

GARDEN REACH SHIPBUILDERS & ENGINEERS LTD. गार्डन रीच शिपबिल्डर्स एण्ड इंजीनियर्स लिमिटेड

(A GOVERNMENT OF INDIA UNDERTAKING) / (भारत सरकार का प्रतिष्ठान)

Address: 61, Garden Reach Road, Kolkata-700 024 / 61, गार्डन रीच रोड, कोलकाता-700 024

Phone/दूरभाष:(033) 2469-8140 to 8143 FAXफैक्स: (033) 2469-3932

Web siteवेब: www.grse.in, E-Mailई मेल: Nandi.Suchita@grse.co.in

CIN / सी आई एन: L35111WB1934GOI007891

12:00 noon

14:00 hrs

CORRIGENDUM – III dated: 14-Oct-2023			
Job Title / कार्य का नाम	िका EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE-MAIN		
NIT No / निविदा संख्या:	SCC/NK/NIC/OT/VM/SRS/022/FT_2006 DTD+ 04_SFD_2023		
Extension of Bid Submission Schedule. Revised Schedule is as follows:			
Cardinal Dates Original Schedule Revised Schedule			

CORRIGENDUM TO PRICE BID:

Tender Submission Due Date

निविदा जमा की अंतिम तिथी Tender Opening Date (Part I)

निविदा खुलने की तिथी

The cable rating mentioned in PRICE BID / BOQ line item 1.79, 1.80, 1.81 is to be read as **1.1KV (1100V)** in place of 11KV.

03-OCT-2023

05-OCT-2023

Accordingly, the description of items at the said serials are as follows:

BoQ SI. No.	Description of Item	Quantity	Unit
1.79	Supply, installation, testing and commissioning of 1.1KV (1100V) grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination.'3.5C x 400 sq.mm	50.00	М
1.80	Supply, installation, testing and commissioning of 1.1KV (1100V) grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination."3.5C x 185 sq.mm	100.00	М
1.81	Supply, installation, testing and commissioning of 1.1KV (1100V) grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination."3.5C x 25 sq.mm	400.00	М

• All OTHER TERMS AND CONDITIONS OF NIT remain unaltered.

Nilanjan Kar

20-OCT-2023

25-OCT-2023

12:00 noon

14:00 hrs

Sr. Manager (Contract) / वरिष्ठ प्रबन्धक (संबिदा)

Garden Reach Shipbuilders & Engineers Limited

61, Garden Reach Road, Kolkata – 700024.



Tender Submission Due Date

निविदा जमा की अंतिम तिथी Tender Opening Date (Part I)

निविदा खुलने की तिथी

GARDEN REACH SHIPBUILDERS & ENGINEERS LTD. गार्डन रीच शिपबिल्डर्स एण्ड इंजीनियर्स लिमिटेड

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CIN / सी आई एन: L35111WB1934GOI007891

12:00 noon

14:00 hrs

CORRIGENDUM – II dated: 04-Oct-2023			
Job Title / कार्य का नाम	EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE-MAIN		
NIT No / निविदा संख्या:	SCC/NK/NIC/OT/VM/SRS/022/FT-2006 DTD: 04-SFD-2023		
Extension of Bid Submission Schedule. Revised Schedule is as follows:			
Cardinal Dates Original Schedule Revised Schedule			

• All TERMS AND CONDITIONS OF NIT including due date of submission of tender remain unaltered.

03-OCT-2023

05-OCT-2023

Nilanjan Kar

16-OCT-2023

18-OCT-2023

12:00 noon

14:00 hrs

Sr. Manager (Contract) / वरिष्ठ प्रबन्धक (संबिदा)

Garden Reach Shipbuilders & Engineers Limited
61, Garden Reach Road, Kolkata – 700024.



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ADDENDUM – I dated: 15-Sep-2023				
Job Title / कार्य का नाम	EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE-MAIN		AT GRSE-MAIN	
NIT No / निविदा संख्या:	SCC/NK/NIC/OT/YM/SBS/022/ET-2006 DTD: 04-SEP-2023		023	
Cardinal Dates (REMAIN UNALTERED)				
Commencement of Bid Submission 25-SEP-2023 15:00 hrs			15:00 hrs	
Tender Submission Due Date निविदा जमा की अंतिम तिथी		03-OCT-2023	12:00 noon	
Tender Opening Date (Part I) निविदा खुलने की तिथी		05-OCT-2023	14:00 hrs	

Clarifications against Pre-Bid Queries

SI. No.	Pre-bid Query	GRSE Clarifications
1.	Providing of structural drawings for biding.	GRSE stated that the existing GA drawing of the SBS including the sketch of existing foundation & proposed extension are enclosed along with the tender (Appendix-A) and the working drawing for foundation of robotic station will be provided later.
2.	Completion period SOTR Clause no. 7.5	GRSE Clarified that, the work is very urgent and need to be completed on fast track with in a period of 12 (twelve) calendar months and foundation for robotic station with in a period of 01 (one) calendar months from the date of issue of Letter of Award (LOA).
3.	Extended job completion period	The Job completion period remains unaltered and as per NIT.
4.	Design of the concrete foundation.	GRSE Confirmed that the concrete foundation for new steel columns should be similar to the existing adjacent concrete foundation of Bay-4 i.e., isolated RCC footing foundation (without pile) as well as the contractor may verify the foundation size by excavating one existing foundation which has already stated in SOTR Clause No. 2.1.1(c). However, the new foundation of the structures is required to be designed by structural expert with a vetting from JU/IIEST/IIT-Kharagpur/IIT-Chennai.
5.	Dismantling items	GRSE Clarified that the Contractor should dismantle the existing structural Timber Sheds (02 Nos), Steel Stair leading to Bay-3 roof & Steel Walkway at eaves level of Bay-4 @ grid-20 to create space for extension. Also, an existing PVC tank along with pump & pipelines, timber store, modified steel stair & walkway to be suitably relocated.



SI.		
No.	Pre-bid Query	GRSE Clarifications
6.	Testing of Materials and Acceptance SOTR clause no. 5.3.	GRSE Clarified that the Contractor must submit valid correlated test certificates for materials/items as per the approved Quality Assurance Plan or relevant Indian Standards before incorporations in the permanent works. Also, the Contractor will bear the cost of any test required by the Engineer or his representative in respect to materials and workmanship deployed on the work.
7.	Flooring works	The floor should be concrete flooring with embedded ISMB in line with existing arrangement.
8.	Installation of EOT crane	GRSE Confirmed that the alignment, levelling, plumbing etc for steel structure gantry girder should be done by the civil Contractor but the installation of EOT crane including rail & DSL will be carried out by another agency. Also, the civil Contractor should coordinate with the crane Contractor during execution in particularly for joint checking of rail gantry beam before installation of base plate & rail by the crane Contractor.
9.	Excavation work for steel stair foundation.	GRSE clarified that during excavation it is desirable to scan the area with proper scanning machine for presence of any underground electrical cable and other utility lines.
10.	Brand of materials to be used for this work	GRSE replied that the approved Makes/Brand of the material to be used in this project is indicated in SOTR clause No.3.8.
	SOTR clause No.3.8	
11	Fixing of wind tie over the polycarbonate sheet	Wind ties are required over poly carbonate sheet.
12	Clause- 2.3. of SOTR	As per SOTR Clause No.2.3 of SOTR following technical documents are required to be submitted by the Bidders along with Technical Bid
		A. Organisation Chart
		B. Details of Resources i.e., set up for design/engineering team and also plant and machineries for fabrication & erection.
		C. Work Plan i.e., Methodology.
		D. Schedule/Programme of work with milestones
		E. Necessary supporting documents for work experience as per technical eligibility criteria.
		F. Initial QAP
		G. Initial Safety Plan
13	Discussion on Clause No. 5.11 of SOTR.	GRSE clarified that the Contractor should take necessary precautionary measure to safeguard the existing structures/ machines/ materials/ various installations/ roads etc. before commencement of work. For that the Contractor will arrange adequate safety nets, ropes, tarpaulin sheet, scaffolding, rubber mats etc. without any extra cost. Any damaged caused by contractor shall be made good at his own cost
14	Unsalvageable dismantled materials	GRSE has Confirmed that the Contractor shall remove all unsalvageable dismantled materials, dismantled concrete, translucent sheets, north



SI. No.	Pre-bid Query	GRSE Clarifications
		light glazing, excavated surplus earth etc. within 07 days after dismantling and these materials shall be disposed of to a suitable area (to be arranged by the Contractor in conformity with statutory rules) outside GRSE premises. Also, the Contractor shall remove any remaining Contractor's Equipment, surplus material, scrap materials, wreckage, debris, rubbish and temporary works from the Site or as directed by the Engineer.
15	Clause No. 5.14 of SOTR	GRSE has Clarified that one fully responsible and experienced & Qualified Site-in-charge (Minimum Qualification: BE / B Tech with experience of 10 years) and one dedicated and experienced / Qualified Safety Officer has to be posted at the site during progress of work. Also, the following register book should be maintained on day-to-day basis by the Contractor:
		A. Log book for re-work/ modification.
		B. Site instruction book.
		C. Details of materials brought by vendor (Material Register) along with copies of challan.
		D. Proper record of hindrances is to be maintained by the contractor for the purpose of timely removal of the hindrance and is to be put up for approval by the Engineer on weekly basis (Hindrance Register).
		E. Daily Progress Report (DPR)
		F. Safety Register.
		G. Quality Register.
		H. Measurement Register

• All TERMS AND CONDITIONS OF NIT including due date of submission of tender remain unaltered.

Nilanjan Kar

Sr. Manager (Contract) / वरिष्ठ प्रबन्धक (संबिदा) **Garden Reach Shipbuilders & Engineers Limited**43/46, Garden Reach Road, Kolkata – 700063.



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NOTICE INVITING TENDER (NIT)

निविदा आमंत्रण सूचना

Garden Reach Shipbuilders & Engineers Limited, a **leading Warship Builders and Engineering Product Company**, invites interested, reputed, resourceful and financially solvent contractors to submit **single stage two-part bids** (**Part I- Techno-Commercial & Part II- Price**) through e-tendering mode for the work package as per following bid document.

NIT SLA No / निविदा संख्या:	SCC/NK/NIC/OT/YM/SBS/022/ET-2006 DTD: 04-SEP-2023			
Job Title / कार्य का नाम	EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE- MA		OP (SBS) AT GRSE- MAIN	
SOR No:	NIL (Anr	nexure-1A)		
Tender issuing Dept. / बिभाग द्वारा जारी	Contract	t Cell (संविदा बि	बेभाग)	
Cardinal Dates				
Date of Prebid Query Submission		11-SEP-2023	12:00 noon	
Date of Prebid Meeting / बोलीपूर्ब बैठक		13-SEP-2023	09:30 hrs	
Commencement of Bid Submission		25-SEP-2023	15:00 hrs	
Tender Submission Due Date निवेदा जमा की अंतिम तिथी		03-OCT-2023	12:00 noon	
Tender Opening Date (Part I) निविदा खुलने की तिथी		05-OCT-2023	14:00 hrs	
Contact Persons:				
other technical Terms Cother technical Terms E-mail: Saha.		aha, DGM (YM) Fanay@grse.co.in 91- 7603039445		

NIT TERMS & REQUIREMENTS

Sl. No.	Description	Reference	Requirement of NIT
1.	TENDER FEE	STAC	INR 500/- (Rupees Five hundred only)
2.	EARNEST MONEY DEPOSIT (EMD)	STAC	INR 15,00,000/- (Rupees Fifteen Lakh only)
3.	DETERMINATION OF L1	Article – 15	L1 bidder will be decided on TOTALITY BASIS including GST
4.	SECURITY DEPOSIT	Article – 22 (1)	5% of total order value (inclusive of taxes)
5.	PERFORMANCE	Article – 22 (2)	10% of total executed order value (inclusive of
	GUARANTEE		taxes)
6.	LIQUIDATED DAMAGES	Article – 22 (9)	0.5% per week, Max. 5% of unexecuted job
7.	TECHNICAL ELIGIBILITY	Article -1 &	As per Clause-7.1 of SOTR (Annexure-1A)
	CRITERIA	Annexure-1A	



SI. No.	Description	Reference	Requirement of NIT
8.	FINANCIAL ELIGIBILITY	Article -1	Average Annual financial turnover should be at
	CRITERIA		least Rs. 330 Lakh during last 03 financial years ending on 31 st March 2022.
9.	VENDORS ON TENDER	Article – 3	Submission of the self-certification document as
	HOLIDAY / BLACKLISTED		per relevant format is mandatory.
	VENDORS		On non-submission of the declaration the bidder
			may be treated as non-responsive and their offer
			may be rejected.
10.	OFFER VALIDITY	Article – 4	180 days
11.	BOQ	Article-6	As detailed at Article-6 & Annexure-1B
12.	TENURE OF CONTRACT / COMPLETION PERIOD	Article – 8	12 (Twelve) months from date of PO / LOA
13.	MOBILIZATION PERIOD	Article – 9(a)	07 days from placement of LOA / PO
14.	JOB COMPLETION	Article – 9(c)	12 (Twelve) months from date of PO / LOA
	SCHEDULE	,	Ref Clause – 7.5 of SOTR (Annexure-1A)
15.	GUARANTEE &	Article – 10	12 (Twelve) months from date of completion /
	WARRANTY / DEFECT		acceptance.
	LIABILITY PERIOD		Ref Clause – 7.6 of SOTR (Annexure-1A)
16.	ESCALATION	Article – 12	Not Applicable
17.	AWARDING JOBS TO	Article – 16	Not Applicable
	MULTIPLE BIDDERS		
18.	INTEGRITY PACT &	Article – 18	Applicable
	INDEPENDENT EXTERNAL		Submission of INTEGRITY PACT complying to
	MONITORS (IEM)		Article-18 & 25 and ANNEXURE-11 of NIT is
			MANDATORY.
19.	PAYMENT TERMS	Article – 22 (3)	Terms mentioned at Article-22(3) shall prevail
			over SOTR.
			1. 90% (Ninety percent) of the value of work
			done will be paid progressively against R/A
			bill subject to maximum one RA bill per
			month.
			2. 10% (Ten percent) of the value of work done shall be held as Performance Guarantee.
			Release shall be as per Article – 22(3.3).
20.	QUALITY ASSURANCE	Article – 22	DGM (YM) / his authorised representatives.
20.	AUTHORITY /	ALLICIE – ZZ	Down (1141) / 1113 dutilolised representatives.
	INSPECTION AUTHORITY		
21.	WORK DONE	Article – 22	AGM (YM) / his authorised representatives.
	CERTIFICATE AUTHORITY		, i
22.	BILL CERTIFYING	Article – 22	CGM (Tech) / his authorised representatives.
	AUTHORITY		
23.	NON-DISCLOSURE AGREEMENT	Annexure-11	APPLICABLE
24.	COLLECTION OF RAW	Article – 22	Not Applicable
	MATERIAL AND DELIVERY		
	OF COMPLETE		
	MATERIALS		
25.	MATERIAL	Article – 22	Not Applicable
	RECONCILIATION		



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INTRODUCTION

Garden Reach Shipbuilders & Engineers Limited, a leading Warship Builders and Engineering Product Company, invites interested, reputed, resourceful and financially solvent contractors to submit **Single Stage two-part bids** (Part I: Techno-Commercial & Part II- Price Bid) through e-tendering mode for the work of "EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE- MAIN". Detailed Scope of work is mentioned in SOTR (Annexure-1A).

ARTICLE/अनुछेद 1. TECHNICAL ELIGIBILITY CRITERIA तकनीकी मापदंड

- i. Bidder should comply to Eligibility Criteria mentioned in SOTRs. (Annexure-1A).
- ii. Format for Technical Eligibility Criteria in this regard has been attached to this document as **Annexure 3**. The format must be filled up and to be uploaded with the Techno-commercial Bid.

ARTICLE/अनुछेद 2. FINANCIAL ELIGIBILITY CRITERIA वित्तीय मापदंड

- i. Bidder's Average Audited Annual financial turnover during last 03 financial years should be at least the amount as specified at NIT Terms & Requirements.
- ii. Requisite formats attached with NIT as **Annexure 4** to be filled up in support of above financial eligibility criteria.

ARTICLE/अनुछेद 3. <u>VENDORS ON TENDER HOLIDAY / BLACKLISTED VENDORS</u>

- i. The bidder should give self-certification (as per **Annexure 5**) that they have neither been Blacklisted nor have received any tender holiday from any PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations during last 03 (three) years ending on the date of submission of the Tended by the bidder. The bidder has to submit self-certification for the same along with the technocommercial offer. GRSE reserves the right to independently verify the same. In case violation of declaration is detected at any stage of tender process and during currency of contract, the order will be terminated.
- ii. If any bidder has been black listed by any PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations, then the bidder is not eligible to participate in this tender. If any discrepancy is detected at any stage of the tender, then the offer submitted by the bidder / contract awarded to the bidder will be cancelled and EMD/SD shall be forfeited and appropriate action will be taken in accordance with the vendor policy of GRSE.
- iii. If any bidder has been put on Tender Holiday by any PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations, then this fact must be clearly stated and it may not necessarily be a cause for disqualifying them.
- iv. In case of non-submission of the self-certification document as per relevant format referred at SI- (i) above, the bidder will be treated as non-responsive and their offer will be rejected.

ARTICLE/अनुछेद ४. OFFER VALIDITY प्रस्ताव की वैध्यता

i. Offer should be valid for period as stipulated in NIT Terms & Requirements from the date of opening of Part-I bid i.e. Techno-commercial bid. Under exceptional circumstances GRSE may request for extension of price validity, beyond the stipulated period against valid reason.

ARTICLE/अनुछेद 5. OPENING OF BIDS निविदा खुलना

Part I (techno-commercial) bid will be opened on the date declared in NIT.

Part II bid will be opened post techno-commercial evaluation by GRSE. Price bid of only those who qualify techno-commercially will be opened. Opening date of Price Bid will be intimated accordingly to all qualified bidders. Disqualified bidders, either during technical assessment or commercial discussion will also be intimated about their non-consideration for farther processing.

ARTICLE/अनुछेद 6. BOQ बी ओ क्यु

(a) BOQ for the work is detailed at **Annexure-1B**.

Unpriced copy of the Price breakup indicating the GST SAC/HSN Code & GST percentage is to be uploaded alongwith the Techno-commercial offer (Part-I). The bid shall not be considered if Price is indicated in any part of Techno-commercial offer (Part-I).



ARTICLE/अनुछेद 7. JOB EXECUTION कार्य निष्पादन

Job is to be carried out strictly as per SOTR and GRSE requirement and in case of doubt, instructions of the officer-in-charge of GRSE/ their authorised representative is to be followed.

ARTICLE/अनुछेद 8. <u>TENURE OF CONTRACT</u>

The tenure of the contract shall be as specified in the NIT Terms & Requirements.

ARTICLE/अनुछेद 9. JOB EXECUTION SCHEDULE कार्य निष्पादन सूची

- (a) **Mobilization Period / लामबंदी अवधी** shall be equal to number of days (as specified in the NIT Terms & Requirements) from date of LOA/PO.
- (b) **Job Starting Date / কার্য आरम्भ तिथी** Job is to be started immediately after mobilization as per direction of WDC Authority / Bill Certifying Authority / their authorized representatives.
- (C) **Job Completion Schedule** / कार्य समाप्ती तिथी: -The job is required to be completed within time limit as specified at NIT Terms & Requirements.

ARTICLE/अनुछेद 10. GUARANTEE & WARRANTY गारंटी एवं वारंटी

Duration of Guarantee Period / Defect Liability Period shall be as per requirement mentioned at NIT Terms & Requirements and shall commence from the date mentioned in the Completion Certificate.

Guarantee Period / Defect Liability Period shall be deemed to be over on completion of the specified duration subject to successful and satisfactory liquidation of defects notified within the pendency of the Guarantee Period / Defect Liability Period.

In case of pending unresolved defects, the Guarantee Period / Defect Liability Period shall stand automatically extended till satisfactory liquidation of defects.

ARTICLE/अनुछेद 11. PRICE मूल्

- (a) The rates QUOTED/ACCEPTED by the bidder, shall be final and will remain firm and fixed for the entire contractual period or till completion of ordered work.
- (b) The quoted price should also include all statutory cost as mentioned/indicated in SOTR.
- (c) GST is to be indicated separately in the Price Breakup.

ARTICLE/अनुछेद 12. ESCALATION मूल्य वृद्धी

NO ESCALATION of price during the contractual period and/or till completion of complete work (except change in GST Rate, if notified by Competent Authority) shall be applicable.

ARTICLE/अनुछेद 13. UNREASONABLE QUOTES अतर्कसंगत भाव

- (a) In case the price of L-1 Bidder is found to quote unreasonably low and/or express desires to withdraw from the tender then such bid will be cancelled and EMD will be forfeited and punitive action will be taken in line with the provision as per GRSE Vendor policy.
- (b) However, in case the L1 Bidder agrees to take-up the job with such unreasonable low quote, lower by 30% or more than estimate and also if the difference in price between L1 & L2 is 30% or more, then the quoted price to be analyzed w.r.t. tender requirement and if the L1 bidder fails to justify their quoted rate, the obtained L1 quote may be liable for rejection.
- (c) If justification is acceptable to GRSE, then Bidder have to submit a declaration to execute the job till satisfactory completion of entire contract. In case of breach of contract, GRSE shall reserve the right to impose Tender Holiday for a period of at least 03 years.

