**CE/CON** acting for and on behalf of The President of India invites E-Tenders against Tender No **4347-GRC-CE-C-HQ-66-2022** Closing Date/Time 06/12/2022 12:00 Hrs. Bidders will be able to submit their original/revised 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	connection with Execution of F Plans, Slope Stability Analysis proposed 4th line between Sar	Consultancy Services for Detailed Project Report and Detailed Design Consultancy in connection with Execution of Final Location Survey, Soil Investigation, Preparation Yard Plans, Slope Stability Analysis and Submission of Various Detailed Design & Drawings for proposed 4th line between Santragachi and Kharagpur (109 Km) under the jurisdiction of Dy CE/Con/Garden Reach of S. E. Railway. Estimate No. 1/FLS-SUR/2022.							
Bidding type	Normal Tender		_						
Tender Type	Open	Bidding System	Single Packet System						
Tender Closing Date Time	06/12/2022 12:00	Date Time Of Uploading Tender	11/11/2022 17:48						
Pre-Bid Conference Required	No	Pre-Bid Conference Date Time	Not Applicable						
Advertised Value	21402986.94	Tendering Section	CE/CON/HQ						
Bidding Style	Single Rate for Each Schedule	Bidding Unit							
Earnest Money (Rs.)	257000.00	Validity of Offer ( Days)	60						
Tender Doc. Cost (Rs.)	0.00	Period of Completion	8 Months						
Contract Type	Works	Contract Category	Expenditure						
Bidding Start Date	22/11/2022	Are Joint Venture (JV) firms allowed to bid	No						
Ranking Order For Bids	Lowest to Highest	Expenditure Type	Revenue						

# 2. SCHEDULE

S.No.	No. Item Code Item Qty Qty Unit Unit Rate Basic Value Escl.(%)					Amount	<b>Bidding Unit</b>	
Schedule	e A-Executio	3213896.00	Above/ Below/Par					
4	Please see Item Breakup for details. 3213896.00 AT Par						3213896.00	
1	Description	<b>n:-</b> Picking ι	ip of the fina	al alignment,	Yard plan & Land	boundary und	er Non SERUSSOF	R - 2010

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	<b>Bidding Unit</b>
Schedule	e B-Executio		8882795.94	Above/ Below/Par				
_	Please see Item Breakup for details. 22528014.06 (-) 60.57							
2	Description	n:- Soil Inve						

S.No.	. Item Code Item Qty Qty Unit Unit Rate Basic Value Escl.(%)				Amount	<b>Bidding Unit</b>		
Schedule	e C-Executio		3764727.00	Above/ Below/Par				
2	Please see Item Breakup for details. 3764727.00 AT Par							
3	Description:- Design & Drawing under Non SERUSSOR - 2010							

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	<b>Bidding Unit</b>
Schedul	e D-Executio	3104368.00	Above/ Below/Par					
4	Please see Item Breakup for details. 3104368.00 AT Par							
4	Description							

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	<b>Bidding Unit</b>
Schedule	e E-Executio	2326200.00	Above/ Below/Par					
E	Lump Sum				1500000.00	55.08	2326200.00	
5	Description :- Lump Sum Work under SERUSSOR - 2010							

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	<b>Bidding Unit</b>	
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Schedule	F-Execution of all works as per schedule	111000.00	Above/ Below/Par		
c	Please see Item Breakup for details.	111000.00			
6	Description:- Preparation of Schedule for Invita	tion of EPC Tende	r under Non S	ERUSSOR - 2010	

# **3. ITEM BREAKUP**

Item- 1	Picking	up of the final alignment, Yard plan & Land boundary under	Non SERU	SSOR - 2	2010	
S No.	ltem No	Description of Item	Unit	Qty	Rate	Amount
	1	Picking up of the final alignment based on good theodolite/total station, shifting and fixing bench mark at each 500 m interval, all the curves should be transitioned, L-Section and plans should be 1:5000 scale, levels for L section should be given at 20m interval, cross section should be given at 50 m interval in hilly terrain, list of bench marks, list of level crossings, list of LHS , minor and major brdiges and Yard plan, list of curves, list of gradients, list of over head crossing, list of kutcha and pucca structure affecting the Railway alignment and list of Railway affecting works, quantity of earth work including preparation and submission of project report and estimates in draft copies in 5 nos. for approval from the Railway and 20 copies as final copies after approval along with drawing in the form of spiral bindings including all charges, taxes etc. complete. Notes: 1. 70% of payment can be released after detailed survey & submission of preliminary report & drawings & drawings are approved by the office of the CAO(Con)/GRC. 2. 30% of payment to be released after approval of project report & various drawings from the competent authority of Railway. 3. Alignment plan shall be finalised as per the direction of Engineer-in-charge. 4. The rate shall be inclusive of all taxes and levies. The rates are net rates and will not be subject to any increase or decrease. There will be no extra payment for price escalation. 5. The rates are for complete job as per the description of item, details/ condition mentioned herein. All payment shall be made for site visit, which may be required. The payment to the contractor will be made as per payment schedule. 6. Ten sets of approved Drawings and Original Tracing paper/cloth has to be handed over to the Railway after approved of Design & Drawing for each bridge. Softcopy in Auto CAD is also to be handed over to the Railway after approved of Design & Drawing for each bridge. Softcopy in Auto CAD is also to be handed over in CD/ pen drive. 7. The drawing should clearly s		109.00	14753.00	1608077.00

