

**EDFC FIELD UNIT-KOLKATA-CIVIL/EDFC
TENDER DOCUMENT**

Tender No: KKK-EN-ROB-DGN-KAN-UDL

Closing Date/Time: 04/03/2024 15:00

GM/CO-Ord/DFCCIL/Kolkata acting for and on behalf of The President of India invites E-Tenders against Tender No **KKK-EN-ROB-DGN-KAN-UDL** Closing Date/Time 04/03/2024 15:00 Hrs. Bidders will be able to submit their original/revise bids upto closing date and time only. Manual offers are not allowed against this tender, and any such manual offer received shall be ignored.

1. NIT HEADER

Name of Work	Consultancy services for preparation of GADs, detailed project report, detailed design and drawing including geotechnical investigation for Construction of 19 (Nineteen) ROBs/RUBs in connection with Eastern Dedicated Freight Corridor between Andal and Khana Stations of Asansol Division in West Bengal.		
Bidding type	Normal Tender		
Tender Type	Open	Bidding System	Single Packet System
Tender Closing Date Time	04/03/2024 15:00	Date Time Of Uploading Tender	08/02/2024 13:23
Pre-Bid Conference Required	No	Pre-Bid Conference Date Time	Not Applicable
Advertised Value	36170255.82	Tendering Section	WEST BENGA
Bidding Style	Single Rate for Each Schedule	Bidding Unit	
Earnest Money (Rs.)	723400.00	Validity of Offer (Days)	60
Tender Doc. Cost (Rs.)	11800.00	Period of Completion	8 Months
Contract Type	Works	Contract Category	Expenditure
Bidding Start Date	19/02/2024	Are Joint Venture (JV) firms allowed to bid	No
Ranking Order For Bids	Lowest to Highest	Expenditure Type	Capital (Works)

2. SCHEDULE

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule A-Non-Schedule Items							24557532.00	Above/ Below/Par
1	Please see Item Breakup for details.				24557532.00	AT Par	24557532.00	
Description:- Non-Schedule Item								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule B-Geotechnical Investigation							11612723.82	Above/ Below/Par
2	Please see Item Breakup for details.				11612723.82	AT Par	11612723.82	
Description:- Geotechnical Investigation								

3. ITEM BREAKUP

Schedule	Schedule A-Non-Schedule Items							
Item- 1	Non-Schedule Item							
S No.	Item No	Description of Item			Unit	Qty	Rate	Amount

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1	NS1	<p>Conducting final Location Survey for Construction of ROB/ RUBs as per relevant para of IR Engineering Code(1993) edition and submission of report. Work to be conducted as per Railways latest codes and as per terms of reference mentioned in the tender document. Note: - The Rate should include the following items. (i) Conducting detailed survey for taking longitudinal and transverse section taking detail of waterways, electrical and telephone crossing road details etc. along the route and plotting the alignment on village map, village map to be arranged by contractor. (ii) Pegging out of alignment at every 10m interval on straight and 10m interval on curves including setting out of curves with transition etc. working out detail quantities of all items of earthwork, Concrete, steel, bituminous Road items (As per MORTH Schedule), and submission of document as per relevant Paras of Engineering Code with schematic diagram. (iii) Planting of concrete pillars of size 30CMx30cm x 60cm of 1:2:4 cement concrete proportion at every 50m interval at Center Line and edge of ROW of ROB/ RUB corridor (with contractor's materials labour tools and plants including taxes and royalties). (iv) Submission of detailed project report in 5(five) copies and soft copy on CD. (v) Transferring the finalized alignment on ground using total station or any other survey instrument as approved by Engineer-in -charge. (vi) Preparation of Land Plans table along the existing track and proposed alignment for identification & measurement of adjoining properties required for superimposition of revenue record. It also includes collection of revenue maps (vii) Schedule of land property required for (Railway portion + approaches) for acquisition purpose will be prepared by the Consultant as per format advised by DFCCIL. (viii) Preparation of land acquisition proposal (Section 20A of RAA, 2008 or similar or similar work of other act as applicable) in five copies as per Revenue Departments requirement of respective State including Collection of Land Records including superimposition of revenue record on proposed alignment & calculation of land requirement. (ix) Assistance for preparation of section 20E (of RAA, 2008 or similar or similar work of other act as applicable) proposal for publication after JMS with state Govt officials. (x) Assistance for preparation of Form 11 for section 20F (of RAA, 2008 or similar or similar work of other act as applicable) with consultation of respective State Govt Officials. Note: In case consultant is not required/ not able to Plant concrete pillars (sub item-iii) for any ROB/ RUB completely or partially, deduction @ Rs. 747/- per pillar shall be made.</p>	Each	19.00	285787.00	5429953.00
2	NS2	<p>Preparation of Concept Plan with different option of ROB with respect to location of ROB/ RUB alignment of road, ease of construction of spans and public convenience. (i) For each ROB/ RUB, 3 to 5 alternative concept plans shall be prepared on AutoCAD and superimposed on Google Map in kmz file. (ii) A write up regarding positive and negative aspects (advantages & disadvantages) of each option ranking them in the order of preference. (iii) Estimated cost of ROB/ RUB, including cost of land & utility shifting is to be given for each option. (iv) Each option shall be submitted in A-3 Sheet in Colour in 05 copies. (v) A CD Containing all option in kmz file shall also be submitted. (vi) Modifications as suggested by DFCCIL and stake holders is to incorporated and re-submitted. (vii) If none of the options submitted by consultant is found suitable, no payment shall be made and the consultant shall submit fresh options. (viii) Submission of feasibility Report. Note: - The rate includes site survey required for this item as per alignment decided by DFCCIL and nothing extra shall be paid for site survey conducted for this purpose.</p>	Each	19.00	188458.00	3580702.00

