

BID DOCUMENT FOR

Design and Construction of Important Bridge across river Sone (approximate length 3.06 Kms), its approaches (on both sides) and other miscellaneous works for double track electrified railway line on Design Build Lump Sum Basis between Sonnagar (Rly.Km.549) and Dehri-on-Sone (Rly.Km.554) Railway Stations on Mughalsarai-Sonnagar Section of Eastern Dedicated Freight Corridor.

SONE BRIDGE CONTRACT PACKAGE

Issued on: 23.4.2013

BID DOUCUMENT No.: HQ/EN/EC/DB/Sone Bridge

PART-5

Employer:
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
A GOVERNMENT OF INDIA ENTERPRISE
under
MINISTRY OF RAILWAYS
COUNTRY: INDIA

PART - 5

Price Schedules

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PART – 5 - Price Schedules

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PREAMBLE

- 1. The Price Schedules shall be read in conjunction with the "Instructions to Bidders", "General Conditions", "Particular Conditions", "Employer's Requirement", "Technical Specifications", and "Drawings".
- 2. The bidder shall quote *lump sum cost* in *INR* for the entire project Design, procurement, Construction of Track and track related works and its testing & commissioning for double track electrified railway line on a Design and Construction of Important Bridge across river Sone (approximate length 3.06 Kms), its approaches (on both sides) and other miscellaneous works for double track electrified railway line on Design Build Lump Sum Basis between Sonnagar (Rly.Km.549) and Dehri-on-Sone (Rly.Km.554) Railway Stations on Mughalsarai-Sonnagar Section of Eastern Dedicated Freight Corridor schedule A. The cost shall cover all the items of the work as detailed in the "Employer's Requirement" contained in Part-2 Section-V of the Bid document as well as conforming to all specifications and stipulations laid down in the Bid Document including all addenda/corrigenda thereof till the date of submission of The lump sum cost shall be inclusive of all costs on Design, Drawings, Reports, Survey, Site Facilities, Construction Equipment, Plants, Instruments, Labour, Supervision, Materials, Erection, Testing, Maintenance, Temporary Works, Site Access, Safety, Security, Defect Rectification, Insurance, Profit, duties, Taxes, Levies, Royalties as per applicable law together with all general risks, liabilities and obligations set out or implied in the contract.
- 3. To facilitate **stage payments** during execution for which Lump sum Cost shall be quoted in **Schedule A**, the entire work has been divided into Six (6) Cost Centers along with their respective percentages of the quoted lump sum of cost in **Schedule** `B'. The value of each cost centre can thus be worked out based on lump sum quote. For further facilitating stage/on account payment, each of the cost centres have been divided into cost sub centres with percentage apportionment of the cost attached to each cost centres as indicated in **Schedule B-1 to B-6**.

On account payments would be made on prorate basis for work done against each Cost Centre/Sub-Centre.

For the purpose of stage/on account payment, the successful Bidder needs to indicate quantities assessed on the basis of preliminary/Final designs/drawings for each Cost Centres/Sub-Centers. However, on approval of detailed designs and drawings by Engineer/Employer against, each Cost Centre/Sub Centre, the final quantities for each Cost Centre/Sub Centre would be considered and payment done will be adjusted accordingly.

4. Filling of Bid document

The Cost shall be filled in with indelible ink or be type written. The person authorized to sign on behalf of the Bidder shall sign in full with the date at the bottom of all pages and at the end of schedules.

PRICE PROPOSAL SUBMISSION SHEET

(To be submitted with Financial Proposal only)

	Date:
To:	
We	e, the undersigned, declare that:
(a)	We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 7;
(b)	We offer to execute the Work in conformity with the Bidding Documents;
(c)	The total price of our Bid is as per schedule- A (Attached).
(d)	We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
(e)	We have not made any tampering or changes in the bidding documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we understand the bid will invite summery rejection and forfeiture of bid security/the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.
(f)	We understand that you are not bound to accept the lowest bid or any other bid that you may receive.
Naı	me
In t	he capacity of
	ned
Dul	y authorized to sign the Bid for and on behalf of

PRICE SCHEDULE Schedule A

(Sub-clause 14.1 of GCC)

Name of Work: "Design and Construction of Important Bridge across river Sone (approximate length 3.06 Kms), its approaches (on both sides) and other miscellaneous works for double track electrified railway line on Design Build Lump Sum Basis between Sonnagar (Rly.Km.549) and Dehri-on-Sone (Rly.Km.554) Railway Stations on Mughalsarai-Sonnagar Section of Eastern Dedicated Freight Corridor."

