on actuals, on tender, and on the current schedule and 3. on the analysis?

Does the abstract of cost account for as credit the salvage value of the dismantled material, empty 4 bitumen drums, and usable hard stone obtained from rock-cutting?

Does the abstract give apportionment of cost wherever applicable between the concerned Authorities, i.e., between the Road and Rail authorities for approaches to over/under bridges in replacement of level crossings: between Road and Irrigation Authorities where a road needing improvements requires diversion or raising because of coming of an irrigation project between the Centre and the State for lengths of byepasses through municipal limits where, as per the recent policy on National Highway links. Land for parallel service roads has to be acquired at the State's cost along with the lane for the bypass and later on parallel service roads also to be provided by the State at their cost before urbanization is authroized.

Is the provision for agency charges at 7.5 per cent for work done upto 30th September, 1975, and at 9 6. per cent for the balance work?

Is the provision for work-charged establishment as per the following? 7.

	provision for work the B-	2 per cent
	For works upto Rs. 25 lakhs	j.25 per cent
(b)	For works above Rs. 25 lakhs and upto Rs. 50 lakhs	1.5 per cent
;(c)	For works above Rs. 50 lakhs	p

VI.

# DETAILS OF MEASUREMENTS

Does the estimate give clearly the details of measurements of all the items figuring in the abstract of cost including levelling course? Is the quantity of the levelling course provided in the revised estimate on 'L' and cross sections as spelled out in this Ministry's Specification No. 106.3 "Measurement of pavement thickness" and not on percentage?

Do the measurements give separately the details of the work found necessary consequent to heavy 2. erosion by rain, floods, etc.

ANALYSIS OF RATES VII.

Does the estimate give analysis of all the rates which are neither covered by tenders nor by the 1. schedule of rate?

Are there quarry or borrow area charts in support of the leads adopted in the rate analysis? 2.

Have reasons and supporting data been furnished for changes in quarries of stone aggregate and borrow 3. areas of earth?

# VIII. DESIGNS

Does the estimate give designs and other details of new items as well as old items where there is change, covering

- (i) Cross Sections of embankment
- (ii) Crust thickness and composition
- (iii) Design of sub-base, base and surfacing
- (iv) Retaining walls etc

# IX. DRAWINGS

1. Does the estimate contain all the drawings viz., key map, index map, site plan, alignment plan, longitudinal sections, cross-sections, land acquisition plans and schedules, culverts, rest houses and inspection bungalows?

2. Do these drawings clearly show both the original and revised proposals and original and revised topography in case there be any difference?

3. Do the longitudinal and cross-sections indicate wherever relevant the highest water-table and highest flood level obtaining?

# NATIONAL HIGHWAY (ROAD WORKS)

### STATE

# STATEMENT SHOWING EXCESS SAVINGS AND DEVIATIONS IN COST & QUANTITIES AS COMPARED WITH THE ORIGINAL ESTIMATE IN RESPECT OF THE WORK OF

SI. No.	ltems of work	sanc	Original Revised Es sanctioned estimate			Estima	te	Savings Excess due to variation in quantity			
		Qty.	Rate	Amt.	Qty.	Rate	Amt.	Qty. Cols. (6-3) (-) or (+)	Rate same as Col. 4 (+)	Savings (-) Cols. (9x10) Amount Rs.	Excess (-) Cols. (9x10) Amount Rs.
I	2	3	4	5 .	6	7	8	9	10	 U	12

original sanctioned estimate

(II) New and/or deviated items (Note: The work done/to be done by different executing agencies should be shown separately).

(III) Centage charges

- (a) Contingencies
- (b) W/C establishment

(c) Quality control on admissible items

- (d) Agency charges
- Total

Savi	ngs/Excess	due to variati	ion in Rates	Total Savings	Excess	Remarks and justifications for deviation from the sanctioned estimates
Qty same as Col. 6	Rate Cols. (7-4) (-) or (+)	Savings (-) Cols. (13x14) Amount Rs	Excess (+) Cols. (13x14) Amount Rs	Savings (-) Cols. (11+15) Amount Rs	Excess (+) Cols. (12+16) Amount Rs	- · · · · · · · · · · · · · · · · · · ·
13	14	15	16	17	18	19

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# CHECK LIST: NATIONAL HIGHWAYS (BRIDGE WORKS) REVISED ESTIMATES

## 1

1.

- ESTIMATE REPORT ACCOMPANYING THE REVISED ESTIMATE
  - Does the report explain the need of revising the estimate and give detailed reasons for change in scope, specifications, (a) rate etc.?