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3	NS3	Preparation of GAD, Detailed design for foundation, sub-structure of viaduct span of ROB and approach spans, Design of Reinforced Earth, Retaining Wall etc. as provided in Scope of Work as per relevant IR, BIS, IRC and other codes for the option of ROB alignment/span selected by Employer: This item includes: (i) Integrated Key Plan of entire ROB alignment covering railway portion, takeoff and landing approaches, arrangements of ROB approaches with NHAI/other roads department will be developed and included in GAD as per the Technical Requirement mentioned in the SCC. (ii) Preparation of GADs as per check list of Railway/DFCCIL and codal provision. (iii) Preparation of preliminary and detailed design of foundation substructure, Superstructure including staircase, approach slab (wherever applicable) & Good for construction drawings (GFC Drawings) and all other drawing as required for construction of DFC+ Railway portion of the ROB and both approaches. (iv) Submission of proof checked detailed design and Good for Construction Drawings (DFC drawings) for foundation, sub-structure, superstructure (if non- RDSO span is adopted), reinforced earth wall and retaining wall. v) The detailed design of super structure will be further governed as per para (iv) of deliverable in part -1 chapter -III. vi) Preparation of bill of quantity (BOQ), detailed estimate, technical specifications and tender document as per preliminary design and drawings.vii) Checking of design /drawing submitted by contractor for bearing, launching scheme, temporary arrangement drawing etc , if required. viii)Technical support for getting approval from Railway /CRS including approval of temporary staggng and launching scheme if required. ix) Designer support during construction of ROB including site visit as per requirement of DFCCIL. This will include modification design / drawings as and when required. x) Out station visit (Kolkata, Asansol, District HQ of Bardhaman, Dhanbad, Delhi /NCR and other locations in Andal -Khana section) with stakeholder attached by consultant team on specific advice of DFCCIL and nothing extra will be paid for visits for such meeting during currency of contract. xi) Proof checking of designs from reputed institute like IIT/NIT with approval of institute by DFCCIL. Note: In case consultant is not required to prepared GAD for any ROB, RUB deduction @ Rs. 15,000/- per ROB/RUB shall be made. If sub-item (vi) regarding BOQ, tender document is not operated further deduction @Rs. 20,000/- per ROB will be made.	Each	17.00	878161.00	14928737.00
4	NS4	Drone Videography in linear section to review progress of work/ intrusion (encroachment)/existing structures into the corridor covering approximate width of 100 to 120 m along Proposed ROB/RUB/ Road/ Existing Rai as instructed by engineer incharge. Submission of geo-tagged 4k resolution videos along with a player facility to load and link image/ Drawings/other files etc., and linkage to GIS map like Google, Bhuvan etc., with overlay /Sync facility should be available & ROW, alignment, structure, chainage & other important details can be incorporated in it. Deliverable to be submitted in Pen drive/ Hard disk.	Each	20.00	4892.00	97840.00
5	NS5	Preparation and submission of Final Geotechnical Investigation report giving complete and Comprehensive record of investigations, laboratory test reports and calculations in approved format including recommendation of bearing capacity, founding level etc. including type of foundation by qualified geotech engineer and vetting of report from NIT/IIT/ Reputed Govt. Engineering college. Note: Unit to be read as for Each 2 ROB/RUB	Each	10.00	52030.00	520300.00
					Total	24557532.00
Schedule	Schedule B-Geotechnical Investigation					

