



BID DOCUMENT FOR

Design and Construction of Rail Flyover near Ganjkhwaja, Formation in Embankments/Cuttings including blanketing, Bridges (Major, Minor & RUBs), Supply and Spreading of Ballast and other related infrastructural works for double track electrified railway line on Design Build Lump Sum Basis in different stretches between Dehri-on-Sone & Mughalsarai of Eastern Dedicated Freight Corridor in the states of Bihar and Uttar Pradesh in India.

CIVIL AND STRUCTURES CONTRACT PACKAGE

Issued on: **14.6.2013**

BID DOUCUMENT
No. : **HQ/EN/EC/DOS-MGS/RFO & Bal. Works**

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

CONTENTS

PART – 5 - Price Schedules

1. Preamble
2. PRICE PROPOSAL SUBMISSION SHEET (BDF-10)
3. Schedule – A (Form for Lump sum cost of the Bid)
4. Schedule – B
 - Apportionment of contract Price for payments according to cost centres.
 - Price Weightage for interim Payment (B-1 to B-9).

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 and Construction of Rail Flyover near Ganjkhwaja, Formation in Embankments/Cuttings including blanketing, Bridges (Major, Minor & RUBs), Supply and Spreading of Ballast and other related infrastructural works for double track electrified railway line on Design Build Lump Sum Basis in different stretches between Dehri-on-Sone & Mughalsarai of Eastern Dedicated Freight Corridor in the states of Bihar and Uttar Pradesh in India. **in 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 Bids. 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 Nine (9) 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-9**.
On account payments would be made on prorated basis for work done against each Cost Centre/Sub-Centre. There are certain items which are not included in cost centres/sub-centres, these works shall also be carried out by Contractor, no extra/additional payment shall be done on account of these works.

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:

Invitation for Bid No **HQ/EN/EC/DOS-MGS/RFO & Bal. Works Dated : 14.6.2013**

To:.....

We, 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.

Name

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date

.....

PRICE SCHEDULE			
<u>Schedule A</u>			
(Sub-clause 14.1 of GCC)			
Name of Work :- “Design and Construction of Rail Flyover near Ganjkhwaja, Formation in Embankments/Cuttings including blanketing, Bridges (Major, Minor & RUBs), Supply and Spreading of Ballast and other related infrastructural works for double track electrified railway line on Design Build Lump Sum Basis in different stretches between Dehri-on-Sone & Mughalsarai of Eastern Dedicated Freight Corridor in the states of Bihar and Uttar Pradesh in India.”			
S No.	Description of Schedule	Lump Sum cost in INR	
		In Figures	In Words
1	2	3	4
1	Design and Construction of Rail Flyover near Ganjkhwaja, Formation in Embankments/ Cuttings including blanketing, Bridges (Major, Minor & RUBs), Supply and Spreading of Ballast and other related infrastructural works for double track electrified railway line on Design Build Lump Sum Basis in different stretches between Dehri-on-Sone & Mughalsarai of Eastern Dedicated Freight Corridor in the states of Bihar and Uttar Pradesh in India.		
	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, GC)

S N	Cost Centre	Percentage of Contract Price
(1)	(2)	(3)
1	Survey, investigation, Design, Setting out and As Built drawings	2.0
2	Earthwork	39.0
3	Minor Bridges & Road Under Bridges	7.0
4	RCC Buried Boxes	5.0
5	Major Bridges	12.0
6	Bridge Portion of Rail Fly Over (Excluding approaches).	18.0
7	Works at Pahleja Yard	8.0
8	Ballast Supply and Spreading	5.0
9	Miscellaneous works & Final Taking Over	4.0
	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 Drawing
(Sub-clause 14.4 of GC)

Cost Centre	Item of Work		Stage Payment		Weightage	Cost	Payment Procedure
Survey, Investigation, Design, Setting Out and As Built Drawing	1	Survey	1(a)	Site survey and finalization of alignment	05%	2 % of the Contract Price	Unit of measurement is linear length along alignment. Payment of each stage will be made on prorata completion of linear length as per weightage given in this Schedule
		Geotechnical/ Hydrological Investigations	1(b)	Site data collection, Detailed Geotechnical and Hydrological investigations report submission, and acceptance of Report by Engineer.	10%		
		Preliminary Design	1(c)	Preliminary Design of the formation, bridges culverts, Flyovers / RUB, fencing, drains, platforms, and all other structures.	20%		
	2	Definitive Design	2	Definitive Design of the formation, bridges culverts, Flyovers, RUB, fencing, drains, platforms, and all other structures.	30%		
	3	Setting Out	3	Setting out of the Final Alignment with location of all structures	15%		
4	Completion Drawings	4	As Built Drawings	20%			
Total:					100%		