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# Closing Date/Time: 06/12/2022 12:00

2	2	Preparation of detailed working yard plan drawing with the help of contractor's good theodolite/ total station mentioning all the details like existing building, bridges, platform, infrigement, proposed/new structure etc, as per standard Railway format in scale 1 :1000 or as directed by Engineer in charge .The rates includes all taxes etc. complete. Notes: 1. The rate shall be inclusive of all taxes and levies. The rates are net rates and will not be subject to any increase or decrease. There will be no extra payment for price escalation. 2. The rate are for complete job as per the description of item, details/ condition mentioned herein. All payment shall be made for site visit, which may be required. The payment to the contractor will be made as per payment schedule given below. i) 70% payment will be released after the yard plans are approved by the office of the CAO/C/GRC. ii) 30 % payment will be released after approval of open line organization of S. E. Railway. If the approval of open line not required the 30 % payment will be released after approval by construction organizations competent authorities. 3. The contractor will submit yard plan in good quality paper print initially for scrutiny. 4. Ten sets of approved drawings and original tracing paper of good quality as directed by Railway has to be handed over to the Railway after approved drawing for each yard. Soft copy in Auto cad is also to be handed over in CD.	30.00	17661.00	529830.00
3	3	Manufacturing, supplying and fixing of 1:2:4 precast cement concrete pillar of size 450mm x 150mm x 150mm and fixing the same with 1:2:4 cement concrete of size 450mm x 250mm x 250mm after excavation of pit of size 450mmx450x450mm and refilling the pit including painting with contractor's paint along the Railway alignment in railway land for the length of approx 24 Km (approx) between Panskura -Tamluk as per Railway's drawing with contractor's all material, all labour, all lead, lift, decent, loading, unloading, sales tax, carriage, handling, cleaning site etc .complete as directed by the Engineer-incharge.	1600.00	358.00	572800.00
4	4	Submission of Project Report (in soft copy and 6 sets hard copy) for Final location survey & detailed estimate with preparation of detailed schedule of quantity for formation work, ballast supply. The report should consist of quantity of earth work, blanket material, ballast, length of retaining walls; length of side drains, list of utilities with location required to be shifted etc. details quantity of various items of minor, major, important bridges, ROB, RUB, & cost of estimation thereof. The estimate shall be prepared in accordance with provision of Engineering Code of Indian Railways & the latest practice of Railway & Rly Bd's instructions. The rates adopted for schedule of quantities & detailed estimate should be latest & realistic. Rate analysis should be submitted as per instruction of Engineer in charge. Notes: The details of quantities shall be submitted block section wise. For Proposed 4th line between Santragachi & Kharagpur (109 Km).	1.00	139238.00	139238.00
5	5	Videography by unmanned Aerial Vehicle (UAV-Drone) for conducting 4th line survey between Santragachi- Kharagpur (109 Km) of South Eastern Railway duly covering full width of Railway Boundar, all the building, Structures, Level crossings and approaches, major bridges, minor bridges, pipe culverts, stations, yards, depots, major site features etc. along the Railway alignment and submission of digital data/digital image/video in CD to Dy.Chief Engineer/Con/GRC, South Eastern Railway.	109.00	3080.00	335720.00