ARTICLE/अनुछेद 14. CONDITIONAL OFFER सशर्त प्रस्ताव

Conditional offers w.r.t. SOTR (Annexure 1) will not be accepted. However, in case the bidder wishes to deviate from any/ some commercial Terms & conditions, then separate deviation statement has to be uploaded along with Part-I bid.



However, GRSE reserves the right to accept / reject the deviations / bid with deviations after giving reasonable opportunity to the Bidder.

If the deviation is acceptable to GRSE, then suitable loading factor for such deviation on the price quoted by the bidder will be formulated during technical/commercial negotiation and the factor will be loaded on the price quoted by the bidder for determination of L1 price.

ARTICLE/अनुछेद 15. DETERMINATION OF L1 एल-1 का चयन

- (a) L1 bidder will be decided as per criteria mentioned at SI-3 of NIT Terms & Requirements.
- (b) However, in case of loading the price due to any deviation against the tender, GRSE will evaluate L1 bidder offline, considering suitable loading factor for such deviation on the quoted price as mentioned in Article-14 above.

ARTICLE/अनुछेद 16. AWARDING JOBS TO MULTIPLE BIDDERS बहुल बिडर के लिए ठेका कार्य

- (a) Separate bidder may be engaged against each line item mentioned in BOQ based on L1 determination (as mentioned at Article-15 above) as specified at SI-18 of NIT Terms & Requirements.
- (b) GRSE wishes to engage multiple bidders for the tendered work subject to the bidders accepting the rate quoted / agreed by L1 Bidder. The ratio of distribution shall be as indicated in **SI-18 of NIT Terms & Requirements**.

ARTICLE/अनुछेद 17. MICRO & SMALL ENTERPRISES सुख्छम एवं छोटे उद्योग

- a) The 'Public Procurement Policy for Micro & Small Enterprises (MSEs) Order, 2012 and subsequent amendments / guidelines / press publications / circulars to the Order, as issued by the Ministry of MSME, shall be applicable as on the date of opening of the price bids.
- b) The bidders are advised to check the website of the Ministry of MSME for details of the amendments / circulars issued by the Ministry of MSME.
- c) Class A and B items are to be considered as non-divisible within the same class of ships and tender is to be awarded on a single bidder on totality basis unless there is any specific clause in the tender enquiry to indicate divisibility of the tendered quantity.

ARTICLE/अनुछेद 18. <u>Integrity Pact & Independent External Monitors (IEM): (Applicable for the Contract value</u> more than Rs. 2.0 Cr.)

- (a) Integrity Pact (समग्रता अनुबंध) pact essentially envisages the agreement between prospective vendors /Bidders & buyers committing the person/officials of both the parties not to exercise any corrupt influence on any aspects of the contract. Only those vendors/bidders who enter into such an integrity pact with the buyer would be competent to participate in the bid. The format of integrity Pact is enclosed with tender documents. Refer Annexure 10. The "Integrity pact on Govt. issued Stamp paper of Rs. 100 duly filled as per enclosed format to be submitted in original. Bidders to ensure that every page of IP is ink signed with company seal/stamp in every page. [Please refer guideline for IP in STAC (SI.-1) in GRSE website]
- (b) Either or both of the following Independent External Monitors will have the power to access the entire project document and examine any complaints received by him. In case of any change in IEMs, it will be informed accordingly.
- (c) The communication details of the IEMs are as follows: -

	Shri Bam Bahadur Singh,	Shri Pidatala Sridhar, IRS (Retd.)
	Height-7; Flat No.1802, Uniworld City,	Flat 2C, Kanaka Lakshmi Apartments
	New Town, Rajarhat, Kolkata-700160	3-6-467 & 468 Street Number-6, Himayatnagar,
	Email: bbsinghbeml@gmail.com	Hyderabad-500029,
		Email: sridharpidatala@gmail.com

ARTICLE/अनुछेद 19. INSTRUCTION TO THE BIDDERS बिडर हेत् अनुदेश

i. Before submitting a bid, bidders are expected to examine the Bid Documents carefully. If they desire, <u>may</u> <u>visit the work front</u>, fully inform themselves of existing conditions and limitations including all items



- described in the Bid Documents. No consideration will be granted for any alleged misunderstanding or the materials to be furnished, work to be performed or actual considerations to complete all work and comply with conditions specified in the Bid Document.
- ii. Any qualified deficiency, errors, discrepancies, omissions, ambiguities or conflicts in the Bid Documents, or there be any doubts as to the meaning of a provision or requirement, the same shall immediately brought to notice of GRSE Tendering Dept. in writing not less than 07 days prior to bid closing date.
- iii. It is understood that in receiving this bid, GRSE assumes no obligation to enter into a contract for the WORK covered by this bid request. GRSE reserves the right to reject any and all unqualified proposals or waive irregularities therein. GRSE reserves the right to evaluate each and every proposal and accept the whole or any part of the tender and the Tenderer shall be bound to perform the same at the rates quoted.
 - GRSE also reserves the right to reject any and all bids and accept the bid, which in its opinion, appears to be most advantageous to GRSE. Receipt and review of this Bid Request constitutes an agreement of confidentiality between GRSE and each of the contracting Firms preparing its Bid. GRSE reserves the right to change the form of this request to Bids, or make clarifications thereto, within a reasonable time before date of submission of Bids.
- iv. General Contractors assume all safety related responsibilities for the site and will furnish and maintain its own safety program for itself and its subcontractors. Contractor are bound to comply with all applicable Environmental, Health & Safety rules, regulations, policies, procedures and guidelines when performing work in the facility or site.
- v. Bidders objecting on any grounds to any bid specification or legal requirements imposed by these bidding documents shall provide written notice to GRSE within 10 calendar day from the day bid document was made available to public. Failure of a bidder to object in the manner set forth in this paragraph shall constitute and irrevocable waiver of any such objection.
- vi. Job is to be carried out as per SOTR and instruction of the Engineer in-charge.
- vii. Any Drawings or technical information attached / provided with this NIT is the Intellectual Property of the Company and will be governed by the specific Acts applicable thereto.
- viii. Post submission of Tender, such drawings and technical information are to be physically returned. Also, all soft copies are to be destroyed and a self-certification to be submitted during CNC, failing which the processing of bid will not be taken further.
- ix. Contractors are responsible to clean up the area of work from all sorts of debris every 3 days. In case of non-compliance to the same, GRSE reserves the right to perform the cleaning activity and charge cost for the same on the contractor with additional penalty of Rs 5000/- per instance.
- x. Bidder has to declare, in what capacity he is participating in the tender viz PSU, Limited Co, Pvt. Ltd. Co., Sole Proprietorship Organization, Partnership firm, Joint Venture / Consortium [Ref. STAC (Annexure 2), Clause: 10], etc. Supporting documents (scanned copy) confirming such status to be uploaded as attachment to Part-I bid.
- xi. A Bidder is allowed to submit only one Bid under any capacity / status.
- xii. Difficulty in submitting the bid:
 - a) In case of any query / difficulty in understanding of SOTR or other technical Terms the same may be got clarified from SOTR authority prior submission of offer.
 - b) Any query/difficulty in understanding of Commercial Terms may be got clarified from Mr. Nilanjan Kar, Sr. Manager (Contract), GRSE (Main Unit) e-mail: Kar.Nilanjan@grse.co.in Mobile no. +91-8584888194.
- xiii. **E-mail Address of Vendor for communication संचार हेतू ई. मेल पत:** Vendor has to provide e-mail address to enable faster communication.

ARTICLE/अनुछेद 20. e-BID INSTRUCTION ई बिंड के अनुदेश

a) Bidders can view / download Part-I (Techno-Commercial) bid documents along with all attachments on portal https://eprocuregrse.co.in. Bidders need to fill up the downloaded documents including the Acceptance



- Matrices and Declarations as per instruction and upload the same during bid submission as per Bid criteria. Non-acceptance of any techno-commercial criteria is discouraged.
- b) Detailed price breakup as per BoQ is to be uploaded with price offer (Part-II). No other attachment to the price bid except as mentioned will be reckoned.
- C) <u>If price is indicated in any document pertaining to Part-I of the bid the Offer shall be summarily rejected.</u>
- d) In case the bidder does not quote his rate for any item(s), it will be presumed that the bidder has included the cost of that/those item(s) in the rates of other items and the rate for such item(s) shall be considered as Zero (0) and the tender shall be evaluated accordingly and the work need to be executed by the successful bidder accordingly.
- e) The amendments / clarifications to the bid document, if any, will be posted on portal only.
- f) It will be the bidder's responsibility to check the status of their Bid on-line regularly after the opening of bid till award of Contract.

q) AMENDMENT OF TENDER DOCUMENT

- (i) Before the deadline for submission of tenders, the Tender Document may be modified by GRSE Ltd. by issue of addenda/corrigendum. Issue of addenda / corrigenda will however be stopped 7 days prior to the deadline for submission of tenders as finally stipulated.
- (ii) Addendum/corrigendum, if any, will be hosted on website / e procurement portal and shall become a part of the tender document. All Tenderers are advised to see the website for addendum/ corrigendum to the tender document which may be uploaded up to 7 days prior to the deadline for submission of Tender as finally stipulated.
- (iii) To give prospective Tenderers reasonable time in which to take the addenda/ corrigenda into account in preparing their tenders, extension of the deadline for submission of tenders may be given as considered necessary by GRSE.

h) PREVALANCE OF VERSION / संस्करण की व्यापकता:

In case of any discrepancy between English and Hindi version the English Version shall prevail. / अंग्रेजी और हिंदी संस्करण के बीच किसी भी विसंगति के मामले में <u>अंग्रेजी संस्करण मान्य होगा</u>।

ARTICLE/अनुछेद 21. BID REJECTION CRITERIA बिड अस्वीकृति के मापदंड

Following bid rejection criteria may render the bids liable for rejection:

- i. Bidder indicating price offer in any form in the Part-I bid i.e techno-commercial bid.
- ii. Bidder's failure to furnish sufficient or complete details for evaluation of the bids within the given period which may range in between two to three weeks depending on the deficiencies noticed in the drawings / technical data which shall not however conflict with validity period.
- iii. Incomplete / misleading / ambiguous bid in the considered opinion of the Technical Negotiation Committee (TNC) of GRSE.
- iv. Bid with technical requirements and/or terms not acceptable to GRSE / Customers / External agency nominated, as applicable.
- v. Bid received without qualification documents, where required as per the tender.
- vi. Bid not meeting the pre-qualification parameters / criteria stipulated in the Tender Enquiry.
- vii. Bid with validity expiry date shorter than that specified in the Tender Enquiry.
- viii. EMD validity period is shorter than Bid Validity Period / as specified in the tender enquiry.
- ix. Bidders who have not agreed for the fixed price till the validity of the tender or have quoted the variable price.
- x. Bidder not agreeing for furnishing of the required Security Deposit (SD).
- xi. Bidders not submitting Original instrument of EMD within 05 days from opening of Part I bid.
- xii. Bidder not submitting Integrity Pact as per requirement of the tender and in reference to ARTICLE/अनुछेद 18. of NIT.
- xiii. Bidder submitted false / incorrect declaration and/or documents etc.



ARTICLE/अनुछेद 22. POST AWARD APPLICABLE CLAUSES ठेका जारी करने के पश्चात लागू उपधारा

1. **Security Deposit प्रतिभृति जमा**- Non-interest-bearing security deposit amounting to percentage of total individual order value (inclusive of taxes) as specified at NIT Terms & Requirements is to be deposited in the manner elaborated in STAC (Annexure - 2).

Security Deposit shall be released on issue of job completion certificate by WDC Authority and submission of PBG (if applicable).

2. **Performance Guarantee:** Non-interest-bearing Performance Guarantee deposit amounting to percentage of total executed order value (inclusive of taxes) as specified at NIT Terms & Requirements is to be deposited in the manner elaborated in STAC. The same shall be released after successful completion of Guarantee Period / Defect Liability Period and satisfactory liquidation of defects.

3. Payment Terms भुगतान की शर्तें:

- 3.1 The contractor shall submit the R/A bills in triplicate along with all necessary / required supporting documents, measurement sheet etc.
- 3.2 **Percentage** of the value of actual work done as specified at NIT Terms & Requirements will be paid progressively against R/A bill at a frequency of once every month during construction. The amount paid at every month shall be evaluated on the basis of actual completed works done during the previous month, against the BOQ item and Unit Rates, on certification of quantum and quality of work by Engineer / Engineer's Representative.
- 3.3 Remaining Percentage of the certified value of work shall be released on: -

Completion of the Guarantee period / defect liability period subject to satisfactory liquidation of defects duly certified by Bill Certifying Authority.

OR

Submission of performance Bank Guarantee of equivalent amount valid till expiry of Guarantee period.

For release of this remaining percentage i.e. retention money (if any) either after guarantee period or on submission of PBG; work done certificate shall not be required. While releasing PBG after expiry of guarantee period, the PBG release application to be submitted to Contract Cell duly certified by Bill Certifying Authority.

4. Work Done Certificate (W.D.C.) कार्य पूर्ति प्रमाण-पत्र (डबल्यू.डी.सी)

Work Done Certificate will be issued by the Quality Assurance Authority OR his Nominated Officer based on clear inspection report as applicable.

W.D.C. is to include whether work has been completed as per delivery schedule or with delay [in days/weeks specified therein]. Any recovery towards usage of GRSE resources is also to be indicated.

5. Bill Certifying Authority बिल प्रमाणन प्राधीकर:

As mentioned at NIT Terms & Requirements.

6. Bill Submission बिल प्रस्तृति:

On obtaining WDC, bills to be raised as Progressive RA Bills. Bills are to be submitted along with supporting documents (Work Done Certificate etc.) at the Bill Receiving Counters located at the respective units of Company. Bill is to be submitted (in 03 copies) in sealed envelope super-scribing on the envelope the Purchase Order No., Vendor code, Bill / Invoice No., Name of person /employee to whom bill is addressed, for processing. The Name of the person to be mentioned on sealed envelope will be the Bill certifying officer.

Note: Transaction fee of Rs. 500.00 for first return & Rs. 1000.00 for subsequent return of bill with inappropriate documents will be charged

7. Collection of Raw Material and Delivery of Complete materials (अनिर्मित सामग्री संग्रह एवं परिवर्तित सम्पूर्ण सामग्री की सुपुर्दगी)

(a) Raw materials will be required to be collected from GRSE against submission of Material Guarantee Deposit on form of Demand Draft / Bank Guarantee (as per GRSE format) amounting to value as specified at NIT Terms & Conditions OR the equivalent value of material as that will remain in the custody of the firm during the execution of the work ONLY in case of materials taken outside GRSE premises. Transportation of



- materials from GRSE to sub-contractor's premises and transportation of finished materials from Sub-contractor's premises up to GRSE are the responsibility of the contractor.
- (b) Indemnity Bond affixing the Common Seal from the registered sub-contractors can be accepted but it should be backed by Insurance Coverage with GRSE as the beneficiary on case-to-case basis with due approval of the management. GRSE registered vendor who are interested to submit Indemnity Bond backed by Insurance coverage should indicate clearly in their offer.

8. Material Reconciliation Statement (MRS) (सामग्री मिलान)

Vendors are to furnish the material reconciliation statement (running MRS) for all free issue materials, ONLY in case of materials taken outside GRSE premises against each consignment immediately on delivery of the same but not later than 30 days of delivery, showing details of raw materials received and material returned or as specified in at **NIT Terms & Conditions**. Any excess consumption of material on account of wastage / damage / re-work attributable to the Contractor, shall be liability of the Contractor and shall be recovered from the receivables of the Contractor from GRSE or otherwise.

In case received material is less than issued material the cost of the material not received shall be recovered from the Contractor as per terms specified at **NIT Terms & Conditions.**

The MRS should be submitted with documentary evidence of material issued & returned duly accepted by competent authority of GRSE and as per the GRSE format and filled up check list for MRS.

9. Liquidated Damages / Penalty

The vendor will be liable to pay minimum Liquidated Damages @ ½ % per week or part thereof on the undelivered work subject to a maximum of 5 % of the value of the order for delayed part. The amount of L.D. may be adjusted or set-off against any sum payable to the Contractor under this or any other Contract with GRSE Ltd.

10. Risk Purchase जोखिम खरीद

In case the progress of work is not satisfactory and the contractor fails to maintain the schedule, GRSE reserves the right to get the work done by alternative source at the risk and cost of sub-contractor.

GRSE shall be at liberty to purchase/obtain the service from the alternative source as it deems fit, to make good such default and or in the event of the contract being terminated, the balance of the remaining service to be delivered there under. Any excess over the job price / service rates, paid and incurred by GRSE, as the case may be, over the contract price shall be recoverable from the firm. To make good the recoverable excess amount paid, GRSE shall be at liberty to invoke Bank Guarantee and/or with other available dues of the firm.

11. Time of completion

Time of completion has to be considered as essence of the contract and cannot be extended for any reason whatsoever. However, in an unlikely situation beyond the control of the contractor, application for extension of due time shall be submitted by the Contractor, 01 Month in advance with proper justification duly endorsed by Engineer In-charge / PL of GRSE with commensurate recording of events in the "Hindrance Register". Please note LD will be levied for the unexecuted portion for such time extension.

12. Contractor's Safety Personnel (संविदाकार के बचाव कर्मचारी)

One fully specialist and certified Safety Personnel has to be posted at the site during progress of work. The responsibility of the safety personnel is to supervise and monitor the site safety obligations of all work places and to comply all laid down Fire & Safety Rules of GRSE. He also ensures all workmen working under the sub-contractor at site are made aware of and comply with all the safety norms.

ARTICLE/अनुछेद 23. ANNEXURES FORMING PART OF THIS e-TENDER ई-निविदा की संलग्नक प्रपत्र

Please find all enclosures as indicated below in GRSE website by clicking the link http://www.grse.in/index.php/tender.html and then click Enclosure Related to tenders of Sub-Contracting Activities

Annexure / संलग्नक	Description /	
1.	A. Statement of Technical Requirement (SOTR) & Drawings	
	B. Bill of Quantities (BOQ)	
	C. Payment Terms	

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2.	GRSE Standard Terms and Conditions (STAC)	
3.	Format for Technical Eligibility Criteria	
4.	Format for Financial Eligibility Criteria	
5.	Self-Certification for Blacklisting / Tender Holiday	
6.	Format for – Disclosure by Contractor of existing work load	
7.	Format for – Disclosure by Contractor of proposed execution / deployment plan of this	
	tendered job	
8.	Confirmation by Bidder & Checklist for Bid Submission	
9.	Check List for Bill Submission – For Service Contracts	
10.	Format for - Integrity Pact To be submitted in Non-Judicial stamp paper of value not less than Rs.100/	
11.	Format for – Non-Disclosure Agreement (please refer <u>www.grse.in</u> →Tender→Enclosures Related to tenders of Sub-Contracting Activities)	
12.	Format for – Bank Guarantee Format for EMD (please refer <u>www.grse.in</u> →Tender→Enclosures Related to tenders of Sub-Contracting Activities)	
13.	Fire & Safety Guidelines (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)	
14.	Special condition of contract (please refer www.grse.in > Tender > Enclosures Related to tenders of Sub-Contracting Activities)	
15.	Contractors Responsibility (please refer www.grse.in→Tender→Enclosures Related to tenders of Sub-Contracting Activities)	
16.	General Requirement (please refer www.grse.in→Tender→Enclosures Related to tenders of Sub-Contracting Activities)	
17.	Check List for Bill submission (please refer www.grse.in→Tender→Enclosures Related to tenders of Sub-Contracting Activities)	
18.	PF, ESI declaration form (please refer www.grse.in→Tender→Enclosures Related to tenders of Sub-Contracting Activities)	
19.	Format for - Bank Guarantee Format for SD (please refer www.grse.in→Tender→Enclosures Related to tenders of Sub-Contracting Activities)	
20.	Format for - Bank Guarantee Format for PBG (please refer www.grse.in -> Tender-> Enclosures Related to tenders of Sub-Contracting Activities)	
21.	Guide line for Bank Guarantee (please refer www.grse.in→Tender→Enclosures Related to tenders of Sub-Contracting Activities)	

ARTICLE/अनुछेद २४. DOCUMENTS TO BE UPLOADED अपलोड हेतु दस्तावेज

a. Self-Attested documents are to be scanned and uploaded with Part I of e-bid / ई-बिड के भाग-1 के साथ स्कैन एवं अपलोड हेतु स्वअभिप्रामाणित दस्तावेज

b.NON-SUBMISSION / INCOMPLETE SUBMISSION IN RESPECT TO BELOW-MENTIONED DOCUMENTS MAY LEAD TO REJECTION OF BID

SI. No.	Description	
1.	DD/PO or MSE/NSIC Exemption certificate towards tender fee	
2.	DD/PO /BG or MSE/NSIC Exemption certificate towards EMD	
3.	Integrity Pact (For Tenders above INR 2 Cr)	
4.	Registration Certificate of the Company with ROC / Trade License	
5.	PAN, TAN, GST	
6.	Copies of registration with PF, ESI authorities.	
7.	Government e-Market Place (GeM) registration certificate with Unique GeM Seller ID	
8.	The Registration Number allotted to MSME's by Trades Receivable e-Discounting	
	System (TReDS)	
9.	Partnership Deed / Memorandum and the Article of Association of the firm confirming	
	partners and lead partner (If applicable)	
10.	Joint Venture Agreement / Memorandum of Understanding with Power of Attorney in	
	favour of lead member. (If applicable)	
11.	Acceptance Matrix for NIT	



Sl. No.	Description	
12.	Acceptance Matrix for Standard Terms & Conditions	
13.	Acceptance Matrix for SoTR	
14.	Format for Technical Eligibility Criteria	
15.	Format for Financial Eligibility Criteria	
16.	Audited/Certified Annual Accounts and Annual Report for immediate last three (03) financial years ending on 31st Mar'21 in support of Financial Eligibility.	
17.	Self-Certification for Blacklisting / Tender Holiday	
18.	Disclosure by Contractor of existing work load	
19.	Disclosure by Contractor of proposed execution plan including proposed deployment of resources of this tendered job	
20.	Work execution plan / schedule in MS Project clearly indicating dependencies	
21.	Confirmation by Bidder & Checklist for Bid Submission	
NON-S	NON-SUBMISSION / INCOMPLETE SUBMISSION IN RESPECT TO ABOVE MAY LEAD TO REJECTION OF BID	

The Bidders has to submit ink signed hard copy of all above documents within 05 days from opening of Part I bid.