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Item- 2		Geotechnical Investigation				
S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		Exploratory drilling of boreholes down to required depth, drilling of 150mm dia. boreholes in all type of soils except hard rock & large boulders (boulder core more than 30cm) including refilling, reinstating surface and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion/chiselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area.				
1	021011	0m to 10m	Metre	1140.00	1441.73	1643572.20
2	021012	10m to 20m	Metre	1140.00	1585.91	1807937.40
3	021013	20m to 30m	Metre	912.00	1730.07	1577823.84
4	021014	30m to 40m	Metre	342.00	1802.18	616345.56
5	021040	Erection of temporary working platform to drill bore hole through flowing/standing water through river bed up to water depth of 1.5m, and dismantling after completing work and removing from the site to clear the water way.	cum	22.00	2972.80	65401.60
		Drilling of NX size borehole (75mm dia.) in all types of hard rock and collection of rock core samples from boreholes and preserving in boxes.				
6	021051	0m to 10m	Metre	112.00	4325.20	484422.40
7	021052	10m to 20m	Metre	22.00	4613.54	101497.88
8	021110	Taking out 100mm dia. & 450mm long undisturbed samples of soil from bore holes, including provision of air tight containers for packing and, labeling incl. transporting the samples to laboratory. Piston sampler shall be used for extracting undisturbed samples where necessary. Samples shall be collected as per IS:2720.	Each	114.00	130.80	14911.20
9	021120	Taking out 100mm dia. & 450mm long disturbed samples of soil from bore holes, including provision of air tight containers for packing, labeling and transporting the samples to laboratory. Samples shall be collected as per IS:2720.	Each	114.00	144.18	16436.52
10	021130	Conducting standard penetration test as per IS:2131 at approximate 1.5m intervals in bore holes, as directed by the Engineer in charge	Each	1482.00	751.44	1113634.08
11	021140	Collection of water samples at required intervals	Each	114.00	216.26	24653.64
		Conducting laboratory Tests on collected soil samples as per relevant IS code				
12	021151	Moisture Content/Dry Density	Each	114.00	360.44	41090.16
13	021152	Atterberg Limits	Each	1326.00	865.04	1147043.04
14	021153	Specific Gravity	Each	1326.00	384.46	509793.96
15	021154	Grain size analysis including Hydrometer analysis	Each	1326.00	706.46	936765.96
16	021155	Direct Shear Test	Each	57.00	2847.43	162303.51
17	021157	Consolidation Test	Each	114.00	2883.47	328715.58
18	021158	Unconfined Compression Test	Each	57.00	2214.50	126226.50
19	021159	Tri-axial Test	Each	57.00	2214.50	126226.50
		Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code				
20	021161	Density Test	Each	22.00	480.59	10572.98
21	021162	Water Absorption & Porosity	Each	22.00	360.44	7929.68
22	021163	Hardness	Each	22.00	432.52	9515.44
23	021164	Unconfined Compression Test	Each	22.00	2306.78	50749.16
24	021165	Point Load Test	Each	22.00	1311.98	28863.56
25	021166	Modulus of Elasticity	Each	22.00	6694.25	147273.50
26	021167	Abrasion Testing	Each	22.00	1545.53	34001.66

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27	021170	Conducting chemical analysis of ground water samples to determine suitability for concreting and aggressiveness in relation to attack on concrete / reinforcement including determination of pH value.	Each	19.00	3604.34	68482.46
28	021180	Conducting chemical analysis of soil samples to determine aggressiveness in relation to attack on concrete / reinforcement including determination of pH value	Each	85.00	4829.81	410533.85
					Total	11612723.82