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	6	All transport arrangement for Drone camera, necessary equipments for drone videography and labour etc. complete.	Kilometre	109.00	259.00	28231.00
					Total	3213896.00
Schedule	Schedul	e B-Execution of all works as per schedule				
Item- 2	Soil Inve	estigation under SERUSSOR - 2010				
S No.	ltem No	Description of Item	Unit	Qty	Rate	Amount
		Exploratory drilling of Boreholes down to required depth, drilling of 150mm diameter boreholes in all type of soils except hard rock and large boulders (boulder core more than 30 cm), including refilling and reinstating surface, and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion / chieselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area				
		0m to 10m	Metre	2690.00		
		10m to 20m	Metre	1890.00		
		20m to 30m	Metre	870.00		1212606.00
		30m to 40m	Metre	870.00		1263135.60
		40m to 50m	Metre	870.00	1533.18	1333866.60
6	191100	Taking out 100mm dia & 450mm long undisturbed samples of soil from bore holes, including provision of air tight containers for packing and, labelling 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	901.00	116.15	104651.15
7	191110	Taking out 100mm dia & 450mm long disturbed samples of soil from bore holes, including provision of air tight containers for packing, labelling and transporting the samples to laboratory. Samples shall be collected as per IS 2720	Each	901.00	116.15	104651.15
8	191120	Conducting standard penetration test as per IS 2131 at approximate1.5 m intervals in bore holes, as directed by the Engineer in charge	Each	4030.00	174.23	702146.90
		Conducting laboratory Tests on collected soil samples as per relevant IS code				
		Moisture contents/ Dry density	Each	901.00	290.38	
		Atterberg Limit	Each	901.00	696.90	627906.90
		Specific Gravity	Each	901.00		
12		Grain size analysis including Hydrometer analysis	Each	901.00	569.14	512795.14
		Direct Shear Test	Each	901.00	2293.96	2066857.96
		Natural density	Each	901.00	309.73	279066.73
15		Consolidation test	Each	901.00	2323.00	2093023.00
		Unconfined compression test	Each	901.00	2323.00	2093023.00
		Tri-axial test	Each	901.00	2323.00	2093023.00
18	191160	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	269.00	2903.75	781108.75
19	191170	Conducting chemical analysis of soil samples to determine aggressiveness in relation to attack on concrete / reinforcement including determination of pH value	Each	269.00	3891.03	1046687.07
20	191180	Preparation and submission of Final report giving complete and comprehensive record of investigations, laboratory test reports and calculations in approved format	Each	2.00	66786.25	133572.50
					Total	22528014.06
Schodulo	Schedul	e C-Execution of all works as per schedule				-

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S No.	Item	Description of Item	Unit	Qty	Rate	Amount
	No					
1	1	Preparation & supply of drawings of different sizes of RCC Box culverts or other types of minor bridges (from Andul - Bagnan Station) as per the railway standard & modifying the same, if required, as per the instructions of Engineerin- charge.	Each	102.00	4254.00	433908.00
2	2	Design of Sub-structure and foundation and making detailed drawings (All structural components excluding super structure) including GAD for major bridges/Road Over Bridge/Railway Fly Over etc.This rate is inclusive of supplying of softcopy of each drawing in CD ROM, one copy in tracing paper & 05 Nos ferro prints (b) For multiple span bridges of steel/PSC/Composite Girder.		11.00	265068.00	2915748.00
3	3	Design of Sub-structure and foundation and making detailed drawings (All structural components excluding super structure) including GAD for major bridges/Road Over Bridge/Railway Fly Over etc. This rate is inclusive of supplying of softcopy of each drawing in CD ROM, one copy in tracing paper & 05 Nos ferro prints (a) For single spans Bridges of steel/PSC/Composite girder. For Proposed 4th line between Santragachi & Kharagpur (109 Km).		4.00	70644.00	282576.00
4	4	Hydrological Survey for Major and important bridges including taking long section and 3 cross section of each river (for Major/Important bridges) one at the centre line of the proposed bridges site and other two at selected suitable site at about 100 mtr appart, down to scale of 5m to 1 cm and plan of the rivers to the scale of 50m to 1cm showing HFL, Bed level, Discharge, Ordinary flood level and low water level etc. submission and approval of drawings.		15.00	8833.00	132495.00
		a. ago.			Total	3764727.00
Schedule	Schedu	le D-Execution of all works as per schedule			I I	
Item- 4	Slope S	Stability Analysis & Field Test Non SERUSSOR - 2010				
S No.	ltem No	Description of Item	Unit	Qty	Rate	Amount
1	1	Carrying out slope stability analysis for Embankments & cutting as per RDSO guide lines for Earthwork in Railway Projects GE-B-1(ANNEXUREIII) for 25T loading-2008 for ifferent heights /depths of formations i.e (a) above 6m & up to 12m. (b) above 12 m & up to 18m (c) above 18m height/depth and submitting the report along with the detailed calculations, sketches and Revised profile of bank/cuttings, if standard cutting /bank slopes found in adequate during analysis with contractor's own qualified personnel supervision and other resources including all taxes etc. complete in all respects through any Govt. Engineering college.The rate is inclusive of all collecting soil samples from field for sub soil, fill materials and from cutting slopes and condducting necessary Geo- Technical Investigations as required in approved laboratory for carrying out slope stability analysis.		40.00	10441.00	417640.00
2	2	Conducting INSITU measurements of deformation modulas (Ev2) of the natural ground along the alignment of proposed 4th line in between SRC-KGP Section as per the direction of Engineer-in-Charge. The test shall be done as per code specified. The rate is including all taxes, GST,royalty, lead, lift, descent, ascent, road taxes etc. The reports shall be submitted in duplicate.		66.00	37494.00	2474604.00