The Bidders should mention the following:

- i. "Unique Seller ID" allotted by GeM (Government e-Market Place) and
- ii. The Registration Number alloted by Trades Receivable e-Discounting System (TReDS). <u>The TReDS</u> Registration Number is only applicable for MSME firms.

The Bidders not registered for Sl. No. 7 & 8 above should apply for registration of the following facilities in portals as per directives of the Government of India.

- i. GeM (Government e-Market Place) → website: https://gem.gov.in
- ii. TReDS (Trades Receivable e-Discounting System) → website: www.invoicemart.com

Vendors Registered with GRSE are not required to upload documents at Sl. No. 4, 5 & 6 above, and are instead required to mention the Vendor Code allotted by GRSE.

ARTICLE/अनुछेद 25. DOCUMENTS IN PHYSICAL FORM TO SUBMIT वास्तविक प्रपत्र जो जमा करने हैं

	PHYSICAL SUBMISSION			
1	EMD Instrument	Within 05 days from opening of Part I bid		
2	Integrity Pact & Non-Disclosure Agreement	Within 05 days from opening of Part I bid		
NOTE:	If instruments submitted through demand draft, the same to be drawn in favor of ENGINEERS LIMITED			
	The demand drafts should be payable at KOLKATA			
	Above mentioned original Negotiable Instruments as stipulated, to reach the office of General Manager, Contract Cell, Commercial Department, New Building complex, 1st Floor GRSE Main Unit, 43/46, Garden Reach Road, Kolkata-700 024 within stipulated period a indicated above in a sealed envelope with tender number and job duly superscripting on (preferably through speed post /courier service).			
<u>100</u>	NON-SUBMISSION / INCOMPLETE SUBMISSION IN RESPECT TO ABOVE MAY LEAD TO			
	<u>REJECTION OF BID</u>			

ARTICLE/अनुछेद 26. SUBMISSION OF BID बिड की पेशी

i. Last date of submission of Bid / Date of opening of bid is indicated in Tender Document. Tender is liable to be rejected if all the requisite documents are not enclosed with the Part I, Techno-Commercial offer. However, if the scanned copies are not uploaded with Part-I bid, then the original copies are to be submitted within 05 days from opening of Part I bid.



- ii. Date of opening of Part II offer i.e. Price Bid will be notified to all Techno-Commercially qualified bidders in due course after conclusion of TNC/CNC meetings and acceptance of Techno-Commercial offer. After opening of e-Price bids, the techno-commercially qualified bidders can view the System Generated Price Comparison Sheet from their own portal.
- iii. GRSE reserves the right to accept / reject any Tender in full or in part without assigning any reason.
- iv. Acceptance Format Matrix should be filled up and attached with techno-commercial bid as marks of acceptance of NIT/SOTR/STAC. In case of non-receipt of filled in STACs acceptance format matrix, it would be presumed that you have accepted all our terms& conditions as per GRSE tender until & unless deviation is specially mentioned in offer.

ARTICLE/अनुछेद 27. PRE-BID MEETING बोलीपूर्व बैठक

- i. Bidders are requested to forward their queries over email to the e-mail address: <u>Saha.Tanay@grse.co.in</u> with copy to **Kar.Nilanjan@grse.co.in** within date and time as indicated above.
- ii. Pre-bid meeting shall be held at Yard Modernisation Department at GRSE Main Unit, 43/46, Garden Reach Road, Kolkata 700024 on date and time as indicated above.
- iii. The dates & time related to Prebid Meeting shall prevail over SOTR.

Sr. Manager (Contract) / वरिष्ठ प्रबन्धक (संबिदा) **Garden Reach Shipbuilders & Engineers Limited** 43/46, Garden Reach Road, Kolkata – 700063.



GARDEN REACH SHIPBUILDERS & ENGINEERS LTD. गार्डन रीच शिपबिल्डर्स एण्ड इंजीनियर्स लिमिटेड

(A GOVERNMENT OF INDIA UNDERTAKING) / (भारत सरकार का प्रतिष्ठान)

Address: 43/46, Garden Reach Road, Kolkata-700 024 43/46, गार्डन रीच रोड, कोलकाता-700 024

Phone/दूरभाष:(033) 2469-8100 to 8113 (Extn/बिस्तार:200/204/206/211), FAXफैक्स: (033) 2469-3932

Web siteवेंब: www.grse.in, E-Mailई मेल: Nandi.Suchita@grse.co.in

CIN / सी आई एन: L35111WB1934GOI007891

ANNEXURE-1A: STATEMENT OF TECHNICAL REQUIREMENTS (SoTR) & DRAWINGS

NIT SLA No / निविदा संख्या:	SCC/NK/NIC/OT/YM/SBS/022/ET-2006 DTD: 04-SEP-2023	
Job Title / कार्य का नाम	EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE- MAIN	
SOR No:	NIL (Annexure-1A)	
Tender issuing Dept. / बिभाग द्वारा जारी	Contract Cell (संविदा बिभाग)	

SCC/NK/NIC/OT/YM/SBS/022 ANNEXURE 1A: SOTR & DRAWING Page 14 of 113



GARDEN REACH SHIPBUILDERS & ENGINEERS LIMITED:

Kolkata-700024



DETAIL DESIGN, MANUFACTURE, SUPPLY, CIVIL CONSTRUCTION, ERECTION, ELECTRICAL & ALLIED JOBS FOR EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE- MAIN

> STATEMENT OF TECHNICAL REQUIREMENTS (SOTR), SPECIAL TERMS & CONDITIONS (STC)

> > EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS)

Garden Reach Shipbuilders & Engineers Ltd Main Yard 43/46 Garden Reach Road Kolkata - 700024, INDIA

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GRSE Ltd.



Yard No.: NA Group : YM Inspection: GRSE

YM Dept

EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE- MAIN

SOTR No.

Sheet: 1 of 28

Rev: 0

Prepared by: Debojit Nandi, JM (YM)

Date : 07.08.23

SM(YM)

Concurred by: Sanat Datta, AGM(YM)

Checked by: Tanay Saha,

STATEMENT OF TECHNICAL REQUIREMENT (SOTR) AND SPECIAL TERMS & CONDITIONS

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1. INTRODUCTION

1.1 Purpose

- 1.1.1 Garden Reach Shipbuilders and Engineers Limited (GRSE), Kolkata invites tender for extension of Existing Bay-4 [about 22.77m wide X 23m crown height] of Ship Building Shop (SBS) at Main by about 60m as per Item-Rate contract basis.
- 1.1.2 The superstructure of the SBS is a braced steel frame having top portal frame, open gable ends & metal sheet roof with requisite stiffness & strength is made of conventional steel structure. The column structures are supported on isolated RCC footing foundation (without pile). Like other bays, a new EOT Crane of 40-ton capacity (01 No.) will run on extended rail track supported on gantry girder. Also, existing EOT crane of 10 ton capacity (01 No) will run on extended rail track supported on gantry girder at lower level. However, both the above EOT cranes will not operate in the same span of columns concurrently. Above extension of Bay-4 shop will be similar to the adjacent Bay-3/5 having 40-ton EOT cranes.
- 1.1.3 The main purpose of this tender is to extend the above Bay-4 of SBS with PEB (pre-engineered building) steel structure including civil work, electrical, utility piping & allied jobs for fabrication of ship block like other functional adjacent bays of SBS. It is preferred that extended Bay-4 of SBS will be made of PEB to have optimum design, quicker construction, better quality & off-site fabrication (at factory). The job also includes foundation of robotic station inside the existing Bay-4 along with dismantling, relocation/removal of existing structural Timber Sheds, Steel Stair & Steel Walkway to facilitate extension work.

1.2 General Arrangement Drawings

1.2.1 Existing GA drawings of the above SBS including the sketch of existing foundation & proposed extension are enclosed along with the tender (List at Appendix-A) for ready reference. Design calculation of the existing structure is not available.

1.3 General Specification

- 1.3.1 This set of technical requirement provides a general guideline for successful execution of the work under the scope of this tender. The work for Extension of Bay-4 of SBS is required to be carried out in accordance with the following scope of work, performance specification, Bill of Quantities (BoQ), relevant Indian Standard Codes for design & construction, Specification as per the latest PWD/CPWD Schedule and best engineering practices.
- 1.3.2 The contractor shall have design-engg, setup for carrying out detail design & drawing of steel & civil structure as per the requirement of job under this tender.

2 SCOPE OF WORK

2.1 Detailed Scope of Supply & Work

2.1.1 The work primarily involves Bay-4 of SBS with PEB (pre-engineered building) steel structure including civil work for concrete foundation, concrete flooring with embedded ISMB, electrical, utility piping & allied jobs. The scope for supply of installation of EOT crane including rail & DSL will be carried out by another agency. Scope of work under this tender broadly comprises of following: -

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- a) Physical site survey & measurement of existing structure by Total Station based on job requirements and necessities of GRSE for finalisation of GA drawing, Design & Drawing for subsequent construction & erection for extension of bay. Minimum clear gap between A24 & A25 columns shall be kept as 10.5m to meet production requirement.
- b) Detail Design & drawings for steel structural work by competent Designer in accordance with the relevant BIS and obtaining vetting of design for steel structure by any Institute (JU, IIEST, IIT-Kharagpur/Chennai). It is considered that generally primary & secondary structural members of the extended structure will be similar/equivalent sections to the existing structural members of existing bays unless found to be inadequate against design loads or got distressed. While finalising GA & detail drawings, various aspects & requirements as specified under the scope shall be duly considered by the Contractor for further construction work.
- c) Construction of concrete foundation for new steel columns, which is considered similar to the existing adjacent concrete foundation of Bay-4 i.e. isolated RCC footing foundation (without pile) as per enclosed sketch. The contractor may verify the foundation size by excavating one existing foundation. Design verification of foundation may be done as per loading & existing soil investigation data. One existing column (A-21) foundation where steel column was removed subsequently (for functional requirement) either to be restored for foundation bolts as feasible or to dismantled & reconstruct new.
- d) Dismantling of existing structural Timber Sheds (02 Nos), Steel Stair leading to Bay-3 roof & Steel Walkway at eaves level of Bay-4 @ grid-20 to create space for extension. Also, an existing PVC tank along with pump & pipelines to be suitably relocated. Based on functional requirements & available space, following needs to be considered: -
 - Modified Steel Stair with optimum flight width to be tentatively located close to A21 & A22 for accessing roof
 - (ii) Modified Walkway for crossing/accessing roof to be located at eaves level along the grid-25 of extended bay keeping adequate space for free travelling of new EOT crane towards further Building Berth-1 / west side.
 - (iii) Timber Sheds would be reconstructed at new location.
- e) Steel structural work including Supply, Fabrication, Assembly & Erection for complete work as per the detail drawings including rail support beams (gantry girder) for EOT cranes (as per existing arrangement), access ladders, platforms, walkway etc. for general operating and maintenance purposes with railings.
- Alignment, levelling, plumbing etc for steel structure, gantry girders etc within the tolerance limit specified in the relevant BIS.
- g) Supply and fixing of metal sheet roof, side cladding, louver and side wall etc. with all allied jobs including intermittent polycarbonate sheet at roof/side wall for natural light.
- Steel Gutters, UPVC down pipes, drain work and allied jobs.
- Cut-outs, structural racks, brackets and platforms for supporting cable trays, cables, piping in line with the drawing/arrangement.

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- Painting of structural steel complying with the specification.
- Concrete flooring with embedded ISMB in line with existing arrangement.
- Brickwork of side walls including plastering (both sides) based on existing arrangement & necessary painting.
- Supply, installation & charging for electrical work to illuminate, power supply to crane DSL (EOT Crane), power connection for welding etc including necessary panel, fittings, cable, earthing etc.
- Supply, installation, testing & commissioning of Gas Pipes (oxygen & DA) and Fire Hydrant as necessary with pipes, valves & all necessary fittings etc. adhering to existing arrangement
- Necessary coordination with the Crane Contractor during execution in particularly for joint checking of rail gantry beam before installation of base plate & rail by the Crane Contractor.
- p) Site Clearance
- q) Defect Liability of 12 (twelve) months against defective material, workmanship, quality for material supplied for the executed work.

2.2 Pre-Bid Meeting

- 2.2.1 Attending pre-bid meeting along with site visit is mandatory and the submitted Bid will not be considered in case of non-participation. Pre-bid Meeting will be held on 10th day from the date of publication of tender.
- 2.2.2 Prospective Tenderers shall submit their queries, if any in connection with the Tender, in writing by email at the earliest to enable GRSE to clarify the same. The last date of submitting the queries is 2 days prior to the pre-bid meeting. Copies of the Employer's response will be displayed on GRSE website www.grse.in including a description of the enquiry but without identifying its source.
- 2.2.3 Also, the Bidder before submission of tender shall make a detail site visit for proper assessment of the work towards satisfactory work including its piping & electrical. The tendered job being item-rate contract as per the BoQ, the Bidder should assess and bring out their observation (if any) during pre-bid meeting for discussion.

2.3 Submission of Technical Documents along with the Bid

- 2.3.1 The Tenderer shall submit following documents along with their technical Bid;
- 2.3.1.1 Organisation Chart
- 2.3.1.2 Details of Resources i.e. set up for design/engineering team and also plant and machineries for fabrication & erection.
- 2.3.1.3 Work Plan i.e. Methodology

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- 2.3.1.4 Schedule/Programme of work with milestones
- 2.3.1.5 Necessary supporting documents for work experience as per technical eligibility criteria.
- 2.3.1.6 Initial QAP
- 2.3.1.7 Initial Safety Plan

2.4 Drawings, Design Calculations and Documents including Quality Assurance Plan (QAP)

- 2.4.1 The Contractor shall submit GA, Drawings, Design Documents including QAP etc. to GRSE for review/approval.
- a) Finalisation of GA, detailed construction working drawings including obtaining vetting of design & drawings for steel structure by any Institute (JU, IIEST, IIT-Kharagpur/Chennai) well before execution for approval i.e. by 02 months from the date of LOA. The contractor shall ensure that each drawing & document contain all necessary details to reduce number of revisions.
- b) An Outline Quality Assurance Plan covering activities including procurement, fabrication, erection, testing critical inspection stages and verification/certification shall be submitted at the time of submitting the Technical Bid. The Contractor shall ensure that his detailed Quality Assurance Plan is prepared and submitted (15 days from the receipt of LOA) prior to the Commencement of the Works for approval. The Contractor has to comply with the quality requirements as per the relevant BIS. All relevant Test Reports / Manufacturing Certificates as per the approved QAP shall be submitted. Approval of document shall not relieve the Contractor of any of his obligations under the Contract.
- c) Work programme with break-up of activities shall be submitted along with the Technical Bid. A detailed network programme (preferably in MS project) showing the activities, milestones, critical path etc shall be submitted by 15 days from LOA.
- d) Method Statements for assembly & erection to be submitted prior to execution including plan & arrangement for ensuring safety.
- e) Monthly Progress Reports
- f) As built drawings (GA, section, elevation etc.) of Extended Structure including allied facilities in both hard and soft (AUTOCAD & Pdf) format on completion of work.

2.5 Other General Requirements

- 2.5.1 There is a severe space constraint in GRSE-Main & thus the Contractor must arrange necessary measures like appropriate off-site fabrication/assembly of structural items & allied items and subsequently transport to work site for erection deploying suitable capacity crane with higher boom for safe erection.
- 2.5.2 The Contractor shall carry out detail survey including the surrounding areas i.e. the adjacent functional shops for finalising methodology & sequence of construction & erection work to avoid interference ongoing shop production activities and also other activated being done by other

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- Contractors. To minimise the interference to ongoing ship construction & other activities of GRSE (by other agencies) in the vicinity of the above SBS, the Contractor has to work in planned & coordinated manner.
- 2.5.3 The Contractor will be responsible for overall site management and coordination of site activities within the boundary of the works, as necessary to ensure the adequacy, stability and safety of the works and of persons at the site. The contractor shall require planning his work in coordination with on-going production activities of GRSE, other contractors working in and around the workplace.
- 2.5.4 The contractor shall abide by prevailing rules & regulations for entry of their workmen, supervisor etc., working inside GRSE premises including working in extended hours/holidays and also entry/exit of construction equipment, materials & consumables.
- 2.5.5 The contractor shall adopt all precautionary safety measures adhering to prevailing safety rules & regulations & in consultation with GRSE Safety Dept. while working at height (roof/girder/louver etc.) during dismantling, structural welding/repair, erection, installation of sheet, painting etc. Since the work is primarily at height using safety net, safety belt, roof ladder, fall back arrester etc as per BIS is mandatory. The contractor shall take all necessary work permit from concern Departments of GRSE (i.e. Safety, Fire etc.) as applicable in line with prevailing rules in GRSE. (Refer Clause No -4 Health and Safety of this SOTR for detail safety requirement).

3 TECHNICAL SPECIFICATIONS

3.1 DESIGN, CONSTRUCTION AND TESTING STANDARDS

3.1.1 Design, manufacture and testing of structural elements shall comply with the appropriate recommendations or requirements of Indian Standards issued by the Bureau of Indian Standards (BIS). The Contractor shall be responsible for ensuring compliance with any relevant standard or code as appropriate.

3.2 Design Loads and Criteria

- 3.2.1 The structural design & construction shall conform to latest editions of BIS including following:
 - a) IS: 875 Code of Practice for design loads for buildings and structures including IS: 875 (Part-3) for Wind Loads
- IS: 800 Code of Practice for General Construction in Steel
- IS: 1893 Criteria for Earthquake Resistant Design of Structures
- d) IS: 456 Code of Practice for Plain and Reinforced Concrete
- e) IS: 7215 Code of Practice for tolerances of fabrication of steel structures

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- f) IS: 12843 Code of Practice for tolerances of erection of steel structures
- g) IS: 3177 Code of Practice for Electric Overhead Cranes

3.3 Basis of Design

3.3.1 Following broad criteria are given as a basis of the basic design of the structural members.

a) Roof loading:

Live load 75kg/m2

Dust + lighting fixtures 25kg/m

b) Crane walkways:

Live load 150kg/m2

c) Seismic load:

Seismic zone III,

d) Basic Wind Speed: 50 m/sec

e) Collateral load

Pipe racking 100kg/m per tier Cable tray 25kg/m per tier

f) EOT Crane

01 No. 40 ton @ about 11.8 m level and 01 No. EOT Crane @ about 6.7m level. However, both the EOT cranes will not operate in the same span of columns concurrently.

Wheel load/base & other data will be provided during Design Stage.

g) Panel Design:

Panels will be designed in accordance with sound engineering methods and practices. Maximum panel deflection to span ratio is 1/180 in a two-span condition for loadings between purlins.

3.3.2 Load combinations in accordance with IS 800 and other relevant codes are to be taken.

3.4 Construction, Materials & Workmanship

- 3.4.1 Construction of the PEB buildings shall be to general good practice and to the standards laid down in BIS: 800. All workmanship shall be equal to the basic practice in modern structural shops. The tolerances of fabrication of steel structures shall be in accordance with IS: 7215 unless otherwise specified.
- 3.4.2 All parts assembled for bolting shall be in close contact over the whole surface and all bearing stiffeners shall bear tightly at both top and bottom without being drawn or caulked.