4. ELIGIBILITY CONDITIONS

Standard Financial Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	The contractual payments received by the tenderer/ JV firm (As per clause 65.15.2 of GCC) in the previous three financial year and the current financial year up to the date of Inviting of tender shall be at least 150% of total advertised value of tender. The tenderer must have received contractual payments in the previous three financial years and the current financial year up to the date of inviting of tender, at least 150% of the advertised value of the tender. The tenderers shall submit Certificates to this effect which may be an attested Certificate from the concerned department / client or Audited Balance Sheet duly certified by the Chartered Accountant/Certificate from Chartered Accountant duly supported by Audited Balance Sheet.; Submission Requirements:TDS certificates/Audited balance sheets and or Photocopies of TDS certificates/Audited Balance sheets clearly indicating the contractual amount received duly certified by the Chartered Accountant/Certificate from Chartered Accountant duly supported by Audited Balance Sheet Client certificate from other than Govt. Organization should be duly supported by Form 16A/26AS generated through TRACES of Income Tax Department of India.	No	No	Allowed (Mandatory)

Standard Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	The tenderer / JV firm (as per clause no. 65.15.1 of GCC) must have satisfactorily completed any of the following during last 7 years, ending last day of month previous to the one in which tender is invited: (a)Three similar works each costing not less than the amount equal to 30% of advertised value of subject work, or (b)Two similar works each costing not less than the amount equal to 40% of advertised value of subject work, or (c)One similar works each costing not less than the amount equal to 60% of advertised value of subject work; Submission Requirement: Thetenderer shall submit the completion certificates/ certified completion certificates from the client(s) and or Photocopies of original certificates of client.	No	No	Allowed (Mandatory)
1.1	Defination of Similar Work :- Design and drawing of Railway Bridge/ROB/ FOB	No	No	Not Allowed

5. COMPLIANCE

Commercial-Compliance

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Please enter the percentage of local content in the material being offered. Please enter 0 for fully imported items, and 100 for fully indigenous items. The definition and calculation of local content shall be in accordance with the Make in India policy as incorporated in the tender conditions.	No	Yes	Allowed (Optional)

Custom

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Documents to be enclosed with the TECHNICAL BID as per Clause1.3.2(b) of Part-I of Chapter-III of Tender Document	No	No	Not Allowed
1.1	Offer letter complete as per Form-1 of Tender Document	No	No	Allowed (Mandatory)

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1.2	Tenderer's Technical credentials in accordance with Para 1.3.13 (i)(A) of Part-I, Chapter-III (Preamble & General Instructions to Tenderers): As per Form No. 2A of Tender Document	Yes	Yes	Allowed (Mandatory)
1.3	Tenderer's Financial credentials in accordance with Para 1.3.13 (i)(B) of Part-I, Chapter-III (Preamble & General Instructions to Tenderers): As per Form No. 2B of Tender Document	Yes	Yes	Allowed (Mandatory)
1.4	Applicant's Party Information Form: As per Form 2C of tender Document	No	No	Allowed (Mandatory)
1.5	Certificates for authenticity of documents/ Format for Affidavit: As per Form 22 of Tender Document	Yes	Yes	Allowed (Mandatory)
1.6	Format of Integrity pact: As per Form 20 of Tender Document	Yes	Yes	Allowed (Mandatory)
1.7	Details of Earnest money in accordance with Para 1.3.8 of Part-I, Chapter-III (Preamble & General Instructions to Tenderers)	Yes	Yes	Allowed (Optional)
1.8	An undertaking that he is not blacklisted or debarred by Railways or any other Ministry or Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in which he was or is a partner/member. Concealment or wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.: As per Clause 1.3.6 of Part-I, Chapter-III (Preamble & General Instructions to Tenderers)	No	No	Allowed (Mandatory)
1.9	Documents to be Submitted Along with Tender as per Clause 1.3.6.2 of Part-I, Chapter-III (Preamble & General Instructions to Tenderers)	No	No	Allowed (Optional)

6. Documents attached with tender

S.No.	Document Name	Document Description
1	FINALTENDERDOCUMENT19ROB.pdf	Tender Document

This tender complies with Public Procurement Policy (Make in India) Order 2017, dated 15/06/2017, issued by Department of Induswww Promotion and Policy, Ministry of Commerce, circulated vide Railway Board letter no. 2015/RS(G)/779/5 dated 03/08/2017 and 27/12/2017 and amendments/ revisions thereof.

As a Tender Inviting Authority, the undersigned has ensured that the issue of this tender does not violate provisions of GFR regarding procurement through GeM.

Signed By: SOUVIK SENGUPTA

Designation : GM