Detailed note on each of the items where huge excess has been incurred as compared to the sanctioned estimate. (b)

Does the report quote the letters of the Roads Wing approving changes in scope, in dimensions, in 2. specifications, etc. and approving tenders?

3.

Does the report indicate the present stage of work (in progress or already completed)?

If the work is already completed, does it give reasons for not submitting the Revised Estimate in time? 4 Further, is it accompanied with completion drawings?

For provision of restoring damages by rains, floods etc. does the report quote the letters intimating the damages on occurrence and explain as to why restoration of the damages could not be a repsonsibility of the 5. contractor?

#### CERTIFICATES II.

Does the revised estimate contain the following certificates : 1.

That the estimate has been checked cent per cent arithmetically by a responsible officer of the State 11 Government

#### Land acquisition, if required 1.2.

- That the land acquisition rates are as ascertained from the competent land acquisition authority.
- That the estimate does not provide for the cost of land belonging to the State Govt. and that this will be available free of cost for the National Highway bridges and appurtenant works
- That the compensation rates for and acquisition do not include agency charges and as such agency charges have been provided separately.
- That the estimate is based on actuals in case of completed works. 1.3.

## COMPLIANCE WITH TECHNICAL AND INSPECTION NOTES III.

Does the estimate contain reports of compliance with the technical and inspection notes of the Roads Wing issued to-date?

## STATEMENT COMPARING THE ORIGINAL AND REVISED PROVISIONS, GIVING IV. EXCESSES AND SAVING AND THE REASONS THEREOF

Does the estimate contain the requisite comparative statement (copy of proforma enclosed) and give in detail the reasons for excesses and savings?

#### ABSTRACT OF COST V.

Has it been seen that the estimate provides for the following wherever needed? 1.

Dismantling of diversion bridge after construction of new bridge.

#### SUB-ESTIMATES FOR L.S. ITEMS 2.

Are the Lumpsum provisions made either in the original sanctioned estimate or the revised estimate supported by the detailed sub-estimates with proper justification for exceeding the sanctioned provisions, if any or for including any new items not covered by the sanctioned estimate?

Has it been indicated as to which rates are based on actuals, on tender, and on the current schedule and 3. on the analysis?

Does the abstract of cost account for as credit the salvage value of dismantled materials of the existing 4. structure, if any?

Does the abstract give apportionment of cost wherever applicable between the concerned Authorities 5. i.e. between the Road and Rail Authorities for approaches to over/under bridges in replacement of level crossings between Road and Irrigation Authorities where a road requires diversion or raising because of coming of an irrigation project between the Centre and the State for lengths of bypasses through municipal limits where, as per the extent policy on Natioal Highway links, land for parallel service roads has to be acquired at the State's cost along with the land for the bypass and later on parallel service roads are to be provided by the State at their cost before urbanization is authorized.

Is the provision for agency charges of 7.5 per cent for work done upto 30th September, 1975, and at 6. 9% for the balance work?

Is the provision for work-charged establishment as per the following?

(a)	For works upto Rs. 25 lakhs		2 per cent
(b)	For works above Rs. 25 lakhs and upto 50 lakhs		1.5 per cent
(c)	For works above Rs. 50 lakhs		I per cent

Note: Provision for centage charges in case of completed works, should be as per actuals limited to the permissible percentages.

#### VI. DETAILS OF MEASUREMENTS

Does the estimate give clearly the details of measurements of all the items figuring in the abstract of 1. cost?

Do the measurements give separately the details of the work found necessary consequent to heavy 2. erosion by rain, floods etc.?-

#### VII. CONTRACT DOCUMENTS

(a)

Is the R.E. accompanied with a copy of the contract agreement in full (not piecemeal)? In case of items where extra due to any clause in the contract like escalation clause is incurred copies of necessary letters ക്ര

etc. justifying in detail for the extra amount on this account.

#### VIII. ANALYSIS OF RATES

Does the estimate give analysis of all the rates which are neither covered by tenders nor by the 1. schedules of rates?

Note: Analysis for supplementary tender rates have to be given?

Are there quarry or borrow area charts in support of the leads adopted in the rate analysis? 2.

3. Fluctuation in rates of materials like steel and cement

- Does the R.E. contain the full details regarding the extra amount spent for steel and cement etc. including sources and (a) quality of materials, rates of procurement and the need for paying higher rates?
- Have reasons and supporting data been furnished for changes in quarries of stone aggregate and borrow areas? (b)

#### DESIGNS IX.

1.