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- 3.4.3 The component parts shall be so assembled that they are neither twisted nor otherwise damaged. Specified cambers, if any, shall be provided.
- 3.4.4 All parts of welded members shall be held in position by means of jigs or clamps while welding.
- 3.4.5 Fabrication of the structure will be undertaken by the Contractor in their factory in India. In case of any approved fabricator (for fabrication only without material) under the direct supervision of the Contractor, prior approval of any fabricator is essential. The Contractor shall provide all required details of the fabricator. Any intended departures from this assumption must be agreed with the Engineer/Owner prior to contract signing and the responsibility shall be attributed as per the Conditions of Contract.
- 3.4.6 The Contractor's materials and workmanship specification shall include suitable detailed cross-references to the Quality Assurance and Certification Plan specified above.
- 3.4.7 The Contractor shall submit the test certificate conforming to appropriate standards of all steel materials used for fabrication. All structure steel shall be free from rust, scales, lamination, cracks, fissures and other surface defects.

3.5 Rectification / Modification / Strengthening of existing Structure

- 3.5.1 All rectification / modification shall be done as per approved sketches following the best practice of fabrication as enumerated under fabrication of Steel Structures as necessary while extension of the bay.
- 3.5.2 Control & distortion in welding as specified under fabrication of steel structures shall be followed during rectification / modification.

3.6 Materials

- 3.6.1 Primary Members: All primary structural members will be in structural steel conforming to IS: 2062 Grade 'A' or equivalent. All structural steel shall be of tested quality
- 3.6.2 Secondary Members: All secondary structural members will be in structural steel conforming to IS: 2062 Grade 'A' or equivalent. Where secondary members are 'Z' or 'C' shaped sections they will conform to ASTM-607 (Grade 50) or equivalent.
- 3.6.3 Anchor Bolts: All anchor bolts and anchor bolt assemblies shall conform to IS: 2062 or IS: 1367.
- 3.6.4 The concrete grout for fixing the anchor/foundation bolts is to be M30 with suitable nonshrinkage chemicals

3.6.5 Connections:

 Shop connection welds shall conform to the relevant IS codes. All welds shall be a minimum 6mm continuous fillet weld unless noted otherwise. Butt welds shall be full penetration.

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- Splices shall be designed to transfer 1.05 times full strength of the member spliced. No splicing is permitted in beams less than 10m length unless prior approval is given.
- iii) Field primary connection fasteners will be High Strength Bolts of Grade 8.8 conforming to IS: 3757, IS: 1367 or ASTM A325 or equivalent. Field secondary connection fasteners shall be bolts of property class 4.6 conforming to IS: 1363, IS: 1367 or ASTM A307 or equivalent. All fasteners are to be electro galvanised.

3.6.6 Structural Steel Work

- 3.6.6.1 In case the material is procured by the Contractor, the Contractor shall submit the test certificate conforming to appropriate standards of all steel materials used for fabrication. All structure steel shall be free from rust, scales, lamination, cracks, fissures and other surface defects.
- 3.6.6.2 Steel used for construction exposed to weather or other corrosive influences shall not be less than 8 mm in thickness and in construction not exposed to weather, thickness shall not be less than 6 mm. The controlling thickness as specified above, for rolled beams and channels shall be taken as the mean thickness of flange, regardless of web thickness
- 3.6.6.3 Sealed tubes and sealed hollow box sections used for external construction exposed to weather shall not be thinner than 4 mm and for construction not exposed to weather shall not be thinner than 3 mm.
- 3.6.6.4 All fabrication of structural steelwork shall be in accordance with IS: 800 and as per the approved drawings unless otherwise specified. The tolerances of fabrication of steel structures shall be in accordance with IS: 7215 unless otherwise specified.

3.6.7 Concreting Work (Nominal & Ready Mixed Concrete):

- 3.6.7.1 The Contractor shall provide ready mixed concrete (RMC) including all labour, materials, equipment and incidentals required for proper execution and completion of all concrete work as specified in IS 456(Latest edition) and latest PWD schedule, West Bengal.
- 3.6.7.2 The Contractor shall not pour any concrete unless and until the representatives of the Engineer have inspected the formwork, reinforcing steel and inserts and sleeves if any and given permission to place concrete.
- 3.6.7.3 The grade of RMC is M 25 & M 30.
- 3.6.7.4 Where nominal concrete mixes are described as 1:1:2, 1:1.5:3 etc. The figures denote the relative proportions of cement, dry sand and graded stone aggregate respectively.
- 3.6.7.5 Portland Pozzolana Cement (Grade-53) conforming to IS: 1489 (Part-I) (Fly ash based) to be used.
- 3.6.7.6 Shuttering shall be plyboard of thickness between 9 to12mm or steel shuttering at all locations for all shapes etc in all complete including de-shuttering of the same after specified period without damaging the concrete works as directed by Engineer-in charge, etc. Providing and applying approved form oil on all surfaces of formwork coming in contact with concrete as per specifications and drawings and as directed by Engineer in-charge. Shuttering shall be of leakproof.
- 3.6.7.7 Each layer of concrete shall be compacted fully before the succeeding layer is placed.

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3.6.7.8 All concrete work shall be water cured for a minimum period of 7 days after concreting or as directed by Engineer.

3.6.8 Steel Reinforcement:

3.6.8.1 Supplying TOR steel reinforcement (of approved manufacturer) of tested quality of any diameter up to 32mm dia minimum Fe 415 confirming to IS:1786 for reinforced concrete work in all sorts of structures at all depth and height including distribution bars, stirrups, binders etc. initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction.

3.6.9 Metal Sheeting:

- 3.6.9.1 Supply of colour coated LYSAGHT® TRIMDEK® profile sheet of nominal 1072 mm overall width and nominal 28 mm deep ribs with subtle square fluting in the five pans at nominal 203 mm centre-to-centre.
- 3.6.9.2 The end rib shall be designed for anti-capillary action, to avoid any seepage of water through the lateral overlap. The feed material shall be of 0.5 mm Total Coated Thickness (0.45 mm BMT) COLORBOND® steel- High tensile with min 550 MPa yield strength, metallic hot-dipped coated with Al-Zn alloy (55% Aluminium, 43.5% Zinc, 1.5% Si) as per AS1397 / IS15961 ZINCALUME® AZ150 (min. 150 g/m2 total on both sides) with Super Durable Polyester quality paint system with inorganic pigments lead free paint of approved colour, suitable for exterior application conforming to AS/NZS 2728 type-4 / IS15965 class 3 of Tata BlueScope Steel make.
- 3.6.9.3 The sheet shall have a total coating thickness of 35 microns, super durable polyester COLORBOND STEEL® with Thermatech™ solar reflectance technology quality paint system of 20 microns on exposed surface and 5-micron reverse polyester coat on back surface over 5-micron primer coat on both surfaces.
- 3.6.9.4 The paint system would have stable resin & inorganic pigments for paint durability and is lead free for water harvesting. The steel sheet shall have brand marking of "LYSAGHT TRIMDEK® -A Product of Tata BlueScope Steel Ltd" on back side at regular interval confirming genuineness of the material. (Colour Toba Blue).
 - 55 mm & 25 mm self-tapping screw to be used with EPDM Washer of 16 mm dia & 3 mm thick washer including necessary sealants (silicon/butyl sealants for transverse laps). Weather locked EPDM washer should be used.
- 3.6.9.5 Minimum 150 mm end lap and one corrugation minimum side lap is required to be maintained. All the lapping joint should be filled with mastic tape. Foam filler to be used wherever required.
- 3.6.9.6 Payment to be made on area of finished working Roof, Ridge, valley and Wall.
- 3.6.9.7 No extra payment to be made for Ridge and Corner flush.
- 3.6.9.8 Installation of sheeting will be done as per the recommendation / Drawings of OEM of Metal sheet.

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3.6.10 Polycarbonate Sheeting Work

- 3.6.10.1 Supply, transportation & delivery, erection and fixing in position 1.5mm thick corrugation polycarbonate sheets.
- 3.6.10.2 Sheet shall be UV protected as per IS 12866-1989.
- 3.6.10.3 10mm dia x 55 mm self-driving screw to be used with EPDM/other Washer of 16mm dia & 3mm thick washer including necessary sealants (silicon/butyl sealants for transverse laps).
- 3.6.10.4 150 mm end lap and one corrugation minimum side lap is required to be maintained.
- 3.6.10.5 Payment to be made on area of finished working Roof, Ridge, valley and Wall.
- 3.6.10.6 Colour of sheets shall be Natural white or tinted blue or as per the requirement of the Engineer.

Weather locked EPDM washer should be used.

3.6.11 Rainwater Down takes:

3.6.11.1 The rain water pipes shall be of the UPVC and of the sizes as specified. All rainwater pipes shall be fitted and fixed in proper position with necessary offsets, clamps, shoe, Y-junctions and other accessories as required and as directed by the Engineer-in-Charge. All joints are to be properly packed.

3.6.12 Masonry / Brickwork

- 3.6.12.1 The bricks shall be locally available kiln burnt bricks of generally regular and uniform size, shape & colour, uniformly well burn but not over burnt.
- 3.6.12.2 The size of brick shall normally 230 mm x 115 mm x 75 mm. Bricks of one standard size shall be used on one work unless specially permitted by the Engineer.
- 3.6.12.3 After immersion in water, absorption by weight shall not be exceeding 20% of dry weight of the brick when tested according to IS 1077 of latest edition. Unless otherwise specified the load to crush the brick when tested according to IS 1077of latest edition shall not be less than 75 Kg/Sq.cm.
- 3.6.12.4 Prior approval of Engineer shall be obtained for the brands of bricks to be used in the work after compliance with the above specifications/tests.
- 3.6.12.5 Unless otherwise specified, mortar for brick work shall be composed of 1:4 ratio i.e. 1 part of cement to 4 parts of sand.

3.6.13 Painting Work

3.6.13.1 The Exterior and Interior Painting on all types of surface in accordance with the 'drawings' and Schedule of finishes or as per the guideline explained in IS: 1477, IS: 2395 and as per direction of the Engineer and 'Schedule of Quantities'.

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- 3.6.13.2 All surfaces for painting shall be properly sand papered and cleaned by mechanical buffing and where necessary good quality putty shall be used to hide all holes, cracks, open joints etc. The rate for painting includes such work.
- 3.6.13.3 Paint shall be applied with approved brushes and surfaces shall be sand papered after every coat. All work when completed shall present a smooth, clean solid and uniform surface, to the satisfaction of the Engineer-in- Charge.
- 3.6.13.4 All surfaces for painting, if they are new, should have a coat of suitable primer before application of the paint. Old surfaces where existing paints have been completely worn out owing to long use should also receive a coat of priming before application of fresh painting.
- 3.6.13.5 <u>Steel Primer:</u> For steel surface red oxide primer, zinc chromate primer of approved brand and manufacture and as per direction of the Engineer-in-Charge is to be applied on the surface.
- 3.6.13.6 <u>Acrylic Primer Coat (solvent based Primer):</u> Acrylic primer coat is to be used as base coat on wall finish of cement, lime or lime cement plaster surface before application of any wall coating e.g. distemper, oil-based paints, synthetic enamel, acrylic emulsion etc. on them.
- 3.6.13.7 Enamel Paint: Enamel paint of approved brand and manufacture shall be used. Each coat shall be allowed to dry for 24 hours and lightly rubbed down with fine grade sand paper and dusted before the next coat is applied. The finished surface shall present an even and uniform appearance. Minimum thickness of paint should be 25µm/coat.
- 3.6.13.8 <u>Acrylic Emulsion Paint:</u> Acrylic emulsion paint are not suitable for application on external surface and surface which are liable to heavy condensation and are be used generally on internal surface. For plastered surfaces a cement priming coat is required before application of acrylic emulsion. Acrylic emulsion paint of approved brand and manufacture and of the required shade shall be used.
- 3.6.13.9 Epoxy Paint: The painting scheme include surface preparation to SA2 1/2 by blasting,1st coat of inorganic zinc silicate primer of 65-micron, intermediate coat of epoxy high build MIO of 100 micron and two finish coats of high build epoxy of 2 x 100 micron.
- 3.7 Piping and Electrical Work
- 3.7.1 Gas distribution System (Oxygen & Acetylene): Supply, installation, testing & commissioning of Oxygen & Acetylene with necessary Valves, Flashback Arrester (FBA) & all necessary fittings, fixtures, clamp, supporting arrangement as per existing arrangement. Full functionality of all the gas distribution system shall be achieved after restoration activity and the complete system shall be tested, commissioned and handed over for further use in production. Pipe shall be of 40NB Schedule 40 Carbone steel. FBA shall have Adequate flow for 3 cutters at 1.2 Bar, BAM approved & Conforms to EN730 / ISO 5175. Ball Valve shall be of Seat Rating: 69 bar at 38oC, 5 bar at 225oC, Body SS 316, Ball SS, Seat PTFE.

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- 3.7.2 Leak test: After completion, the gas distribution system of each gas shall be charged separately with inert gas at appropriate pressure (as per relevant IS) to check all the welding joints (old and new), pipe fitting joints, etc with soap solution for presence of any leakage in them.
- 3.7.3 Lock Test: After obtaining of satisfactory result in Leak test, the entire gas distribution system of each type of gas shall be charged again separately at the working pressure of respective system. After closing all the outlet and vents properly, the pressure source shall be disconnected and sealed. After one hour, the pressure gauge reading shall be checked for any pressure drop. The initial pressure reading and final pressure reading (after one hour) shall be recorded in the commissioning report.
- 3.7.4 Painting: All newly laid pipe lines and attached system shall be painted with one coat of red oxide primer and two coats of epoxy paint one coat before erection and one coat after erection, as per standard IS:2379 1990 (Colour Code for Identification of Pipe Lines). The pipe line shall be marked with flow directions, medium being carried and colour band at necessary locations as per the instructions of GRSE Manager in Charge.
- 3.7.5 The Contractor shall carry out all the associated work as necessary which may not be illustrated above but required to fulfil safe & satisfactory restoration of the systems. Vendor should Engage 6G welder. Document to be produced before starting the job.
- 3.7.6 Inspection: Final Inspection & Testing shall be carried out in front of GRSE Representative from YM, SBS, Maintenance (Deputed by DGM(ES)) and Safety Depts with prior intimation. Compatibility with existing connection shall be tested during this final inspection. No leakage shall be allowed from any joints and all the fittings / item shall fit correctly with the pipelines.
- 3.7.7 Compatibility of items: Supplier shall check the end connections (dimensions, thread types etc.) physically in existing equipment used at GRSE before submitting their quote and supply. Supplier shall ensure that supplied items shall match with existing equipment used in GRSE. The Contractor shall carry out all the associated work as necessary which may not be illustrated above but required to fulfil safe & satisfactory restoration of the systems.
- 3.7.8 Warranty: Warranty Workmanship as well as materials supplied by the vendor will be guaranteed for satisfactory performance of a period of 36 months from the date of successfully commissioning. Any malfunction / non-operational of system during guarantee period is to be rectified by vendor within 02 working days at free of cost. Necessary maintenance service as required need to be provided with expert technician during the warranty period
- 3.7.9 Electrical Work: Supply, installation, testing & commissioning of following electrical equipment's for BAY-4 SBS extension. For technical issues, relevant Standards/Codes shall be BIS IS:4594, IS:3177, IS:807, IS:875, IS:1893, IS:800, The Indian Electricity Act 2003 & Indian Electricity Rules 1956 and other relevant BIS as applicable.
- 3.7.9.1 Supply, installation, testing & commissioning of Main power(415V,400A) distribution panel (MPDP-1) including ECO-SMART Lighting Energy Saver- 1 no (Road side)
 - (i) Incomer TPN MCCB (400A)-1
 - (ii) Incomer TPN MCCB (400A)-1(Solar System)
 - (iii) Outgoing TPN MCCB (200A)-1

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- (iv) Outgoing TPN MCCB (100A)-3
- (v) Outgoing TPN MCCB (63A)-7
- 3.7.9.2 Supply, installation, testing & commissioning of AC (415V) to AC (110V) converter panel with transformer & ACDB – 1 no
- 3.7.9.3 Supply, installation, testing & commissioning of industrial power socket(20A) of 110V AC with structure –06 Nos
- 3.7.9.4 Supply, installation, testing & commissioning of industrial double power socket(20A) of 220V AC with structure –06 Nos
- Supply, installation, testing & commissioning of flood light with structure (250W LED) Nos
- 3.7.9.6 Supply, installation, testing & commissioning of street light with structure (36W LED) - 10 Nos
- 3.7.9.7 Supply, installation, testing & commissioning of TPN main switch with structure (63A) for welding Machines 06 Nos
- 3.7.9.8 Supply, installation, testing & commissioning of 3 phase TPN (100A incomer) 12-way MCB DB for Light & Fan – 2 Nos
- 3.7.9.9 Supply, laying & end termination of 1 X 3.5 C X 400 sqm 11 KV AL XLPE Armoured cable- 50 meter.
- 3.7.9.10 Supply, laying & Installation of FRLS PVC Insulated Copper Cable/ Wire, Cable Tray, Conduit pipe, Gland, Lugs.
- 3.7.9.11 Supply & Installation of Total 06nos Earth pit with Earthing strip.
- 3.7.9.12 Supply & Installation of Earthing system for PV Array, PCU power system, Lightning protection system (Early streamer emission- ESE/ Ionizing lighting rod system with lighting counter meter to be installed for protection against lighting), Earthing mat to be provided in front of all the Electrical Panels. Earth Pit, its cover and Name Plate marking.

3.8 Approved Make / Brand

Item	Make / Brand	
Cement	Lafarge / ACC / Ultratech or equivalent as approved by Engineer	
Reinforcement Steel	TISCO / SAIL / ESSAR / RINL/ SRMB or equivalent as approved by Engineer.	
Structural Steel	SAIL / TATA / JINDAL / equivalent as approved by Engineer	
Metal Sheet	LYSAGHT TRIMDEK® -A Product of Tata BlueScope Steel Ltd	
Paint	Asian Paints / Berger / ICI / Nerolac or equivalent as approved by Engineer	

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CPVC Pipe	Supreme/Oriplast/Skipper/Astral or equivalent as		
	approved by Engineer		
UPVC Pipe	SUPREME / PRINCE /ORIPLAST or equivalent as approved by Engineer		
Gas Pipes	Reputed make to be approved by GRSE		
Valves	(i) L&T Valves,(ii) Shenco Valves (iii) Kirloskar (iv)Leader or equivalent as approved by Engineer		
Flash Back Arrestor	(i) Messer (ii) Witt (iii) Linde or equivalent.		
Switch Fuse Unit (SFU)	C&S/ Havells/ Schneider/ Siemens/ ABB		
MCB's, MCCB's & MCB DB	Havells/ C&S/ L&T/ Siemens/ Schneider/ Legrand		
11 KV AL XLPE Armoured cable	Skytone/ National/ Polucab/ Glloster/ KEI		
PVC insulated 1.1KV grade copper wires & Cables	Havells/ HPL/ Finolex/ Policab		
Terminals	Elmex/ Technoplast/ Molex/ Connectreed		
Lugs	Dowells/ Ismal		
Glands	Braco / Commet / Jainson / Dowells		
Indicating Lamps	L&T/ Siemens/ Technique		
Light fittings & Luminaries	Philips/Crompton/Balaji/Havells/Wipro		
External Light	Bajaj/ Philips/ Wipro/ Havells		
Panel meters (Ammeter, voltmeter, frequency meter)	Automatic Electric / Schneider/ Enercon - Conzerve / L&T		
Industrial Sockets & Switches	HPL/ Snieder/ LEGRAND/ PHILIPS/ ABB		
Steel/ PVC Conduit	ATUL/ JPC/ KRAFT/ SGI		
FRLS PVC insulated wires (ISI mark)	Finolex / Sundeep / Poliplast/polycab/RR unilay		
GI Pipe	Tata/Jindal		
HDPE Pipes	Supreme/Oriplast/Skipper/Astral or equivalent as approved by Engineer		
PVC Tank	Sintex/Reno or equivalent as approved by engineer		

4 HEALTH AND SAFETY

4.1 SAFETY GUIDELINES TO BE ADOPTED BY THE CONTRACTORS AT GRSE PREMISES

4.1.1 The contractor shall provide & ensure use of ISI marked Industrial Safety Shoes, Safety Helmets, Retractable type Full Body Harness (Double Lanyard), Welding Fume Respirator, Safety Goggles, Hand Gloves, Boiler Suits & other necessary Personal Protective Equipment (PPEs) depending upon the nature of job while at work.