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					Total	111000.00
1	1	Preparation of Schedule for Invitation of EPC Tender as per model EPC document of IR.	Each	1.00	111000.00	111000.00
	No					
S No.	Item	Description of Item	Unit	Qty	Rate	Amount
Item- 6	Prepara	ation of Schedule for Invitation of EPC Tender under Non SEI	RUSSOR -	2010		
Schedule	Schedu	le F-Execution of all works as per schedule				
					Total	3104368.00
		descent, ascent, road taxes etc. The reports shall be submitted in duplicate.				
		The rate is including all taxes, GST, royalty, lead, lift,				
		the soil test done. The tests should be done as IS Code.				
		in between SRC-KGP Section as per the direction of Engineer-in-Incharge and submission of reports based on				
		on natural ground along the alignment of proposed 4th line				
3	3	Conducting undrained cohesiion of soil (cu) test for the soil	Numbers	66.00	3214.00	212124.00

## 4. ELIGIBILITY CONDITIONS

## Standard Financial Criteria

S.No		Confirmation Required		Documents Uploading
1	Submit the scanned copy (In PDF Form) of the documents as per the requirement of financial eligibility criteria of the tender [Refer para 2.3 of tender document {Para 2.3 for tenderer(s) participating as JV firm}]. TENDERS NOT ACCOMPANIED BY THESE DOCUMENTS WILL BE SUMMARILY REJECTED.	No	No	Allowed (Mandatory)

#### Submission of Document Verification Certificate

S.No.		Confirmation Required		Documents Uploading
	Please submit a certificate in the prescribed format (please download the format from the link given below) for verification / confirmation of the documents submitted for compliance of eligibility / qualifying criteria. Non submission of the certificate, or submission of certificate either not properly filled in, or in a format other than the prescribed format shall lead to summary rejection of your offer. (Click here to download the Format of Self Certificatio)	No	No	Allowed (Mandatory)

### Standard Technical Criteria

S.No.	•	Confirmation Required		Documents Uploading
1	Submit the scanned copy (In PDF Form) of the work(s) completion certificate(s) as per the requirement of Technical eligibility criteria of the tender [Refer para 2.3 of tender document {Para 2.3 for tenderer(s) participating as JV firm}]. TENDERS NOT ACCOMPANIED BY THESE DOCUMENTS WILL BE SUMMARILY REJECTED.	No	No	Allowed (Mandatory)
1.1	Defination of Similar Work :- Any Civil Engineering survey work.	No	No	Not Allowed

### 5. COMPLIANCE

#### **Commercial-Compliance**

S.No.	•	Confirmation Required		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)