S No.	Description of Schedule	Lump Sum cost in INR	
		In Figures	In Words
1	2	3	4
1	Design and Construction of Important Bridge across river Sone (approximate length 3.06 Kms), its approaches (on both sides) and other miscellaneous works for double track electrified railway line on Design Build Lump Sum Basis between Sonnagar (Rly.Km.549) and Dehri-on-Sone (Rly.Km.554) Railway Stations on Mughalsarai-Sonnagar Section of Eastern Dedicated Freight Corridor.		
	Total Amount		

Note:-

- 1) The cost shall be filled in with indelible ink or be type written.
- 2) The above quoted cost covers all items of the work as detailed in the "Employer's Requirement" contained in Part 2 Section –V as well as conforming to all specifications and stipulations laid down in the Bid Document including all addenda/corrigenda thereof till the date of submission of Bids.
- 3) It is inclusive of all costs on Design, Drawings, Reports, Survey, Site Facilities, Construction, Equipment, Plants, Instruments, Labour, Supervision, Materials, Erection, Testing, Maintenance, Temporary Works, Site Access, Safety, Security, Defect Rectification, Insurance, Profit duties, Taxes, Levies, Royalties as per applicable law together with all general risks, liabilities and obligations set out or implied in the contract.

SIGNATURE OF BIDDER

PRICE SCHEDULE Schedule B

Apportionment of Contract Price for Payments According to Cost Centres (Sub-clause 14.4 of GC)

SN.	Cost Centre	Percentage of Contract
		Price
1.	Survey, investigation, Design, setting out	3%
	and as Built drawings	
2.	Foundation for Piers and Abutments of	45%
	Bridges.	
3.	Substructure for Piers and Abutments of	15%
	Bridges.	
4.	Superstructure for Piers and Abutments of	32%
	Bridges.	
5.	Earthwork & Protection works for	2%
	approaches.	
6.	Completion of activities towards final taking	3%
	over	
	Total	100%

The percentage figures as filled in column (3) by the Employer for the apportionment of the Contract Price for completion of the Works corresponding to the items given above are fixed and payment will be released for different cost centre as per above percentage break-up of contract price. Refer Sub-Clause 14.4 – Particular Conditions of Contract for further details.

Price Schedule B-1

Contract Price Weightage for Interim Payments

for

Survey, Investigation, Design, Setting out and As Built drawings

(Sub-clause 14.4 of GC)

Item of Work	Stage Payment	Wei	Cost	Payment Procedure
		ght age		
Inception Report	Inception Report	5%		Payment shall be due only after completion of these activities
Survey	Site Survey, establishment of bench marks, validation of ROW and finalization of Alignment.	5%		Payment shall be due only after completion of these activities
Geotechnical & Hydrological investigation	Geotechnical & Hydrological Investigations and Submission of detailed report.	15%		Payment shall be due only after completion of these activities
Technical Design	Submission of Technical Design and Drawings a) Wells b) Sub-structure c) Super-structure including bearing and launching arrangement scheme. d) Earth work and protection works	3% 2% 4%	3% of the Contract Price	Payment shall be due only after completion of these activities
	Approval of Technical Design and Drawings a) Wells b) Sub-structure c) Super-structure including bearing and launching arrangement scheme d) Earth work and protection works	3% 2% 4%		Payment shall be due only after completion of these activities
Setting Out	Setting out of the final alignment with location of all piers/abutments for main bridge, approaches on both ends and miscellaneous works.	6%		
Construction Design	Submission of Construction design and drawings			Payment shall be due only after completion

	a) Malla	F0/	-f 4
	a) Wells	5%	of these activities
	b) Sub-structure	4%	
	c) Super-structure including	7%	
	bearing and launching		
	arrangement scheme		
	d) Earth work and protection	1	
	•	1%	
	works		
	Approval of Const. Design and		Payment shall be due
	drawings		only after completion
	a) Wells	5%	of these activities
	b) Sub-structure	4%	or those delivities
	'	7%	
	c) Super-structure including		
	bearing and launching		
	arrangement scheme		
	d) Earth work and protection	1%	
As-Built	Submission of As-Built Drawings	15%	Payment shall be due
Drawings			only after completion
			of these activities
	Total	100%	

NOTE:

Payment will be made on approval of the Engineer/Employer for various completed items.