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LIST OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

SL. NO.	NAME OF PPE	STANDARD
1	Safety Helmet	IS: 2925/EN: 397
2	Safety Footwear	IS: 15298/EN: ISO 20345
3	Safety Googles	ANSI: 287.1 / EN: 166
4	Ear Plug	IS: 9167 / EN: 352
5	Hand Gloves	i. IS: 4770 for Electrical work. ii. EN: 420 for general requirement. iii. EN: 388 for Medical Hazard. iv. IS: 6994 / EN: 407 for heat applications (Gas Cutting / Welding)
6	Welding Fume Respirators & Dust Musk	IS: 9473 / EN: 149
7	Double lanyard Safety Belt & harness, automatic fall arrestor.	IS: 3521
8	Cotton Boiler Suit Cloth	IS: 177-1989 (Amended up to date), Variety 3

4.1.2 Hot Work Safety (Gas Cutting, Welding etc.):

Prior to commencement of hot work, surrounding areas (including other side of the bulkhead & deck) shall be inspected for the presence of any inflammable materials and no Hot Work shall be carried out without obtaining Hot Work Permit from Fire Fighting Department of GRSE

- Adequate ventilation must be arranged while working in confined spaces throughout the period of carrying hot work.
- (ii) Damaged gas hoses & welding cables should not be used for gas cutting & welding job. Gas cutting hoses & copper welding cables must be ISI marked of reputed make. Use of Aluminium Welding Cable is prohibited during construction activities from fire safety point of view.
- (iii) The gas cutting hose should be separated from welding cables & electric cables.
- (iv) The welding holders, if energized, should not be left unattended.
- (v) All gas cutting torches shall be ISI marked of reputed make and must be fitted with standardized FLASH BACK ARRESTER.
- (vi) Full insulated welding holders (ISI marked) shall be used in construction jobs.
- (vii) During recess period (Lunch time and at the end of day's work) or when work is suspended for more than half an hour, the gas cutting hoses shall be disconnected from

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- the cylinder valves and removed from ship's confined space and keep the same in an open area / Main Deck.
- (viii) All gas equipment shall be subjected to "Water Dip" test daily, before taking those on board. A record of the testing to be maintained by the person carrying out such test.
- (ix) Electric power shall be cut off from welding transformer end during recess period, at the end of day's work and whenever the work is stopped for at least half an hour.
- (x) During hot work activity at the overhead location and on the bulk head, a person must be deputed at the opposite side of hot work from fire safety point of view. xii. Use of LPG for gas cutting is strictly prohibited in the shipyard.

4.1.3 Safety during Grinding:

- (i) All grinding machines shall be provided with standardized & non-expired grinding wheels of reputed make and shall be fitted with protective metal guards during grinding job.
- (ii) Use of oversize grinding wheel is prohibited.
- (iii) All grinding wheels shall be of reputed brand & make and shall be stored / handled carefully prior to taking into use.
- (iv) Damaged grinding wheel shall be replaced forthwith for avoiding likely hood bursting of the Wheel.
- Suitable Safety Goggles / Transparent Face Shield to be used for protection of eyes against foreign body.
- (vi) Double insulated type portable Grinding Machines to be used.

4.1.4 Safety precautions while working at height:

- (i) Prior to starting of any work at height from where a person may fall and get injured, "Height Work Permit" (Annexure - I) shall be issued by the concerned official of Civil Department to the concerned contractor firm and to be forwarded to Safety Department for clearance.
- (ii) The vendor representative / Supervisor shall check the height work area before commencement of height work & confirm to comply according to the checklist (as per Annexure – II).
- (iii) All temporary scaffolding structure (Metal / Bamboo) should be erected with adequate stability of the structure and dimensions as per IS: 3969 (Part -
- (iv) While erecting the scaffolding structure and working on scaffolding platform, all concerned personnel shall wear full body harness with double Lanyard (safety belt) with anchoring the lifeline to the nearest rigid structure.
- (v) The scaffold platforms to be provided with suitable hard barricading at the open sides. Top guard must be at least 42", mid 21", toe board 4" from the working surface and wooden working platform / planks to be secured at both ends for preventing over turning of the wooden planks.

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- (vi) The staging / scaffolding planks should be so arranged that there is no gap between them.
- (vii) There should be sufficient lighting in and around the staging / Scaffolding, if the work is planned after the sunset.
- (viii) Defective wooden planks (weak, rotten, cracked, split, bent) should never be used on staging. Staging planks to be checked thoroughly and defective planks should be replaced prior start of work.
- (ix) While erecting scaffold, care should be taken to ensure that the distance between two transoms is not more than one metre.
- (x) Suitable Ladders should be tied / anchored at the top as well at the bottom to prevent dislodging from it's position.
- (xi) Where erection of scaffolding structure is not feasible / provided, appropriate type of Suspended Working Platform for single person in sitting posture (Boatswain's Chair) may be used by anchoring on to the fixed rigid structure in conjunction with use of double lanyard full body harness (safety belt) and automatic fall arrestor to prevent inadvertent fall of person from height.
- (xii) As per requirement, Safety Net (having suitable mesh size) to be erected just below the work location to prevent fall of man, material and tools & tackles from height.
- (xiii) 'Safety Tool Box' to be conducted by the Site In-charge / Supervisor of the contractor firm on regular basis prior to commencement of day's work and a register to be maintained at site with signature of the height workers, duly endorsed by the Site In charge of the firm.

4.1.5 Safety precautions while working on fragile roof (A.C Sheet):

- (i) Prior to starting of any job on fragile roof (A.C.Sheet), "Height Work Permit" (Annexure

 I) shall be issued by the concerned official of Civil Department to the contractor firm and to be forwarded to Safety Department for clearance.
- (ii) The vendor representative / supervisor shall check the height work area before commencement of height work & confirm to comply according to the checklist (as per Annexure – II).
- (iii) While working on fragile roof (A.C.Sheet), dedicated Roof Ladder along with the full body harness with double lanyard (safety belt) shall be used on the top of the roof and safety belt to be anchored to a rigid structure above the roof.
- (iv) Safety Net (having suitable mesh size) to be erected just below the work location to prevent fall of man, material and tools & tackles from height.
- (v) Where a rigid structure is not available for anchoring the hook of safety belt (double lanyard full body harness), a dedicated horizontal life line of adequate strength to be erected above the roof for ensuring safe movement across / along the fragile roof.
- (vi) The underneath area of work on fragile roof shall be cordoned with cautionary tape with a minimum site clearance of 5 mtr. in all direction from the location of work and sufficient number of Cautionary Notice Board (in Bengali & Hindi Language) to be displayed &

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- maintained at site for general information to the others / personnel working in the close vicinity.
- (vii) 'Safety Tool Box' to be conducted by the Site In-charge / Supervisor of the contractor firm on regular basis prior to commencement day's work and a register to be maintained at site with signature of the height workers, duly endorsed by the Site In charge of the firm.
- (viii) All personnel working on fragile roof, shall be well trained and conversant with the use of Roof Ladders, full body harness safety belt, anchorage of lanyard of harness on the horizontal lifeline etc.

4.1.6 Safety precautions during & after excavation of soil:

- (i) Civil maintenance work which requires excavation of soil, shall be cordoned immediately with hard fencing of adequate strength, all around the excavated location, to prevent inadvertent fall of persons inside the trench.
- (ii) Such cordoned areas are also to be marked / identified with cautionary banners / danger tapes to attract attention of the moving vehicles inside the factory premises.
- (iii) After filling up of excavated locations, the said area should not be immediately left opened / allowed for vehicle movement until the total area is suitability settled & made strengthened to avoid any vehicle to be entrapped therein.

4.1.7 Electrical Safety:

- (i) Only standardized electrical extension boards fitted with industrial type plug, socket and MCB, to be used at site for drawing temporary power from the nearby electrical outlet points.
- (ii) Use of damaged / worn out power cable, electrical extension boards, plug & sockets etc. are strictly prohibited at work site.
- (iii) Electrically operated power tools (e.g. Cutting Wheel, Grinding Machines, Hand Held Concrete Vibrator etc.) shall be of double insulated type.
- (iv) Contractor personnel of the firm shall not tamper / alter any electrical connection for exigency of work. For all type of required electrical support, GRSE electrical department shall be approached through proper channel.

4.2 Health & Safety Plan

- 4.2.1 In addition to the GRSE's Health and Safety Guideline the Contractor must fully comply with all relevant Indian Health and Safety legislation. Nothing in the contract or this specification shall reduce his statutory obligations with respect to health and safety.
- 4.2.2 The Contractor shall be responsible for ensuring that his works are safe. To this end, contractor shall nominate a suitably qualified Health and Safety Manager who shall prepare a Health & Safety Plan for the works in accordance with GRSE guidelines/standards. The Contractor shall be responsible for implementing the Health & Safety Plan with respect to his works. The Health

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& Safety Plan shall, as a minimum, contain a Health & Safety Risk Assessment and a Health & Safety Management Plan.

4.3 Health & Safety Risk Assessment

- 4.3.1 This shall identify all potential hazards to people that may arise due to the works. In this context "people" shall include anyone who may be affected by the works whether Contractor's personnel, Owner's personnel, other contractors' personnel, visitors, general public etc.
- 4.3.2 Hazards shall include those which may arise due to the interaction of the Contractor's own activities with those of others in the Main Yard including dockyard operations.
- 4.3.3 The risk assessment shall identify appropriate methods to eliminate or reduce the risk of the hazard occurring to the minimum that is reasonably practicable.
- 4.3.4 It shall define the specific ways in which each Hazard and its consequent Risk is to be minimised, for example by:
- a) Training of personnel.
- Physical measures on site e.g. temporary works, barriers etc.
- Methods of work on site.
- Management e.g. permits to work; monitoring and control of potentially hazardous activities, co-ordination with other parties
- e) Documentation e.g. method statements, maintenance manuals etc.

4.4 Health & Safety Management Plan

- 4.4.1 This shall document the Contractor's plan for managing, co-ordinating, implementing, monitoring and controlling his activities with respect to Health & Safety.
- 4.4.2 It shall include an organisation chart which shall identify those personnel in the Contractor's organisation (office and site) who have particular responsibilities for Health & Safety matters, with their contact details.
- 4.4.3 The Contractor's Health & Safety Manager or his nominated representative shall be available at all times during the progress of the works.
- 4.4.4 It shall include but not be limited to:
- a) Methods for assuring health and safety, both of his own personnel and that of other people in the shipyard who may be affected by the Contractor's activities.
- Staff training and certification.
- Accident reporting.
- d) Reporting of non-compliance.
- e) Safety Management and control of Sub-Contractors.
- f) Work Equipment, Plant, and Personal Protective Equipment.
- g) First aid provision.
- h) Emergency procedures.

4.5 Height work

4.5.1 All height work shall be carried out adopting appropriate safety measures like erecting steel / iron scaffolding, use of cherry picker / man lift or any other suitable safe measure to carry out such jobs on obtaining proper height work permit from GRSE safety department. Safety belt, fall arrestor, PPE etc shall be used during any height work execution. GRSE safety norm shall be followed while work execution in side of the factory premises. Under no circumstance, safety shall be compromised.

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5 OTHER REQUIREMENTS

5.1 Contractor to Supply all Materials

- 5.1.1 Unless stipulated otherwise in the Contract, all materials including consumables required for the work shall be procured and supplied by the Contractor with the approval of the Engineer or his Representative and subject to subsequent testing as may be required by the Engineer or his Representative.
- 5.1.2 The Contractor shall comply with the relevant IS Codes.

5.2 Deployment of Resources

- 5.2.1 Contractor shall provide adequate number of qualified / experienced workmen, with experienced Engineers / Supervisors & also one experienced / qualified Safety Officer and also sufficient construction equipment, materials, tools & tackles etc. for achieving the schedule target as per approved work schedule. The contractor shall ensure timely deployment of all above resources at site to ensure contractual completion.
- 5.2.2 The contractor shall ensure deployment of adequate and proper skilled /semi-skilled workforce as per work requirements and optimum supporting unskilled workforce as necessary.

5.3 Testing of Materials and Acceptance

- 5.3.1 Test samples shall be prepared and submitted for approval of the Engineer or his Representative, whenever required to do so, all at the Contractor's cost.
- 5.3.2 The Contractor shall submit valid correlated test certificates conforming to applicable standards for materials/items before incorporation in the permanent works.
- 5.3.3 Testing of materials shall be conducted as per the approved Quality Assurance Plan or relevant Indian Standards.
- 5.3.4 Unless stipulated otherwise in the Contract, the cost of any test required by the Engineer or his representative in respect of materials and workmanship deployed on the work shall be borne by the Contractor.

5.4 Inspection by the Engineer

- 5.4.1 For Site inspection, the Contractor shall give adequate notice to the Engineer (authorised representative of GRSE).
- 5.4.2 The Contractor shall provide the Engineer with proper free and safe access to the Contractor's works and stores or his sub-contractor's works and stores at all times and shall provide reasonable facilities to enable him to undertake his inspection.
- 5.4.3 The Contractor shall make all necessary arrangements to enable stage inspections by the Engineer.
- 5.4.4 The Engineer or his Representative shall have power to certify or disapprove/reject works or materials, in accordance with the Conditions of Contract.

5.5 Quality & Workmanship

5.5.1 Quality and workmanship of all items/materials and work shall conform to BOQ /Technical Specification / relevant Indian Standards. The Contractor shall be responsible for any loss/damage during the course of work to any structure, machinery, equipment, fittings, wiring,

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piping, and systems etc. caused by his workman (or his sub contractor's) and the Contractors shall make good such damage free of cost.

5.6 Materials / Work not acceptable to Engineer

5.6.1 The Engineer or his Representative shall have the power to inspect any material and work at any time and to order at any time – (a) for removal from the Site of any material which in his opinion is not in accordance with the Contract or the instruction of the Engineer or his Representative, (b) for the substitution by the proper and suitable materials, or (c) the removal and proper re-execution of any work, which in respect of material and workmanship is not in accordance with the Contract or the instructions of the Engineer. The Contractor shall comply with such order at his own expense and within the time specified in the order. If the Contractor fails to comply, the Engineer shall be at liberty to dispose any such materials and re-do any work in the manner convenient to the Engineer by engaging any outside agency at the risk and expense of the Contractor and after giving him a prior written notice of 7 (seven) days. The Contractor shall extend his full assistance as required by the Engineer during inspection.

5.7 Contractor to Commence Work

5.7.1 The Contractor shall mobilize and commence the work on site on the Commencement Date stated in the LOA/PO. The Contractor shall then proceed with the work with due expedition and without delay, except as may be expressly sanctioned or ordered by the Engineer or his Representative, time being deemed the essence of the Contract on the part of the Contractor.

5.8 Supervision by the Contractor

- 5.8.1 The Contractor shall engage experienced and qualified Engineers at site in day-to-day charge of the work and the Engineer should be authorized to receive instructions from the Engineer-In charge /GRSE. He shall receive orders given by the Engineer from time to time and shall act on them promptly. One fully responsible and experienced & Qualified Site-in-charge (Minimum Qualification: BE / B Tech with experience of 10 years) has to be posted at the site during progress of work.
- 5.8.2 The Contractor shall provide necessary and adequate supervision during the execution of the works and as long thereafter as the Engineer or his Representative shall consider necessary during the Defect Liability Period.
- 5.8.3 The Contractor or his competent and authorised agent or representative shall be constantly at site during working hours. The Contractor shall inform the Engineer or his Representative in writing about such representative / agent of him at site. Replacement of any of the authorised agent of the Contractor during the currency of Contract shall only be with prior written approval of the GRSE/ Engineer.
- 5.8.4 The Contractor and his authorised agent or representative shall be readily available to meet with the GRSE and/or Engineer and/or Engineer's Representative and instructions given to him by the Engineer or his Representative in writing shall be binding upon the Contractor.

5.9 Setting Out

5.9.1 The Contractor shall be responsible for the true and proper fitting / alignment of the Works in relation to reference points / lines / levels as applicable. The checking of any alignment or level by the Engineer or his Representative shall not in any way relieve the Contractor of his

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- responsibility for the correctness thereof and he shall fully provide, protect and preserve the setting out of the works.
- 5.9.2 The Contractor shall promptly notify the Engineer of any discrepancy in the setting out of the works.

5.10 Care of the Work

5.10.1 From the commencement of the works till issue of the Completion Certificate hereof; the Contractor shall take full responsibility for the care thereof. Save for the excepted risks, any damage, loss or injury to the work or any part thereof shall be made good by the Contractor at his own cost as per instruction and to the satisfaction of the Engineer, failing which the Engineer or his Representative may cause the same to be made good by any other agency and the expenses incurred and certified by the Engineer / Owner, shall be recovered from the Contractor.

5.11 Protection of the Existing Structures / Machines

- 5.11.1 The Contractor will be responsible for the protection of all existing structures, machines, cranes, electrical installations, ship blocks, surrounding roads, pavements, drains etc. adjacent to and within the Works from any type of damage.
- 5.11.2 Before the commencement of work, the Contractor to take necessary precautions and measures to safeguard the existing structures/machines/materials/various installations/roads etc. and protect them from possible damages. For that the Contractor will arrange adequate safety nets, ropes, tarpaulin sheet, scaffolding, rubber mats etc. without any extra cost.
- 5.11.3 If any damage occurs by the Contractor or sub-contractor or contractor's workmen, will be recovered suitably from the Contractor.

5.12 Existing Roads & Shop floor to be kept clean

- 5.12.1 Existing roads & Shop floor used by vehicles/machineries of the Contractor or any of his subcontractors for supplies of materials or plant shall be kept clean and clear of all dirt, mud or any other materials dropped by the said vehicles or their tyres. The Contractor shall provide and maintain all equipment as may be necessary to keep the Owner's roads clean as required by this Clause.
- 5.12.2 Any damage caused by the Contractor to the surface of the roads or car parks shall be made good at his own cost.

5.13 Control of Pollution / Health Hazards

5.13.1 The Contractor shall take care to comply with current legislation on the Control of Pollution.

5.14 Site-In charge / Log Book / Hindrance & other Records

- 5.14.1 One fully responsible and experienced & Qualified Site-in-charge (Minimum Qualification: BE / B Tech with experience of 10 years) has to be posted at the site during progress of work.
- 5.14.2 One dedicated and experienced / Qualified Safety Officer at site.
- 5.14.3 Details of technical personnel deployed for the job.
- 5.14.4 Log book for re-work/ modification.
- 5.14.5 Site instruction book.

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- 5.14.6 Details of materials brought by vendor along with copies of challan.
- 5.14.7 Proper record of hindrances is to be maintained by the contractor for the purpose of timely removal of the hindrance and is to be put up for approval by the Engineer on weekly basis.

5.15 Clearance of Site

- 5.15.1 During construction work, the Contractor shall remove all unsalvageable dismantled materials, dismantled concrete, translucent sheets, north light glazing, excavated surplus earth etc. as directed by the Engineer from the site progressively so that construction activities remain unaffected. These materials shall be disposed off to a suitable area (to be arranged by the Contractor in conformity with statutory rules) outside the GRSE premises.
- 5.15.2 On receiving the Completion Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, scrap materials, wreckage, debris, rubbish and temporary works from the Site or as directed by the Engineer.
- 5.15.3 The site shall be handed over in a tidy and workmanship manner.
- 5.15.4 If all these items have not been removed within 28 (twenty eight) days, after the issue of Completion Certificate the Owner may sell or otherwise dispose of any remaining items. The Owner shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

6 GRSE SCOPE

6.1 Electricity

6.1.1 GRSE will provide electrical power supply at one point / suitable location near the construction area / site i.e. Module Hall at free of cost for execution of job. The Contractor shall make necessary arrangements for further distribution, as required, from that point on a temporary basis all at his own cost. The contractor shall ensure consumption of power in very economical way to save energy.

6.2 Water

6.2.1 Construction water will be provided at free of cost from existing source of GRSE. The Contractor shall arrange necessary water distribution pipe line and pump as required all at his own cost.

7 SPECIAL TERMS AND CONDITIONS OF CONTRACT

7.1 Technical Eligibility Criteria

7.1.1 Bidder shall have experience of successful execution of Similar Nature /Type of Job i.e. fabrication & installation of Steel Structural work & allied jobs in Industrial Sheds/Steel Structure during last seven (07) years. Supporting documents meeting Technical Eligibility Criteria to be submitted along with the bid. Also full contact details like name, address, telephone numbers of the person under whose direct jurisdiction the work was executed etc. to prove that they had carried out such works successfully in any PSU / Corporate house / Industry.

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7.1.2 Bidder has to fulfill experience in successful completion of aforesaid similar jobs of value not less than Rs. 8 Crore for one job OR not less than Rs. 5 Crore each for two jobs OR not less than Rs. 4 Crore each for three jobs in last Seven (07) years. The bidder must submit necessary proof duly endorsed along with the bid. Value of steel structural work job of the respective job shall be minimum 40% of the total work order value.

7.2 Site Condition

- 7.2.1 The Tenderer shall consider that accommodation for personnel of the Contractor and their sub-contractors is not allowed to reside at GRSE premises.
- 7.2.2 All the work sites are within the compound of a running engineering works and the Contractor's works will have to be carried out in a manner so as to avoid interruption in the normal shipyard production activities. Accordingly, the Contractor is to co-operate with GRSE to minimize disruption to shipbuilding activities and is to preserve and maintain GRSE vehicular access route for the transport of ship blocks etc.
- 7.2.3 Tenderer must carefully consider his method of construction and safety of the works in relation to environmental factors and the ground conditions.
- 7.2.4 Before quoting, the Tenderer in his own interest shall carry out site visits to know the site conditions / situations and full implications of the assignment. This will also help him in proper assessment of the work. Failure to do so will not absolve the contractor of his responsibility to carry out the work as specified in the Tender Documents. The cost of visiting the site shall be borne by the Tenderer and shall be at his own responsibility and risk.

7.3 Site Consultations

7.3.1 The work shall be carried out in consultation with the Yard Modernisation Department of GRSE headed by Addl. General Manager (YM & CM), with other officers as nominated by him.

7.4 Work Done Certificate (W.D.C.)

7.4.1 The contractor will put up Work done for certification to Engineer along with all inspection report / measurement sheet signed by Quality Assurance Authority/Engineer. Work done certificate is to include whether work has been completed as per delivery schedule or the delay in days/weeks occurred in completion of work. Any recovery towards usage of GRSE resources is also to be indicated.