Note :

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

Price Schedule B-2
Contract Price Weightage for Interim Payments
for
Earthwork

(Sub-clause 14.4 of GC)

Cost Centre	Item of Work	Stage Payment	Weightage	Cost	Payment Procedure	
Earthwork	Earthwork in formation including blanketing, drains, retaining structures, turfing, pitching and other incidental works.	1	Earthwork in embankment/cutting including compaction so as to achieve 50% of desired height below bottom of blanketing layer:		39 % of the Contract Price	Unit of measurement is linear length along alignment. Payment of each stage will be made on prorata completion of linear length as per weightage given in this Schedule
		1(a)	For RFO Portion (Ch.112.13 to 116.38)	15%		
		1(b)	For Balance Portion	15%		
		2	Balance earthwork in embankment/ cutting including compaction upto bottom of blanketing layer			
		2(a)	For RFO Portion (Ch.112.13 to 116.38)	12%		
		2(b)	For Balance Portion	13%		
		3	Earthwork in Blanketing layer complete in all respect	35%		
4	Longitudinal/cross drains, retaining structures, pitching, turfing and other incidental works, complete.	10%				
Total:				100%		

Note :

- i) Payment will be made on certification of the Engineer for various items.
- ii) Single line connecting to Ganjkhwaja shall also be considered in linear length for the purpose of payment.

Price Schedule B-3
Contract Price Weightage for Interim Payments
for
Minor Bridges & Road Under Bridges

(Sub-clause 14.4 of GC)

Cost Centre	Item of Work	Stage Payment		Weightage	Cost	Payment Procedure
Minor Bridges & RUBs	Construction of Minor Bridges, Road Under Bridge etc.	1	On ground clearance, ground improvement and testing, completion of the foundation works etc.	20%	7 % of the Contract Price	Cost of each minor bridge/RUB will be determined on the basis of total linear length, along alignment, of the minor bridges/RUB on prorata basis. Payment of each stage for a bridge/RUB will be made on the completion of the relevant stage as per the weightage given in this schedule.
		2*	On completion of RCC Boxes, abutment, piers for slab bridges, back filling and approaches.	37%		
		3	On completion of balance works as per drawing like -deck slab along with walkway, railings, wing walls, return walls, Ballast Retainer, foot path, hand railing, all types of protection works, pitching, turfing, river training works, if any, etc. complete in all respects	43%		
Total:				100%		

Note-

1. Payment will be made on certification of the Engineer for various items.
- 2* If a bridge is constructed using precast elements, then 75 % payment against sub cost centre 2 shall be released upon finishing casting of elements and transporting all such elements to the site of bridge construction. Balance 25% shall be released after completion of stage 2.
3. Single line connecting to Ganjkhwaja shall also be considered in linear length for the purpose of payment.

Price Schedule B-4
Contract Price Weightage for Interim Payments
for
RCC Buried Boxes

(Sub-clause 14.4 of GC)

Cost Centre	Item of Work	Stage Payment		Weightage	Cost	Payment Procedure
RCC Buried Boxes	Construction of RCC Buried Boxes	1	On ground clearance, ground improvement and test, completion of the foundation works etc.	20%	5 % of the Contract Price	Cost of each location for RCC Buried Box will be determined on the basis of total linear length, along alignment, of the bridges on prorata basis. Payment of each stage for a bridge will be made on completion of the relevant stage as per the Weightage given in this schedule.
		2*	On completion of RCC Boxes	60%		
		3	On completion of balance works as per drawing like - back filling, pitching, turfing, Ballast retainer, foot path, hand railing etc. complete in all respects.	20%		
Total:				100%		

Note:

1. Payment will be made on certification of the Engineer for various items.
- 2.* If a RCC Box is constructed using precast elements, then 75% payment against sub-cost centre 2 shall be released upon finishing casting of elements and transporting all such elements to the site of bridge construction. Balance 25% shall be released after completion of stage 2.

Price Schedule B-5
Contract Price Weightage for Interim Payments
for
Major Bridges

(Sub-clause 14.4 of GC)

Cost Centre	Item of Work	Stage Payment	Weig htag e	Co st	Payment Procedure	
Bridges (Major)	Construction of Major Bridges	1	On ground clearance, preparation of base below the pile cap or below the well cap for well foundation or below the pier base for open foundation as applicable, ground preparation work, completion of the foundation works and testing work.	25%	12 % of the Contract Price	Cost of each bridge will be determined on the basis of total linear length, along alignment, of the bridges on prorata basis. Payment of each stage for a bridge will be made on completion of the relevant stage as per the weightage given in this schedule.
		2	On Completion of abutment, piers including pile caps or well caps as applicable, work up to the bottom of super-structure (without bearings) including pier/abutment cap and completion of approaches including back filling.	20%		
		3	On completion of super structure, bearings, walkway, hand rails, testing etc.	30%		
		4	On completion of balance works as per drawing like - wing walls, return walls, all protection works, pitching, turfing, if any, testing on completion etc. complete in all respects.	25%		
Total:				100%		