Price Schedule B-2

Contract Price Weightage for Interim Payments

for

Foundation for Piers and Abutments of Bridge

(Sub-clause 14.4 of GC)

Item of Work	Stage Payment	Weigh tage	Cost	Payment Procedure
Foundation Work	Setting of Well Curb for sinking at designed location (including coffer dam if any).	10%		Payment shall be made after setting of well curb. Payment will be made on pro-rata basis of total no. of wells for completed setting of well curb.
	Sinking and seating of well completely	45%	45 % of the Contract Price	Payment shall be made after sinking and seating the well completely. Payment will be made on pro-rata basis of total no. of wells for completed Sinking and seating of well.
	Completion of Bottom plug	20%		Payment shall be made after completion of Bottom plug. Payment will be made on pro-rata basis of total no. of wells for completed Bottom Plug.
	Completion of Well Cap	25%		Payment shall be made after completion of Well cap completely Payment will be made on pro-rata basis of total no. of wells for completed Well Cap.

NOTE:

- i) Payment will be made on approval of the Engineer/Employer for various completed items.
- ii) Unit of measurement is no. of wells.

Price Schedule B-3 Contract Price Weightage for Interim Payments for Substructure for Piers and Abutments of Bridge

(Sub-clause 14.4 of GC)

Item of Work	Stage Payment	Weightage	Cost	Payment Procedure
Sub Structure Works	Completion of substructure for pier/abutment	70%	15 % of the Contract Price	Payment will be made on pro-rata basis of total no. of Piers and Abutments for completed substructure for Piers /Abutments.
	Completion of pier/ abutment cap including inspection platforms	30%		Payment will be made on pro-rata basis of total no. of Piers and Abutments for completed substructure for Piers /Abutments cap.

NOTE:

- i) Payment will be made on approval of the Engineer/Employer for various completed items.
- ii) Unit of measurement is no. of Piers/abutments.

	Price Schedule B-4							
	Contract Price Weightage for Interim Payments							
			for					
	S	Superstruc	cture of Brid	lge				
				(Sub-clause 14.4 of GC)				
Item of Work	Stage Payment	Weigh tage	Cost	Payment Procedure				
Super structure	Development and Commissioning of Casting yard for precasting of PSC box girders	4%		Payment will be made on completion of this activity.				
	Pre-casting of Box Girders including testing	55%		Payment will be made on pro-rata basis of total no. of Box Girders for completed Box Girders. Unit of measurement is no. of Box Girders.				
	Manufacturing supply and installation of bearing for each span	2.5%	32% of the Contract	Payment will be made on pro-rata basis of total no. of spans for completed installation of bearings for a span. Unit of measurement is no. of Spans.				
	Launching of Box girders	35%	Price	Payment will be made on pro-rata basis of total no. of Box Girders for completed Launching of Box Girders. Unit of measurement is no. of Box Girders.				
	Laying of wearing Coat	1%		Payment will be made on pro-rata basis for completed length.				
	Construction of Ballast retainers, footpath, hand railing, installation of	2.5%		Payment will be made on pro-rata basis of total no. of Spans for completed spans.				

NOTE:

expansion joints.

- i) Payment will be made on approval of the Engineer/Employer for various completed items.
- ii) Mass production/ regular casting of box girders shall start after validation of design /construction methodology by conducting load test on first girder. For testing refer para 7.20.2 (6) Vol.6, Section V (Employer's Requirement).
- iii) The number of span for UP and DN shall be considered separately for payment purposes.

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Price Schedule B-5 Contract Price Weightage for Interim Payments for Earthwork & Protection works for approaches of Bridge

(Sub-clause 14.4 of GC)

Item of Work	Stage Payment	Weigh tage	Cost	Payment Procedure
Earthwork & Protection works	Earth work for formation on approaches including blanketing a) On One Approach b) Another Approach	40% 40%	2% of the Contract	Payment will be made on completion of these activities.
	Protection work (including wing walls, retaining walls/buried abutment including launching apron. Transition arrangement, etc. in approaches) as required. a) On One Approach b) Another Approach	10% 10%	Price	

NOTE:

i) Payment will be made on approval of the Engineer/Employer for various completed items.

Price Schedule B-6
Contract Price Weightage for Interim Payments
For
Completion of activities towards final taking over

(Sub-clause 14.4 of GC)

Item of Work	Stage Payment	Weightage	Cost	Payment Procedure
Final taking over Activities	Completion of all other finishing items like Bridge name board, bridge plaque, flood gauges, trolley refuge, railing for inspection platform, ladders etc.	50%	3% of the Contract Price	Payment will be made on pro-rata basis.
	Final Taking over	50%		Lump Sum

Note:

Payment will be made on certification of the Engineer/Employer for various items.