7.5 Completion Period

- 7.5.1 Completion period of the entire scope of work under this tender shall be:-Total 12 (Twelve) calendar months from the date of issue of Letter of Award (LOA) or signing of contract agreement whichever is earlier.
- 7.5.2 The Tenderer, however, is required to assess the period and confirm the completion period. The tenderer must submit a network schedule (in MS Projects) explaining planning and program in detail for execution of the project. It is relevant to mention that as the existing Module Hall are functional the work shall be done in co-ordination with GRSE Production Dept.

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7.6 Guarantee Period / Defect Liability Period (DLP)

7.6.1 The work executed including supplied components thereof are to be guaranteed for satisfactory performance for the period of 12 (Twelve) Calendar months from the date mentioned in the Completion Certificate, unless otherwise agreed in writing by the Engineer. This will be deemed as the 'Guarantee Period' 'Defect Liability Period'.

7.7 Ownership of Scrap

7.7.1 All scrap items (salvageable) i.e. Metal scrap materials (loose) if obtained/generated by demolishing of any structure / during excavation shall remain the property of the Owner/GRSE and shall be shifted and stacked at place earmarked by owner within GRSE premises. However, steel embedded within concrete shall be disposed of from site by the Contractor along-with excess earth, debris and rubbish etc.

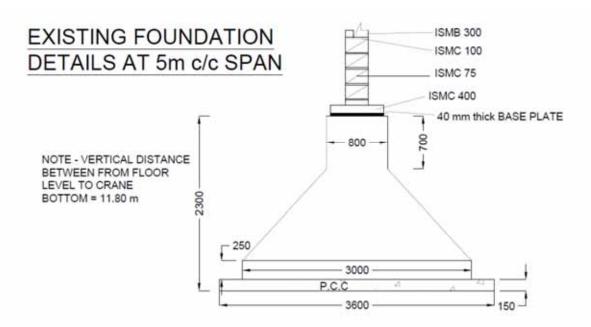
7.8 Completion Certificate

- 7.8.1 When the whole of the work has been completed to the satisfaction of the Engineer and has passed any final test as per the Specification/Contract/ instruction of the Engineer, the Contractor shall, within 21 (twenty one) days of submission of his application to the Engineer, be entitled to receive a "Certificate for Completion" of work.
- 7.8.2 If any part of the total work having been completed to the satisfaction of the Engineer, be taken over and / or used by the Owner, the Contractor shall on application be entitled to partial completion certificate indicating the portion of the work covered by it, so that the Contractor's liability during Defect Liability Period of the Contract, if any, shall commence from the date mentioned in such certificate so far as the completed portion of the work is concerned.

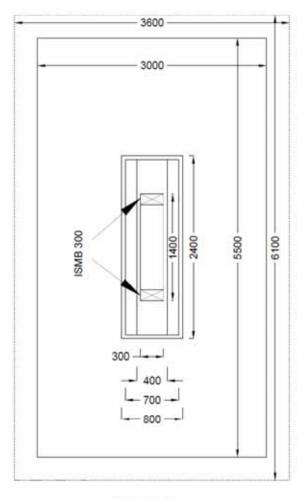


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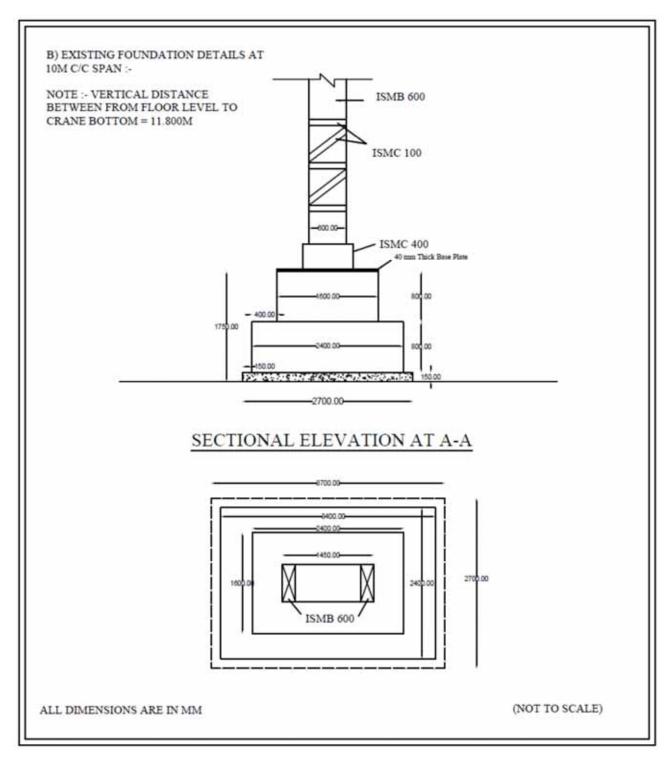
SECTIONAL ELEVATION AT -AA-



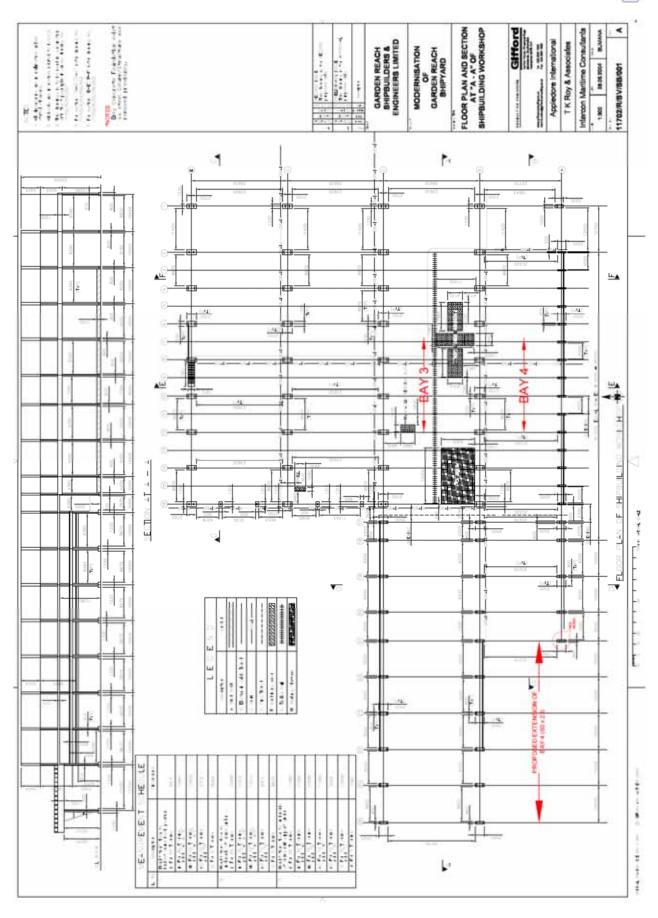
PLAN

ALL DIMENSIONS ARE IN mm

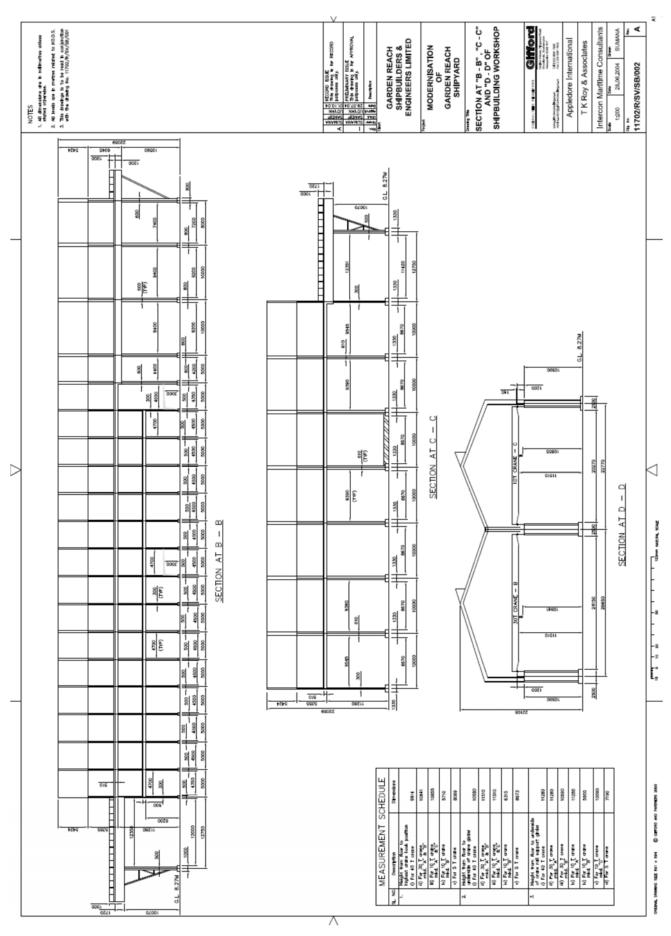




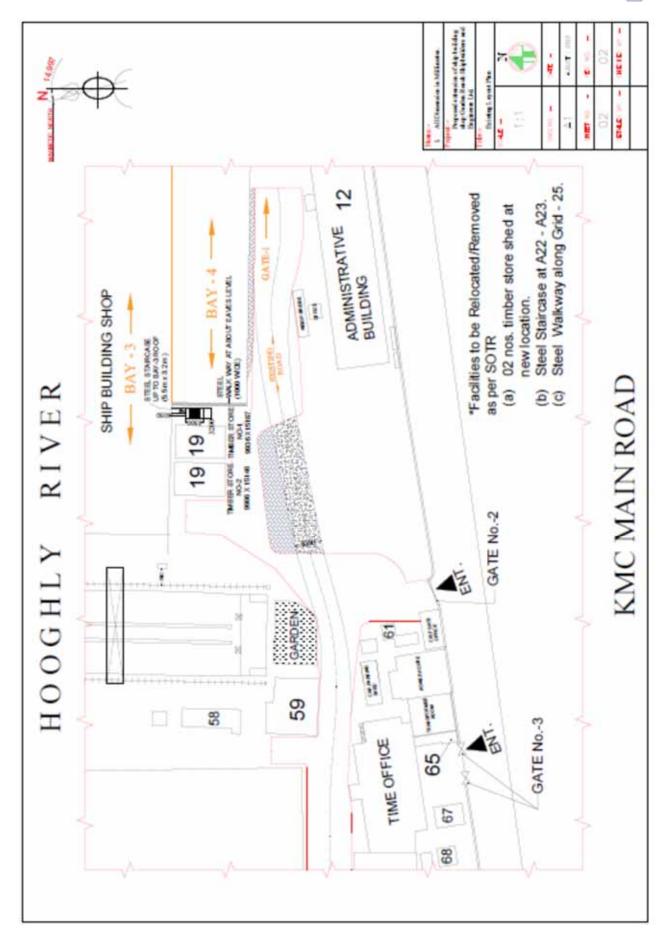




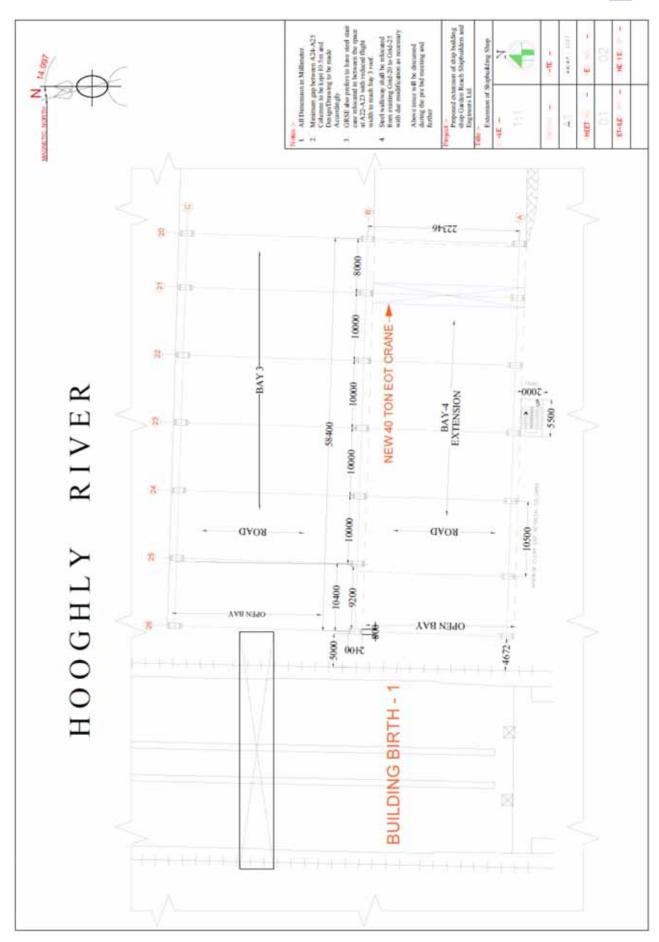














GARDEN REACH SHIPBUILDERS & ENGINEERS LTD. गार्डन रीच शिपबिल्डर्स एण्ड इंजीनियर्स लिमिटेड

(A GOVERNMENT OF INDIA UNDERTAKING) / (भारत सरकार का प्रतिष्ठान)

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Web siteवेंब: www.grse.in, E-Mailई मेल: Nandi.Suchita@grse.co.in

CIN / सी आई एन: L35111WB1934GOI007891

ANNEXURE-1B: BILL OF QUANTITIES

NIT SLA No / निविदा संख्या:	SCC/NK/NIC/OT/YM/SBS/022/ET-2006 DTD: 04-SEP-2023
Job Title / कार्य का नाम	EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE- MAIN
SOR No:	NIL (Annexure-1A)
Tender issuing Dept. / बिभाग द्वारा जारी	Contract Cell (संविदा बिभाग)

- (a) BOQ for the work is detailed below.
- (b) Any of the Line item may be deleted as per actual requirement of GRSE. Necessary amendment of the Purchase Orders will be issued accordingly (if required).
- (c) Detailed price breakup indicating **GST HSN/SAC Code & Percentage** as per this BoQ is to be uploaded in Portal along with price offer (Part II).

BOQ is as follows:

LINE ITE M	SUB LINE ITEM	Description	Qty.	MON	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		TOTAL (LINE 10 + LINE 20))							
10		CIVIL WORK FOR EXTENSIO	N OF BAY	4						
10	1	Design, Drawing & Detailing as mentioned below: a. GA drawing b. All short of Civil drawing and detailing c. All Structural Drawing and detailing d. Vetting of final design & drawing (civil & structural) by Reputed college/University like IIEST/JU/IIT (All drawing should be submitted both in hard and soft copies along with PDF & Auto Cad files)	1.00	LS						
10	2	Soil investigation (Minimum 02 Nos.bore holes) and detail survey of construction site and adjascent areas with Auto Level &Total Station	1.00	LS						
10	3	Dismantling of existing structural Timber Sheds (02 Nos), Steel Stair leading to Bay-3 roof, Steel Walkway at eaves level of Bay-4 & existing PVC tank along with pump & pipelines.	1.00	LS						
10	4	Earth work in excavation including cleaning away vegetation, surbs, etc. if any, for foundation, trenches, drains in earth, soil of all types (ordinary /hard soil) in both dry and wet conditions, sand, gravel and soft murum,bituminous pavement including dewatering, dressing of sides and ramming of bottom and removal of excess earth/soil from GRSE premises etc. all complete as specified and as directed.(Mode of measurement shall be as per drawing).	345.00	CUM						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	Mon	Rate (INR)	nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
10	5	Earth work in filling in foundation trenches or plinth or pit with good earth, in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete, With earth obtained from excavation of foundation	40.00	CUM						
10	6	Dismantling R.C. floor, roof, beams etc. including cutting rods and removing rubbish including stacking of steel bars.	190.00	CUM						
10	7	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish	20.00	CUM						
10	8	Filling in foundation/plinth/trench/pit by silver sand in layers not exceeding 150 mm and consolidating the same by thorough saturation with water, ramming and mehanical vibro compactor complete including the cost of supply of sand. (payment to be made on measurement of finished quantity)	245.00	CUM						
10	9	Supplying, spreading and consolidating an uniform and homogeneous mixture of Stone Dust and Sand (mixed in proportion of 3:1 by volume and by any approved method as per direction of Engineer-in- Charge) to the required thickness in layers at 97% Proctor Density (not less than 1.7 gm/cc) with power roller to proper gradient and camber, including watering as necessary, lighting, guarding, barricading and making adequate earthen bundh where necessary to protect the edges and curing with water for 2 to 3 days, mending cracks and depressions by rolling where necessary complete as per Specification including all incidental charges of roller, cost of fuel & lubricants. The compaction factor is 0.67. Note: Rolling should also be done before spreading of mixture of stone dust and sand	395.00	СИМ						
10	10	Suplying and laying Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand.	50.00	SQM						
10	11	Taking out carefully asbestos Sheeting, North light glazing, translucent sheet, CGI, CI sheet of roof, side valleys, ridge, louvers, side sheeting/cladding, gutters, Rain water downtakes pipe, wall etc of structural steel sheds of all sizes with all lead and lift after unscrewing bolts, nuts, screws, removal of wind tie etc with all necessary safety measures complete as per drawing or as instructed by the engineer and disposal of the dismantled materials (asbestos sheets, translucent sheets and nothlight glazing) out side GRSE area (to be arranged by the Contractor in conformity with statutory rules) and stacking of CGI, vally etc at GRSE. Payment will be made for net area of the sheeting. Lapping of any nature shall not be considered for payment. Dismantled asbestos translucent sheets and nothlight glazing will be property of contractor	750.00	SQM						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	MON	Rate (INR)	nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
		and the contractor while quoting his rate should take salvage value of these into account.								
10	12	Stripping off worn out plaster and raking out joints of walls, celings etc. upto any height and in any floor including removing rubbish.	100.00	SQM						
10	13	Labour for cutting, lowering and stacking after dismantling in parts R.S. joists, channels, angles, tees, plates, Valley gutter etc.at any level complete as directed.including existing steel stair, walk way etc	50.00	MT						
10	14	M.S. structural works in roof truss, columns, beams, stair, walkway, handrail, ladder, valley gutter,Runner for Ridge,Runner for polycarbonet sheet etc. with simple rolled structural members (e.g. joists, channels, angle, tees, flats, plates, tube, pipe etc. including hollow sections of square or rectangular shape) connected to one another with brackets, gussets, cleats as per design/drawing or direction complete, including supplying, fabrication, hoisting and bolted or welded with cleaning of structural surface including necessary gas cutting, drilling, providing and fixing of bolts, nuts, washers etc. (Payment shall be made on the basis of calculated theoretical weight of structural members only in finished works. No additional payment for weld metal deposition, bolts, nuts and washers etc. shall be allowed).	70.00	MT						
10	15	Supply & eraction of PEB Structures including epoxy paint for extension of existing shed inside the GRSE Main premises as mentioned in the SOTR. The painting scheme include surface preparation to SA2 1/2 by blasting,1st coat of inorganic zinc silicate primer of 65-micron, intermediate coat of epoxy high build MIO of 100 micron and two finish coats of high build epoxy of 2 x 100 micron (50% payment will be released on recive of the PEB Structure inside the GRSE premises along with sbsequent clearance from engaging dept.)	480.00	МТ						
10	16	Supplying , fitting and fixing single skin color coated trapezoidal profile for wall cladding, Roof shall be made of 0.45mm BMT (Base Metal Thickness) 0.50mm TCT (Total Coated Thickness excluding paint), G550 (minimum 550 yield strength), of Zincalume metallic coating (IS15965) with high Solar Reflectance Index (SRI) value for better cooling as per thermatch technology, 1000-1015mm effective cover width with five major corrugation, 28mm high rib spaced at 203mm c/c with subtle square fluting in the pan and the end rib shall have anti-capillary groove & return leg. The steel sheet shall be fastened with 40 micron zinc coated or 25 micron zinc-tin alloy coated, hex-head, self-drilling screw as per IS 3566-2002 class 3 fastener. The base steel shall be coated with zincaluminum alloy Zincalume (AZ150)(i.e, 55% AI, 43.4% Zinc, 1.6% Si) minimum	2500.00	SQM						