### **General Instructions**

S.No.	Description	Confirmation	Remarks	Documents
		Required	Allowed	Uploading

## Tender No: 4347-GRC-CE-C-HQ-66-2022

1	Option of Payment through Letter of Credit (L.C.): Tenderer(s) may submit option for taking payment through Letter of Credit (L.C.). [Refer para 7.1 of tender document].		No	Not Allowed
2	Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under: The conversion rate of US Dollars into Rupees shall be the daily representative exchange rates published by the Reserve Bank of India for the relevant date. Where, relevant date shall be as on the last day of month previous to the one in which tender is invited. In case of any other currency, the same shall first be converted to US Dollars as on the last day of month previous to the one in which tender is invited, and the amount so derived in US Dollars shall be converted into Rupees at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date.	No	No	Not Allowed
3	Electronic Reverse Auction (eRA) is applicable in works tender valued more than Rs 50 crore in each case. [Refer para 7.2 of tender document].	No	No	Not Allowed
4	Contract under EBR (IF): It is agreed by and between the parties that Railway shall continue to be held responsible for all obligations, risk and liabilities, whatsoever, arising out of or in connection with the Principal agreement and this novation agreement, whether during the progress of the work or after its completion. It is further agreed and understood by and between the parties that IRFC shall be the owner of assets, if any, arising out of execution of works as defined in the Principal Agreement, except the land whose ownership shall continue with Railway. Accordingly, the invoices shall be issued by capturing GSTIN of contractor (as the supplier) and GSTIN of IRFC (as bill to party). Also, the contractor shall submit the invoice, issued in the name of IRFC, to railway for processing payment by Railway to contractor subject to applicable TDS under the Income Tax, GST or any other applicable laws. It is further agreed by and between the Parties that IRFC shall be responsible to comply with Income Tax and GST laws in relation to filling of returns.	No	No	Not Allowed
5	All General Instructions are available in the uploaded tender document.	No	No	Not Allowed
6	There are several changes in the tender document after the new GCC April 2022 is issued. Tenderer(s) are requested to go through the tender document & GCC carefully before the submission of the offer.	No	No	Not Allowed
7	Clarification of Bids: To assist in the examination, evaluation & comparison and pre-qualification of the Tender, the Railway may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Railway shall not be entertained or considered. The Railway request for clarification and the response of the bidder in this regard shall be in writing. However, if a Bidder does not provide clarification of its bid by the date and time communicated in the Railway request for clarification, the bid shall be evaluated as per the documents submitted along with the bid.	No	No	Not Allowed

# **Technical-Compliances**

S.No.	Description	Confirmation Required		Documents Uploading
	SCANNED COPY (IN PDF FORM) OF ALL THE DOCUMENTS OF THE JOINT VENTURE (JV) FIRM AS MENTIONED IN THE PARA 2.3 OF THE TENDER DOCUMENT. IF THE TENDERER IS A JOINT VENTURE FIRM, ALL THE REQUIRED DOCUMENTS SHOULD BE UPLOADED HERE. For all other type of firms (Other than JV firms) the tenderer has to upload the scanned copy (In PDF Form) of all the documents as mentioned in clause 2.3 of the tender document.	No	No	Allowed (Mandatory)
2	Scanned copy (In PDF Form) of the Vendor Mandate Form as per specific format provided in the para 4 of tender document. The Tenderer is required to declareBank details and A/C No. etc. in Vendor Mandate Form.		No	Allowed (Mandatory)
3	Scanned copy (In PDF Form) of the complete address of the firm as per para 1 of tender document, to which the all correspondences shall be made by the railway.	No	No	Allowed (Mandatory)
4	Scanned copy (In PDF Form) of valid Provident fund (PF) Code Number of the establishment/tenderer.	No	No	Allowed (Mandatory)

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5	Scanned copy (In PDF Form) of Goods and Services Tax (GST) Registration Certificate containing GST Registration Number.	No	No	Allowed (Mandatory)
6	Scanned copy (In PDF Form) of certificate by tenderer for site visit & familiarization (Refer para 11 of tender document).	No	No	Allowed (Mandatory)
7	Scanned copy (In PDF Form) of declaration by tenderer as per para 6 of tender document.	-	No	Allowed (Mandatory)
8	Scanned copy (In PDF Form) of the list of the persons of the tenderer on hand & proposed to be hired for this tender.	No	No	Allowed (Mandatory)
9	Scanned copy (In PDF Form) of list of the plants & machinery of the tenderer available on hand and proposed to be inducted & hired for this tender.	No	No	Allowed (Mandatory)
10	Scanned copy (In PDF Form) of list of the arbitration/court cases of the tenderer during last three years.	-	No	Allowed (Mandatory)
11	Submit the scanned copy (In PDF Form) of the sub contractor's work experience certificate (Please refer Clause 13.37 of tender document).	No	No	Allowed (Mandatory)
12	Bid Security is required to be submitted/uploaded as per para 12.3 of tender document.	No	No	Allowed (Mandatory)
13	Scanned copy (in PDF Form) of Power of Attorney as para 2.3.10 of tender document.	No	No	Allowed (Mandatory)

#### Undertakings

				Documents Uploading
1	I/ We have visited the works site and I / We am / are aware of the site conditions.	No	No	Not Allowed

#### 6. Documents attached with tender

S.No.	Document Name	Document Description
1	GCCApril-2022.pdf	GCC 2022
2	TD66-2022.pdf	Tender Document
	2022_CE-I_CT_GCC- 2022Policy14_07_2022.pdf	GCC Corrigendum No 1

This tender complies with Public Procurement Policy (Make in India) Order 2017, dated 15/06/2017, issued by Department of Industrial 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: ASHOKE KUMAR SAHA

Designation : AXEN/C/W-A/GRC