NOTE :

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

Price Schedule B-6

Contract Price Weightage for Interim Payments

for

Bridge Portion of Rail Fly Over (Excluding approaches)

(Sub-clause 14.4 of GC)

Cost Centre	Item of Work	Stage Payment		Weightage	Cost	Payment Procedure
Bridge portion of Rail Fly Over	Construction of Bridge Portion of Rail Flyovers	1	On ground clearance, preparation of base below the pile cap or below the well cap for well foundation or below the pier base for open foundation as applicable, ground preparation work, completion of the foundation works and testing work.	20%	18 % of the Contract Price	Payment of each stage for RFO will be paid on completion of the relevant stage as per the Weightage given in this schedule.
		2	On Completion of abutment/piers including pile caps or well caps as applicable, work up to the bottom of super-structure (without bearings) including pier/abutment cap and completion of approaches including back filling.	20%		
		3	On completion of super structure, bearings, walkway, hand rails, testing.	35%		
		4	On completion of balance works as per drawing like - wing walls, return walls, all protection works, pitching, turfing, if any, etc. complete in all respects.	25%		
Total:				100%		

Note :

1. **Payment will be made on certification of the Engineer for various items.**
2. For Rail Flyover – these stages will be further subdivided, into Number of piers +2 abutments etc. as per the approved drawing of RFO and stage payment for completion of work for each pier and abutment shall be made as per the requirement of these stages.

Price Schedule B-7
Contract Price Weightage for Interim Payments
for
Works at Pahleja Yard

(Sub-clause 14.4 of GC)

Cost Centre	Item of Work	Stage Payment	Weightage	Cost	Payment Procedure	
Works at Pahleja Yard	Works at Pahleja Yard	1	Earthwork in Pahleja Yard	35%	8 % of the Contract Price	Unit of measurement is linear length along alignment. Payment of each stage will be made on prorata completion of linear length as per Weightage given in this Schedule
		2	Construction of Minor Bridges in Pahleja Yard	20%		
		3	Rail Level, goods platforms	10%		
		4	On completion of balance works as per yard drawing like – station building, Goods Office, Road in circulating area, Fencing, earth filling, pitching, turfing, if any, etc. complete in all respects.	35%		
Total:				100%		

Note :

1. **Payment will be made on certification of the Engineer for various items.**
2. **Further distribution for stage payment of item 4 above will be decided by Engineer.**

Price Schedule B-8
Contract Price Weightage for Interim Payments
for
Ballast Supply and Spreading

(Sub-clause 14.4 of GC)

Cost Centre	Item of Work	Stage Payment		Weight age	Cost	Payment Procedure
Ballast Supply	Ballast Supply and Spreading	1	Complete supply of Ballast (60,000 cum)	70%	5 % of the Contract Price	Stage payment under this cost centre will be regulated based on pro-rata volumetric measurement of Ballast supply.
		2	Spreading and rolling of part quantity of 30,000 cum of ballast to provide approx. 200 mm cushion to facilitate laying of track over the ballast.	30%		The stage payment under this cost centre shall be regulated on linear basis for ballast spreading, leveling and rolling.
Total:					100%	

Note :

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

Price Schedule B-9
Contract Price Weightage for Interim Payments
for
Miscellaneous Works and Final Taking Over

(Sub-clause 14.4 of GC)

Cost Centre	Item of Work	Stage Payment	Weight age	Cost	Payment Procedure
Miscellaneous Works and Final Taking Over	Level Crossing Gates	1. On completion of level crossing gate lodges & related works at various locations as per the Employer's Requirement.	6%	4 % of the Contract Price	Unit of measurement is no. of level crossings. Payment of each stage will be made on prorata completion of no. of level crossings subject to Weightage given in this Schedule.
	Utilities	2. Removal of chartered utilities as mentioned in Bidding Document.	22%		Payment will be made on completion of these activities.
	Final Taking Over Activities	3. Completion of all other finishing items like Bridge name board, bridge plaque, flood gauges, trolley refuge, railing for inspection platform, ladders etc.	22%		Unit of measurement is linear length of embankment .Payment will be made on Pro-rata basis.
		4. Final Taking Over	50%		Lump Sum.

Note:

1. Payment will be made on certification of the Engineer for various items.
2. Further distribution for stage payment of item 2 above will be decided by Engineer.