LINE	SUB LINE	Description	Qty.	Mou	Rate	Amou nt Exclud	GST HSN/	GST%	GST Amount	Amou nt Includ
М	ITEM	·	J	ם	(INR)	ing GST (INR)	SAC Code		(INR)	ing GST (INR)
		of 150g/m2 coating total on both sides, pre-painted with colorbond XRW (exterior roofing, walling) paint system of 35 micron super Durable Polyester paint (SDP) with stable inorganic pigment with no lead contents confirming IS15965. The sheet shall be free from defects and have brand marking of the manufacturer giving product details on the back of the sheet at regular interval confirming genuinity of the material. In Roof, Ridge, valley, Corner Flush, Canopy and Wall with 0.50 mm thick sheet. Minimum 150 mm end lap and one corrugation minimum side lap is required to be maintained. All the lapping joint should be filled with mastic tape. Foam filler to be used wherever required. Weather locked EPDM washer should be used (60% payment will be released on recive of				(iiii)				(iiii)
		the Zn-Al alloy sheet inside the GRSE premises along with sbsequent clearance from engaging dept.)								
10	17	Fitting and fixing old pieces of Corrugated metal sheets or plain sheets including closing old holes with EPDM washers and sheet-bolts and nuts, etc. and including fixing the same to supporting frame with necessary hook-bolts, EPDM washers, putty etc. (excluding cost of sheets). (Payment to be made on area of finished work.) (ii) With all new fittings including the cost thereof.	150.00	SQM						
10	18	Supplying, fitting & fixing 1.5mm thick Corrugation Polycarbonate clear sheet made of national brand, excluding the supporting frame work, fitted and fixed with 10mm dia x 55mm Self-driving screws, Weather lock washers and putty complete with 150mm end lap and one corrugation minimum side lap complete as per specification & direction of Engineer - in - charge including materials, labour, taxes and all other incidental charges.150 mm end lap and one corrugation minimum side lap is required to be maintained. Weather locked EPDM washer should be used. (60% payment will be released on recive of the Polycarbonate sheet inside the GRSE premises along with sbsequent clearance from engaging dept.)	200.00	SQM						
10	19	Supplying, fitting & fixing UPVC pipes A- Type and fittings conforming to IS:13592-1992 with all necessary clamps nails, including making holes in walls, floor,sheet,metal etc. cutting trenches in any soil through masonry concrete structures etc if necessary and mending good damages including joining with jointing materails (Spun Yarn, Valamoid/Bitumen/M-Seal etc) complete. upto any height. A) UPVC Pipes: (iii) 160 mm. Dia. Including all fitings required	300.00	RM						
10	20	Providing & laying plain or reinforced cement concrete (mix 1:2:4) (1 cement: 2 coarse sand: 4 hard graded	65.00	CUM						



LINE ITE M	SUB LINE ITEM	Description	Qty.	Won	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		stone chips 20mm nominal size) as per IS:456 with graded stone chips (20 mm nominal size) as per relevant IS codes.at any height and depth excluding cost of shuttering and reinforcement but including curing etc. all complete as directed.								
10	21	Providing M25 grade reinforced cement Concrete as per IS: 456 with coarse aggregate of size 20 mm downgraded in columns, lintels, chajjas, canopies, staircase slabs, walls, coping, pipe encasement, floor slab, roof slab etc. at all levels as per drawing and finishing with trowel floating etc., to obtain top class finish including compacting, curing, etc., but excluding Reinforcement and formwork.	100.00	CUM						
10	22	Supplying ready mixed concrete of M 30 Grade with well graded stone chips of 20 mm nominal size containing designed quantity of cement per Cu.m of wet concrete produced in computerised batching plant under controlled condition using approved super plastisizer, designing concrete mix following I.S. 10262 and I.S. 456, transporting the mix with agitation in transit mixer to work site depositing the mix on a platform erected for the purpose at required levels of concreting and then placing the mix in its final location of form work, compacting and curing the same complete as per specification & direction of the Engineer-in-charge including computerised batching plant transit mixer with all accessories vibrators etc. inclusive of all other incidental charges in this connection complete	500.00	CUM						
10	23	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any,	10.00	CUM						
10	24	Providing, erecting & fixing in position plywood shuttering of thickness than 9 to12mm or steel shuttering at all locations for all shapes etc in all complete including deshuttering of the same after specified period without damaging the concrete works as directed by Engineerincharge, etc. Providing and applying approved form oil on all surfaces of formwork coming in contact with concrete as per specifications and drawings and as directed by Engineerin-charge.	550.00	SQM						
10	25	Supplying tor steel reinforcement (of approved manufacturer) of tested quality of any diameter upto 32mm dia Fe 500 confirming to IS:1786 for reinforced concrete work in all sorts of structures at all depth and height including distribution bars, stirrups, binders (dowel bar should be installed as per normal practice) etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed	70.00	МТ						



LINE ITE M	SUB LINE ITEM	Description	Qty.	MON	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		wire at every intersection, complete as per drawing and direction.								
10	26	Supplying and laying Polythene Sheet (150gm / sq.m.) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches	2000.00	SQM						
10	27	Brick work with 1st class bricks in cement mortar (1:4)	50.00	CUM						
10	28	125 mm. thick brick work with 1st class bricks in cement mortar (1:4)	20.00	SQM						
10	29	Providing plaster (to wall, floor, ceiling etc.) with sand and cement mortar (1:4) including scaffolding, cleaning of surface, rounding off or chamfering corners as directed and raking out joints of roughening of concrete surface, including throating, nosing and drip course where necessary, curing etc. all complete as per EIC. 15mm thick plaster	500.00	SQM						
10	30	Neat cement punning about 1.5mm thick in wall, dado, window sill, floor etc.	200.00	SQM						
10	31	Acrylic Distemper to interior wall, ceiling with a coat of solvent based interior grade acrylic primer (as per manufacturer's specification) including scaffolding, cleaning and smoothning of surface. Two Coats	50.00	SQM						
10	32	Applying 02 coats Exterior grade Acrylic primer of approved quality and brand on plastered or cencrete surface old or new surface to receive decorative textured (matt finish) or smooth finish acrylic exterior emulsion paint including scaffolding, scraping and preparing the surface throughly, complete as per manufacturer's specification and as per direction of the EIC.	500.00	SQM						
10	33	Protective and Decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of Engineer-in-Charge to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and all incidental charges but excluding the cost of primer. Two Coats.	500.00	SQM						
10	34	Removing old paint from blistered painted surface of steel or other metal by chipping including scaffolding, scraping and cleaning and exposing the original surface.	100.00	SQM						
10	35	Priming one coat on timber or wood or plastered surface or steel or other metal surface with synthetic oil bound primer of approved quality including scaffolding, smoothening surfaces by sand papering etc.	700.00	SQM						
10	36	2 coat aluminium Painting of approved brand on entire steel structure of existing as well as modified steel structure and new fabricated /erected steel structure including scaffolding (both inside and outside faces).	200.00	SQM						
10	37	Painting with best quality synthetic enamel paint of approved make and brand and colour including smoothening surface by sand papering	500.00	SQM						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	MOO	Rate (INR)	nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
		etc. including using of approved putty, scaffolding, etc. on the surface, if necessary. For High gloss two coats.				(iiiii)				(ar aray
10	38	Supplying, fitting, fixing, Chain link fencing of approved quality with iron posts by means of galvanised "C" clips to grid of horizontal strands of galvanised high tensile spring steel wire of 12 S.W.G which have to be tensioned and fixed to the vertical posts by means of galvanised special clips, bolts and nuts etc.(The rate is exclusive of the cost of posts), 50 mm. x 50 mm. x 8 g.	170.00	SQM						
10	39	Supplying bubble free float glass of approved make and brand conforming to IS: 2835-1987. 5mm thick coloured / tinted / smoke glass	20.00	SQM						
10	40	MS (IS-2062) Holding down bolt (duly hot dip galvanised) with 100 x 100 x 6 mm plate washer at bottom, MS Insert Plates, Pipe Sleeves etc including complete fitment & embedded in concrete as per EIC. Size of bolt as per detail design drawing.	10.00	MT						
10	41	Filler joint Providing and filling joint sealing compound as per drawings and technical specifications with coarse sand and 6% bitumen by weight	200.00	RM						
10	42	Supplying & laying Double Wall Corrugated (with external annular corrugation and smooth internal walls) High Density Polyethelene Pipes with all fittings and accessories conforming to IS 16098 (Part-II):2013 having Stiffness Class of SN 8 with Ring Stiffness not less than 8.00 KN/Sqm. and Impact Resistance TIR value not more than 10% including necessary jointing materials for nonpressure underground Drainage, Sewerage & Cross drainage app 300mm internal dia.	70.00	М						
10	43	Providing and laying reinforced cement concrete pipe NP4 with spigot socket for culverts on first class bedding of granular material in single row including fixing with cement mortar 1:2 as per Technical Specification Clause 1106 for Rural Roads of MORD 300MM	10.00	RM						
10	44	Supplying, fitting and fixing in position G.I. pipes of TATA make for underground works with all necessary accessories, specials viz.socket, bend, tee, union, cross, elbow, nipple, short piece etc.including cost of all materials, jointing materials , cutting pipes, making threads, cutting trenches upto 1.5 metre below surface in all sorts of soil and refilling the same as directed with two coats of painting on G.I. pipes and specials with bituminous paint complete in all respect.	20.00	RM						
10	45	C.I. sluice valve 150 mm dia. with flanged ends drilled to as per I.S. 1358/62 and having all cast iron components as per I.S. 780/71 solid forged bronze inside screw spindle having ultimate tensile strength not less than 4.72 MT per sq. cm. Spindle nut	2.00	EA						



LINE ITE M	SUB LINE ITEM	Description	Qty.	MON	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
10	46	valve and seat faces of hard wear resisting, manufactured from best quality gunmetal conforming to I.S. 780/71, painted black all over with asphalt base paint tested to 21 kg (hydraulic pressure) per sq. cm., valve opening to anticlockwise direction, fitted and fixed complete. Providing & injecting high performance	50.00	Bags						
	.0	non shrink, Anti- washout Polymer Cement Grout per pack of 225gm for 50kg bag of cement as per manufacturer's specifications into honeycombing area / porous concrete with suitable pump at pressure of 2.0 Kg/Cm2 and subsequently cutting /removal of nozzles and sealing of holes	30.33	Dago						
10	47	Supplying, fitting & fixing of partly glazed partly panelled or fully glazed single leaf Aluminium swing door of all aluminium sections viz door frame (top and side frame), shutter(top rail, bottom rail, lock rail, door vertical), glazing clip made of Aluminium Alloy Extrusions conforming to IS: 733-1983 and IS: 1285-1975, annodized conforming to IS:1868-1983, fitted with all other accessories viz. EPDM gusket, cleat, angle screws, handle, door stopper. including labour charges for fitting and fixing of aluminium door with door spring, /aluminium hinges, glass / Panel board all complete as per architectural drawings and direction of Engineerincharge, 10-12 Micron thickness Annodizing film colour powder coating	25.00	Kg						
10	48	Supplying, fitting & fixing of 2-Track / 3-Track Aluminium sliding Window of all Aluminium sections viz. window frame (top, bottom & side frame), shutter (top, bottom, side & interlock member) made of aluminium alloy extrusions conforming to IS 733-1983 & IS 1285-1975, annodised conforming to IS 1868-1983, fitted with all other accessories viz. PVC roller, EPDM gasket, maruti lock, screws etc. including labour charges for fitting & fixing of aluminium 2-track/3-track sliding window with fixing of glass (excluding cost of glass) all complete as per architectural drawings and direction of Engineer-in-charge. 10-12 Micron thickness Annodizing film colour powder coating	15.00	Kg						
10	49	M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs	2.00	Qntl						
10	50	Godrej Hydraulic door closer fitted and	1.00	EA						
10	51	fixed complete Heavy type Supplying 'Godrej' mortice lock chromium plated with keys 6 levers including fitting & fixing complete	1.00	EA						
10	52	Supplying profiles of required section made of Aluminium Alloy Extrusions conforming to IS: 732-1983 and IS: 1285- 1975; Annodized (with required	10.00	RM						



LINE SUB Description						Amou				Amou
natural) matt finished conforming to IS: 1888-1983 for Internation of composit door, silding & casement windows, partitions, formed of basid endeals of the partitions, formed of basid endeals of the partitions of finished length of the work). 10 53 Arodised alluminum barrier / tower / socket bod (full covered) of approved conforming to IS: 20474 fitted and fixed with cadmium plated screws 10 54 So mm thick interlocking designer concrete power block M-40 grade for medium-falliz cone & stilling costs 2006 (over 20-40 mm medium sand bed on 255mm thic WBM WMM base course 250mm thic bound gradual or follocks with fine sand by throuming & subsequent watering including cost of sand for sand basid but excluding cost of sand for sand basid but excluding cost of sand for sand basid but excluding cost of base, sub-base course & subgrade preparation/, complete as per direction 10 55 Supplying, filting and forang CPVC 25 mm thick course & forang cPVC 25 mm from the forang cPVC 25 mm from from from the forang cPVC 25 mm from from from from from from fr	ITE	LINE	Description	Qty.	Mon	nt Exclud ing GST	HSN/ SAC	GST%	Amount	nt Includ ing GST
socket bolt (full covered) of approved manufactured from extruded section conforming to I.S. 2047/4 fitted and fixed with cadminum plated screws to concrete paver bolck M-40 grade for arterial roads etc. as per IS. 15658-2006 (over 20-40 mm medium sand bed on 250mm this WIBM WMMM base course & 250 mm this bound gnaular's granular sub-base course & filling the intersities of blocks with fine sand by brooming & 250mm this bound gnaular's granular sub-base course & filling the intersities of blocks with fine sand by brooming & sub-base course & subgrade preparation.) complete as per direction of Engineerin-Charge 10 55 Supplying, fitting and fixing CPVC 25 mm (Chlorinated Polyvinyl Chloride) pipes of approved make conforming to IS-15778; 2007. 10 \$5 Supplying, fitting and fixing etc. complete in all respect including outting pipes, fitting, fixing etc. complete in all respect including outting pipes, fitting, fixing etc. complete in all respect including outting pipes, fitting, fixing etc. complete in all respect including outting pipes, fitting, fixing etc. complete in all respect including outting pipes, sitting, fixing etc. complete in all respect including and sixing etc. of all in encessary fitting as prequired jointing material will be made for accessories, specials VI.S. specials NI.S. specials NI.S			natural) matt finished conforming to IS: 1868-1983 for fabrication of composit door, sliding & casement windows, partitions, formed of basic sections of any ISI embossed / certified make and brand as per direction of Engineer - In-Charge. (Payment will be made on							
concrete paver block M-40 grade for medium-traffic zone & utility cuts on arterial roads etc. as per IS: 15658-2006 (over 20-40 mm medium sand bed on 250mm thk WBM WMM base course course course course a course of filling the intersticas of blocks with fine sand by brooming & 250 mm thk bound gnaular/ granular sub-base course & subgrade preparation.) Complete as per direction of Engineer-in-Charge preparation.) Complete as per direction of Engineer-in-Charge (Chlorinated Polyvinyl Chloride) pipes of approved make conforming to 18-15/78: 2007. with all necessary accessories, specials viz. socket, bend, f.ee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. filted with holder bast camps, including countries of all necessary fittings as required,jointing materials in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials 10 56 Supplying, fitting and fixing ummetal wheel valive of approved brand and make tested to 21 kg per sq. cm., (for water of the standard of the standar	10	53	socket bolt (full covered) of approved manufactured from extruded section conforming to I.S. 204/74 fitted and	1.00	EA					
10 55 Supplying, fitting and fixing CPVC 25 mm (Chlorinated Polyviryl Chloride) pipes of approved make conforming to IS-15778: 2007 with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials wheel valve of approved brand and make tested to 21 kg per sq. cm. (for water lines only). 10 56 Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq. cm. (for water lines only). 10 57 Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75 mm X 75 mm wooden blocks, C.P. waste fittings of 32 mm dia., one approved quality proved quality proved quality proved ground proved paying of 30 mm dia, approved quality P.V.C. waste pipe with C.P. nut 32 mm dia., 900 mm long approved quality P.V.C. connection pipe with heavy brass C.P. nut including mending good all damages and painting the brackets with two coats of approved paint with woods of approved paint with the position with brass screws on 75 mm X 75 mm wooden blocks cohinaware of approved make in position with brass screws on 75 mm X 75 mm wooden blocks cohinaware of approved make in position with brass screws on 75 mm X 75 mm wooden blocks complete.	10	54	concrete paver block M-40 grade for medium-traffic zone & utility cuts on arterial roads etc. as per IS: 15658-2006 (over 20-40 mm medium sand bed on 250mm thk WBM/ WMM base course & 250 mm thk bound gnaular/ granular sub-base course & filling the interstices of blocks with fine sand by brooming & subsequent watering including cost of sand for sand bed but excluding cost of base, sub-base course & subgrade preparation.) complete as per direction	10.00	Sqm					
10 56 Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq. cm. (for water lines only). 10 57 Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75 mm X 75 mm wooden blocks, C.P. waste fittings of 32 mm dia, one approved quality brass C.P. pillar cock of 15 mm dia., C.P. chain with rubber plug of 30 mm dia, approved quality P.V.C. waste pipe with C.P. nut 32 mm dia, 900 mm long approved quality P.V.C. connection pipe with heavy brass C.P. nut including mending good all damages and painting the brackets with two coats of approved paint 10 58 Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete. 10 59 Chromium plated Bib Cock with wall 2.00 EA	10	55	Supplying, fitting and fixing CPVC 25 mm (Chlorinated Polyvinyl Chloride) pipes of approved make conforming to IS-15778: 2007. with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accesories,	48.00	М					
vitreous china best quality approved make wash basin with C.I. brackets on 75 mm X 75 mm wooden blocks, C.P. waste fittings of 32 mm dia., one approved quality brass C.P. pillar cock of 15 mm dia., C.P. chain with rubber plug of 30 mm dia., approved quality P.V.C. waste pipe with C.P. nut 32 mm dia., 900 mm long approved quality P.V.C. connection pipe with heavy brass C.P. nut including mending good all damages and painting the brackets with two coats of approved paint 10 58 Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm wooden blocks complete. 10 59 Chromium plated Bib Cock with wall 2.00 EA	10	56	Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq. cm. (for	4.00	EA					
urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete. 10 59 Chromium plated Bib Cock with wall 2.00 EA	10	57	Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.l. brackets on 75 mm X 75 mm wooden blocks, C.P. waste fittings of 32 mm dia., one approved quality brass C.P. pillar cock of 15 mm dia., C.P. chain with rubber plug of 30 mm dia., approved quality P.V.C. waste pipe with C.P. nut 32 mm dia., 900 mm long approved quality P.V.C. connection pipe with heavy brass C.P. nut including mending good all damages and painting the brackets	2.00	EA					
10 59 Chromium plated Bib Cock with wall 2.00 EA	10	58	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks	2.00	EA					
TIGROUP (HOUNGIERT TO LOGE NO. BUY! / Y	10	59		2.00	EA					



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LINE ITE M	SUB LINE ITEM	Description	Qty.	WOO	Rate (INR)	nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
		Model - Florentine of Jaquar or similar brand)								
10	60	Chromium plated angular Stop Cock with wall flange (Equivalent to Code No. 5053 & Model - Florentine of Jaquar or similar brand).	3.00	EA						
10	61	Areca Palm 4 - 5 suckers of height 90 cm to 105 cm in earthen pots of size 25 cm.	15.00	EA						
10	62	Providing and fixing at or near ground level precast cement concrete in kerbs (size: 410 mm x 310 mm x width 150 mm at bottom with circular nosing at top) (Nano kerb) of cement concreat M25 Grade without reinforcement, fixing as per approved pattern and setting in position at site after preparing the bed grade and slopes by laying Cement concrete with jhama khoa (1:4:8) as per specification and direction of Engineer-in-Charge including filling of joints with 10 mm thick cement morter (3:1) and back filling the vertical piece properly with earth duly compacted and curing the morter joints for atleast 3 days including cost and carriage of all materials complete.	20.00	М						
10	63	Supplying, fitting and fixing P.V.C. water storage tank of approved quality with closed top with lid (Black) - Multilayer (b) 1000 litre capacity	1.00	EA						
10	64	Supplying, fitting and fixing of MS seamless pipe for O ₂ and DA ,32 mm NB, Schedule 40, with all necessary accessories specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary fittings(except Valves & flame arrestor) as required, jointing materials in any position above and below ground.	210.00	М						
10	65	Supplying, fitting and fixing of MS seamless pipe for O2 and DA, 15 mm NB, Schedule 40, with all necessary accessories specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary fittings(except Valves & flame arrestor) as required, jointing materials in any position above and below ground.	60.00	М						
10	66	Supply, Fitting and fixing of SS Ball Valve 1/2 inch(NB),screw end (both side) with fixture and required accessories	10.00	EA						
10	67	Supply ,Fitting and fixing of Flame arrestor for DA with required accessories	10.00	EA						
10	68	Supply, Fitting and fixing of NRV for O2 outlet with required accessories	10.00	EA						
10	69	Supply Fitting and fixing of screw type gas valve 1/2 inch with required accessories	10.00	EA						
10	70	Installation commissioning and testing charge of DA and O2 gas pipe line	1	LS					_	