7.

Whether the bridge is guide bund is being/has been constructed at the site approved by Roads Wing?

Whether the changes, if any, in design from those provided in the sanctioned estimate like charges in 2. span arrangement, change in linear waterway, type and depth of foundations, etc. have been got approved from Roads Wing?

Whether design assumptions made in the sanctioned estimate have been realised at site. 3.

Whether approval of the Ministry or its regional office has been contained wherever specified in the 4. technical notes accompanying the sanction letters?

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## X, DRAWINGS

1. Does the estimate contain all the drawings viz. index map, site plan, general arrangement drawing of the bridge guide bund and supporting drawings or reference to any type of drawings being used along with justification for departure, if any?

2. Does these drawings clearly show both the original and revised proposals in case there be any difference?

3. Whether the drawings have been got approved from the regional office, as suggested in the technical notes?

# XI. AUDIT PARAS

Are there any audit objections pending clearance on this work? If so, brief report may be furnished.

## XII. PENDING CLAIMS

If there are any claims pending settlement on this work a brief report thereof may be furnished.

## XIII. DEPARTMENTAL EXECUTION

If any or all the items of the work have been executed departmentally at rates different from sanctioned rates, the rate analysis of all such items may be furnished.

STATE:

## NATIONAL HIGHWAY (BRIDGE WORKS)

# STATEMENT SHOWING EXCESS/SAVINGS AND DEVIATIONS IN COST & QUANTITIES AS COMPARED WITH THE ORIGINAL ESTIMATE IN RESPECT OF CONSTRUCTION OF BRIDGE

SL No.	Items of work	Original sanctioned estimate			Revised Estimate			Savings/Excess due to variation in quantity			
		Qty.	Rate	Amt.	Qty.	Rate	Amt.	Qty. Cols. (6-3)	Rate same as Col. 4	Savings (-) Cols. (9x10) Amount Rs.	Excess (-) Cols. (9x10) Amount Rs.
1	2	3	4	5.	6	7	8	9	10	11	12
•	As provided in the original sanctioned estimate										
I.		ote: The w	ork done	/to be do	one by a	differer	nt execu	iting ager	cies shoul	d be shown se	parately).
	original sanctioned estimate	st of		/to be do	one by a	differer	nt execu	iting ager	ncies shoul	d be shown se	parately).
I.	original sanctioned estimate New and/or deviated items (N Excess due to difference in co	st of		/to be do	one by i	differer	nt execu	iting ager	ncies shoul	d be shown se	parately).
I.	original sanctioned estimate New and/or deviated items (N Excess due to difference in co procurement and supply of ma	st of		/to be do	one by b	differer	nt execu	iting ager	ncies shoul	d be shown se	parately).
I.	original sanctioned estimate New and/or deviated items (N Excess due to difference in co procurement and supply of ma 1. Cement	st of		/to be do	one by b	differer	nt execu	iting ager	ncies should	d be shown se	parately).
I.	original sanctioned estimate New and/or deviated items (N Excess due to difference in co procurement and supply of ma 1. Cement 2. Steel	st of		/to be do	one by a	differer	nt execu	iting ager	ncies shoul	d be shown se	parately).
I.	original sanctioned estimate New and/or deviated items (N Excess due to difference in co procurement and supply of ma 1. Cement 2. Steel 3. Other materials Total Centage charges (a) WC Establishment	st of		/to be do	one by o	differer	1t execu	iting ager	ncies shoul	d be shown se	parately).
I. II.	original sanctioned estimate New and/or deviated items (N Excess due to difference in co procurement and supply of ma 1. Cement 2. Steel 3. Other materials Total Centage charges (a) WC Establishment (b) Contingencies	st of		/to be do	one by a	differer	nt execu	iting ager	ncies shoul	d be shown se	parately).
I. II.	original sanctioned estimate New and/or deviated items (N Excess due to difference in co procurement and supply of ma 1. Cement 2. Steel 3. Other materials Total Centage charges (a) WC Establishment	st of		/to be do	one by a	differer	nt execu	iting ager	ncies shoul	d be shown se	parately).

		xcess due t n in Rates	0	Total Savi	ings/Excess	Remarks and justification for deviations from the sanctioned estimates			
Qty. same as col. 6	Rate col. (7-4) (-) or (+)	Savings -cols. (13x14) Amount Rs.	Excess - cols, (13x14) Amount Rs.	Savings (-) cols. (11+15) Amount Rs.	Excess (+) cols. (12+16) Amount Rs.	-			
13	14	15	16	17	18		19		