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LINE ITE M	SUB LINE ITEM	Description	Qtý.	Mon	Rate (INR)	nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
10	71	Supply, Erection, Testing & Commissioning of Cubicle Type floor mounted front operated Main Power Distribution Panel with following technical specification for Ship Building Shop MPDP-1 (Lifting arrangement also should be provided). Incoming Terminal - 400A FP MCCB (36kA) - 2 no. (One number Spare Incomer MCCB for Solar System) Outgoing Terminals - 200A TPN MCCB (25 kA) = 02 NOS. 100A TPN MCCB (25 kA) = 07 NOS. ECO SMART LIGHTING ENERGY SAVER = 01 NOS Following instruments to be provideR,Y,& B Indicator lamps, Voltmeter (0 - 500 V). Voltmeter & individual ammeter to be provide with CT for each Outgoing Terminals, Selector switches, control fuse with link. 600 A rating Aluminium Basbar with PVC (R,Y,B & Black) insulation. The Cubicle Enclosure to be fabricate by 14 SWG CRCA Sheet with powder coated paint with IP - 54. Protection	1.00	No.						
10	72	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240V, on surface/recess complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required (But without MCB/RCCB/ISOLATOR) of Street Light Distribution Board & Flood Lighting Distribution Board for Ship Building Shop. "12 Way Double Door"	2.00	EA						
10	73	Supply, Erection, testing & commissioning of Industrial Plug & Socket board with 240 V, 20A, SPN & Earth Metal Industrial Plug socket & 20A Industrial top incl. S&F 20 A SP MCB breaking capcity 10kA (C- Curve) in SS enclosure fixed on wall and with all auxiliary accessories for erection, suitable for AC supply with following Technical Specification for Ship Building Shop (2Nos Socket & MCB in 1no Borad) - 20 A SP MCB (10kA) = 12 NOS. 20 A SPN & Earth Metal Industrial Plug socket with top = 12 NOS.	6.00	No.						
10	74	Supply, erection, Testing & commissioning of indoor type 250 W LED Flood light fittings. Including all auxiliary accessories & erection materials for out side lighting of Ship Building Shop (Hanging type)	30.00	No.						
10	75	Supply, erection, Testing & commissioning of outdoor type 36W street light fittings with single piece die cast aluminium housing & UV stabilised acrylic cover, all accessories, erection materilas of Ship Building Shop.	10.00	No.						
10	76	Supply, Erection, testing & commissioning of SDF 63A TPN 4P, 415V AC Open Execution & SS Enclosure, CE Handle DIN Type SFU, with following Technical Specification for Ship Building Shop -	6.00	No.						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	Won	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		63 A TPN, 4P, 415V SFU = 06 NOS.								
10	77	Supply, installation, Testing & Commissioning of 20 kVA, 415V / 110V, AC Panel cum ACDB including Transformer & all accessories with as per following specification - For Transformer - KVA rating - 20 KVA. Input Voltage - 415V, AC Out put Voltage - 415V, AC Out put Voltage - 110V, AC AC incoming switch - 63 A TPN Switch Disconnector = 1 no. For 110V AC Distribution - 400A copper Basbar for distribution - one set AC Out going Teminals - 32A DP MCB = 18 nos. Following instruments to be provided - R,Y,& B Indicator lamps, Voltmeter (0 - 500 V) & individual ammeter with CT for each Incoming & Outgoing Terminals, Selector switches, control fuse with link. 400 A rating copper busbar with PVC insulation. The Cubicle Enclosure to be fabricate by 14 SWG CRCA Sheet with powder coated paint, lifting arrangement to be provided with IP - 54. Protection	1.00	No.						
10	78	Supply, erection, Testing & commissioning of 20A, 110V SPN Industrial sockets with complete set and all auxiliary accessories for erection, suitable for 110V AC supply with following Technical Specification for Ship Building Shop - 20 A SP MCB (10kA) = 6 NOS. 20 A SPN & Earth Metal Industrial Plug socket with top = 6 NOS.	6.00	No.						
10	79	Supply, installation, testing and commissioning of 11KV grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination.'3.5C x 400 sq.mm	50.00	М						
10	80	Supply, installation, testing and commissioning of 11KV grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination."3.5C x 185 sq.mm	100.00	М						
10	81	Supply, installation, testing and commissioning of 11KV grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination."3.5C x 25 sq.mm	400.00	M						
10	82	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 X 4 sq. mm and 1x4.0 sq. mm. (for Earthing) Cu. Wire through 25 mm dia 14 SWG GI conduit, with JB, Circular Box, connector And other erection materials, the conduit should be earthed separately along the length, for Bay light & Power Plug Supply.	1000.00	М						
10	83	Supply & Erection of Grounding System by 50 x 6 mm Hot deep GI flat laid in between Earth Bar to LDB, PDB & others Electrical Equipments and also laid along the in side wall of SBS at 600 mm height from the floor height.	50.00	М						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	MON	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
10	84	Supply, Erection & Testing of Chemical Earthing at SBS by 3M long 50 mm. Dia.perforated Hot Deep Galvanised Iron pipe vertically grouted out side of SBS. Chemical provided for erection as per IS standard.	6.00	No.						
10	85	Supply, erection Testing & commissioning or pre fabricated hot deep galvanised Iron Ladder type cable tray for LT cable with proper supporting arrangement.450 mm cable tray	50.00	М						
10	86	Supply, erection Testing & commissioning or pre fabricated hot deep galvanised Iron Ladder type cable tray for LT cable with proper supporting arrangement.300 mm cable tray	500.00	М						
10	87	SITC of fully autonomous Early Streamer Emission Lightning Air Terminal (ESEAT) Supply, installation, fixing, fitting, testing and commissioning of fully autonomous Early Streamer Emission Lightning Air Terminal Lightening Arrester (ESEAT) of Type DMSGI-45 with Level-1 protection of 63 Mtr. Radius. Device is confirming to standard NF C 17-102. Device shall be mounted at least 5 meter clear to highest point by support-mast of 40 mm dia GI Pipe duly galvanized with minimum 85 micron zinc coating with foundation to suit Mast, for Level 1 protection of 63 m (as per NFC 17-102 & IEC 60-1:1989.) radius with accessories complete as required for all other structures and designated open spaces covered by general area lighting mast on which ESE (Early Streamer Emission) can be installed similar to OPR 30 with active system. The Insulation material used to electrically isolate the panels shall be comprised of a base polymer which provides high Ozone & UV resistance with di-electric strenght of 24-38 KV/mm tested as per NFC 17-102 & IEC 60-1:1989. The ESE terminal shall not contain any electronic circuits or any moving parts for its operation. The ESE terminal shall be tested & certified by CPRI (Central Power Research Institute, Govt of India) for the Impulse current of 45 KA (8/20 micro sec) with 5 positive & 5 negative impulse. The ESE (Early Streamer Emission) terminal shall be approved by DGMS (Director General of Mines Safety), Govt of India. Make:- ABB/Altec Corporation/Ingesco/LPI / Erico. The above advanced New Generation Lightning Arrester with ESE Technology consist of following items:-Air Terminal:- Providing of Early Streamer Emission Air Terminal made of pure Stainless Steel grade A316 double layer (DIN 4301) Mast:- Providing of Extension support Mast made of 40 mm dia class A GI Pipe duly galvanized with minimum 85 micron zinc coating with foundation to suit Mast, for Level 1 protection of 63 Mtr. radius (as per NFC 17-102 & IEC 60-1:1989.), with accessories complete as required for all other structures like	1.00	Set						



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LINE	SUB			_		nt	GST		GST	nt
ITE	LINE	Description	Qty.	MOU	Rate	Exclud	HSN/	GST%	Amount	Includ
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						GST	Code		, ,	GST
		couplers, guywires to fix the mast to the				(INR)				(INR)
		building /structure at highest point such								
		that the Air terminal is 5 meters above								
		the tallest structure including								
		supporting 1.25 m FRP Mast. (as per								
		NFC standard)and properly secured in a vertical position.								
		Lightning Flash Counter :- Poviding								
		fitting fixing and testing of Lightning								
		Flash Counter (Search / Strike counter)								
		(6 Digit Display), suitable for 10kA-								
		100kA (250A) to be installed on one of the down conductors approximately 5								
		Mtr. from the ground level. It registers								
		every lightning discarage intercepted								
		by the air terminal as direct lightning								
		protection Testing leints: Poviding fitting fixing								
		Testing Joints:- Poviding, fitting, fixing of testing joints to be located just below								
		the lightning counter on the down								
		conductor from the earthing system in								
		order to faciliate periodical checking of								
		earthing resistivity.								
		Protective Sheath :- A 3 inch dia approximately 3 Mtr long plastic pipe is								
		fitted at the ground level to prevent								
		accidental shocks to human								
		beings/animals during a lightning								
		discharge. Down Conductor :- Supplying, laying,								
		fixing of 70 sq mm pvc insulated								
		copper flexible cable for down								
		conductor including fixing of suitable								
		clamps and other accessories from the								
		ESE Air Terminal to the earth pit as per detailed technical specification, Make:-								
		Havells/Finolex/Gloster.								
		The product specifications of above								
		fully autonomous Early Streamer								
		Emission Lightning Air Terminal								
		Lightening Arrester (ESEAT) shall be as follows :-								
		Material - Stainless Steel 316 (DIN								
		4301)								
		Weight - 2.9 Kgs.								
		Length- 55cm (including the rod). Width - 12.5 Cm.								
		Total cost of fully autonomous Early								
		Streamer Emission Lightning Air								
		Terminal (ESEAT)								
10	1	Design, Drawing & Detailing as	1.00	LS						
		mentioned below : a. GA drawing								
		b. All short of Civil drawing and								
		detailing								
		c. All Structural Drawing and detailing								
		d. Vetting of final design & drawing (civil & structural) by Reputed								
		college/University like IIEST/JU/IIT								
		(All drawing should be submitted both								
		in hard and soft copies along with PDF								
40	-	& Auto Cad files)	4.00	10		-				
10	2	Soil investigation (Minimum 02 Nos.bore holes) and detail survey of	1.00	LS						
		construction site and adjascent areas								
	<u> </u>	with Auto Level &Total Station		<u> </u>	<u></u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>
10	3	Dismantling of existing structural	1.00	LS	-			-		
		Timber Sheds (02 Nos), Steel Stair								
		leading to Bay-3 roof, Steel Walkway at eaves level of Bay-4 & existing PVC								
		tank along with pump & pipelines.								
10	4	Earth work in excavation including	345.00	CUM						
		cleaning away vegetation, surbs, etc. if								



LINE	SUB			_		Amou nt	GST		GST	Amou nt
ITE M	LINE	Description	Qty.	Mon	Rate (INR)	Exclud ing GST (INR)	HSN/ SAC Code	GST%	Amount (INR)	Includ ing GST (INR)
		any, for foundation, trenches, drains in earth, soil of all types (ordinary /hard soil) in both dry and wet conditions, sand, gravel and soft murum,bituminous pavement including dewatering, dressing of sides and ramming of bottom and removal of excess earth/soil from GRSE premises etc. all complete as specified and as directed.(Mode of measurement shall be as per drawing).								
10	5	Earth work in filling in foundation trenches or plinth or pit with good earth, in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete, With earth obtained from excavation of foundation	40.00	CUM						
10	6	Dismantling R.C. floor, roof, beams etc. including cutting rods and removing rubbish including stacking of steel bars.	190.00	CUM						
10	7	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish	20.00	CUM						
10	8	Filling in foundation/plinth/trench/pit by silver sand in layers not exceeding 150 mm and consolidating the same by thorough saturation with water, ramming and mehanical vibro compactor complete including the cost of supply of sand. (payment to be made on measurement of finished quantity)	245.00	CUM						
10	9	Supplying, spreading and consolidating an uniform and homogeneous mixture of Stone Dust and Sand (mixed in proportion of 3:1 by volume and by any approved method as per direction of Engineer-in- Charge) to the required thickness in layers at 97% Proctor Density (not less than 1.7 gm/cc) with power roller to proper gradient and camber, including watering as necessary, lighting, guarding, barricading and making adequate earthen bundh where necessary to protect the edges and curing with water for 2 to 3 days, mending cracks and depressions by rolling where necessary complete as per Specification including all incidental charges of roller, cost of fuel & lubricants. The compaction factor is 0.67. Note: Rolling should also be done before spreading of mixture of stone dust and sand	395.00	CUM						
10	10	Suplying and laying Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand.	50.00	SQM						
10	11	Taking out carefully asbestos Sheeting, North light glazing, translucent sheet, CGI, CI sheet of roof, side valleys, ridge, louvers, side sheeting/cladding, gutters, Rain water downtakes pipe, wall etc of structural steel sheds of all sizes with all lead and lift after unscrewing bolts, nuts, screws, removal of wind tie etc with all necessary safety measures complete as per drawing or as instructed by the engineer and disposal of the dismantled materials (asbestos sheets, translucent sheets and	750.00	SQM						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	Mou	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		nothlight glazing) out side GRSE area (to be arranged by the Contractor in conformity with statutory rules) and stacking of CGI, vally etc at GRSE. Payment will be made for net area of the sheeting. Lapping of any nature shall not be considered for payment. Dismantled asbestos sheets, translucent sheets and nothlight glazing will be property of contractor and the contractor while quoting his rate should take salvage value of these into account.								
10	12	Stripping off worn out plaster and raking out joints of walls, celings etc. upto any height and in any floor including removing rubbish.	100.00	SQM						
10	13	Labour for cutting, lowering and stacking after dismantling in parts R.S. joists, channels, angles, tees, plates, Valley gutter etc.at any level complete as directed.including existing steel stair,walk way etc	50.00	MT						
10	14	M.S. structural works in roof truss, columns, beams, stair, walkway, handrail, ladder, valley gutter,Runner for Ridge,Runner for polycarbonet sheet etc. with simple rolled structural members (e.g. joists, channels, angle, tees, flats, plates, tube, pipe etc. including hollow sections of square or rectangular shape) connected to one another with brackets, gussets, cleats as per design/drawing or direction complete, including supplying, fabrication, hoisting and bolted or welded with cleaning of structural surface including necessary gas cutting, drilling, providing and fixing of bolts, nuts, washers etc. (Payment shall be made on the basis of calculated theoretical weight of structural members only in finished works. No additional payment for weld metal deposition, bolts, nuts and washers etc. shall be allowed).	70.00	МТ						
10	15	Supply & eraction of PEB Structures including epoxy paint for extension of existing shed inside the GRSE Main premises as mentioned in the SOTR. The painting scheme include surface preparation to SA2 1/2 by blasting,1st coat of inorganic zinc silicate primer of 65-micron, intermediate coat of epoxy high build MIO of 100 micron and two finish coats of high build epoxy of 2 x 100 micron (50% payment will be released on recive of the PEB Structure inside the GRSE premises along with sbsequent clearance from engaging dept.)	480.00	MT						
10	16	Supplying, fitting and fixing single skin color coated trapezoidal profile for wall cladding, Roof shall be made of 0.45mm BMT (Base Metal Thickness) 0.50mm TCT (Total Coated Thickness excluding paint), G550 (minimum 550 yield strength), of Zincalume metallic coating (IS15965) with high Solar Reflectance Index (SRI) value for better cooling as per thermatch technology, 1000-1015mm effective cover width with five major corrugation,	2500.00	SQM						



LINE ITE M	SUB LINE ITEM	Description	Qty.	MON	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		28mm high rib spaced at 203mm c/c with subtle square fluting in the pan and the end rib shall have anti-capillary groove & return leg. The steel sheet shall be fastened with 40 micron zinc coated or 25 micron zinc-tin alloy coated, hex-head, self-drilling screw as per IS 3566-2002 class 3 fastener. The base steel shall be coated with zinc-aluminum alloy Zincalume (AZ150)(i.e, 55% AI, 43.4% Zinc, 1.6% Si) minimum of 150g/m2 coating total on both sides, pre-painted with colorbond XRW (exterior roofing, walling) paint system of 35 micron super Durable Polyester paint (SDP) with stable inorganic pigment with no lead contents confirming IS15965. The sheet shall be free from defects and have brand marking of the manufacturer giving product details on the back of the sheet at regular interval confirming genuinity of the material. In Roof, Ridge, valley, Corner Flush, Canopy and Wall with 0.50 mm thick sheet. Minimum 150 mm end lap and one corrugation minimum side lap is required to be maintained. All the lapping joint should be filled with mastic tape. Foam filler to be used wherever required. Weather locked EPDM washer should be used (60% payment will be released on recive of the Zn-Al alloy sheet inside the GRSE premises along with sbsequent clearance from engaging dept.)								
10	17	Fitting and fixing old pieces of Corrugated metal sheets or plain sheets including closing old holes with EPDM washers and sheet-bolts and nuts, etc. and including fixing the same to supporting frame with necessary hook-bolts, EPDM washers, putty etc. (excluding cost of sheets). (Payment to be made on area of finished work.) (ii) With all new fittings including the cost thereof.	150.00	SQM						
10	18	Supplying, fitting & fixing 1.5mm thick Corrugation Polycarbonate clear sheet made of national brand, excluding the supporting frame work, fitted and fixed with 10mm dia x 55mm Self-driving screws, Weather lock washers and putty complete with 150mm end lap and one corrugation minimum side lap complete as per specification & direction of Engineer - in - charge including materials, labour, taxes and all other incidental charges.150 mm end lap and one corrugation minimum side lap is required to be maintained. Weather locked EPDM washer should be used. (60% payment will be released on recive of the Polycarbonate sheet inside the GRSE premises along with sbsequent clearance from engaging dept.)	200.00	SQM						
10	19	Supplying, fitting & fixing UPVC pipes A- Type and fittings conforming to IS:13592-1992 with all necessary clamps nails, including making holes in walls, floor,sheet,metal etc. cutting trenches in any soil through masonry concrete structures etc if necessary	300.00	RM						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	MOU	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		and mending good damages including joining with jointing materails (Spun Yarn, Valamoid/Bitumen/M-Seal etc) complete. upto any height. A) UPVC Pipes: (iii) 160 mm. Dia. Including all fitings required								
10	20	Providing & laying plain or reinforced cement concrete (mix 1:2:4) (1 cement: 2 coarse sand: 4 hard graded stone chips 20mm nominal size) as per IS:456 with graded stone chips (20 mm nominal size) as per relevant IS codes.at any height and depth excluding cost of shuttering and reinforcement but including curing etc. all complete as directed.	65.00	CUM						
10	21	Providing M25 grade reinforced cement Concrete as per IS: 456 with coarse aggregate of size 20 mm downgraded in columns, lintels, chajjas, canopies, staircase slabs, walls, coping, pipe encasement, floor slab, roof slab etc. at all levels as per drawing and finishing with trowel floating etc., to obtain top class finish including compacting, curing, etc., but excluding Reinforcement and formwork.	100.00	CUM						
10	22	Supplying ready mixed concrete of M 30 Grade with well graded stone chips of 20 mm nominal size containing designed quantity of cement per Cu.m of wet concrete produced in computerised batching plant under controlled condition using approved super plastisizer, designing concrete mix following I.S. 10262 and I.S. 456, transporting the mix with agitation in transit mixer to work site depositing the mix on a platform erected for the purpose at required levels of concreting and then placing the mix in its final location of form work, compacting and curing the same complete as per specification & direction of the Engineer-in-charge including computerised batching plant transit mixer with all accessories vibrators etc. inclusive of all other incidental charges in this connection complete	500.00	CUM						
10	23	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any,	10.00	CUM						
10	24	Providing, erecting & fixing in position plywood shuttering of thickness than 9 to12mm or steel shuttering at all locations for all shapes etc in all complete including deshuttering of the same after specified period without damaging the concrete works as directed by Engineerincharge, etc. Providing and applying approved form oil on all surfaces of formwork coming in contact with concrete as per specifications and drawings and as directed by Engineerin-charge.	550.00	SQM						
10	25	Supplying for steel reinforcement (of approved manufacturer) of tested quality of any diameter upto 32mm dia Fe 500 confirming to IS:1786 for	70.00	MT						



LINE ITE M	SUB LINE ITEM	Description	Qty.	MOU	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		reinforced concrete work in all sorts of structures at all depth and height including distribution bars, stirrups, binders (dowel bar should be installed as per normal practice) etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction.								
10	26	Supplying and laying Polythene Sheet (150gm / sq.m.) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches	2000.00	SQM						
10	27	Brick work with 1st class bricks in cement mortar (1:4) 125 mm. thick brick work with 1st class	50.00	CUM						
10	29	bricks in cement mortar (1:4) Providing plaster (to wall, floor, ceiling etc.) with sand and cement mortar (1:4) including scaffolding, cleaning of surface, rounding off or chamfering corners as directed and raking out joints of roughening of concrete surface, including throating, nosing and drip course where necessary, curing etc. all complete as per EIC. 15mm thick plaster	500.00	SQM						
10	30	Neat cement punning about 1.5mm thick in wall, dado, window sill, floor etc.	200.00	SQM						
10	31	Acrylic Distemper to interior wall, ceiling with a coat of solvent based interior grade acrylic primer (as per manufacturer's specification) including scaffolding, cleaning and smoothning of surface. Two Coats	50.00	SQM						
10	32	Applying 02 coats Exterior grade Acrylic primer of approved quality and brand on plastered or cencrete surface old or new surface to receive decorative textured (matt finish) or smooth finish acrylic exterior emulsion paint including scaffolding, scraping and preparing the surface throughly, complete as per manufacturer's specification and as per direction of the EIC.	500.00	SQM						
10	33	Protective and Decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of Engineer-in-Charge to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and all incidental charges but excluding the cost of primer. Two Coats.	500.00	SQM						
10	34	Removing old paint from blistered painted surface of steel or other metal by chipping including scaffolding, scraping and cleaning and exposing the original surface.	100.00	SQM						
10	35	Priming one coat on timber or wood or plastered surface or steel or other metal surface with synthetic oil bound primer of approved quality including scaffolding, smoothening surfaces by sand papering etc.	700.00	SQM						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	Won	Rate (INR)	nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
10	36	2 coat aluminium Painting of approved brand on entire steel structure of existing as well as modified steel structure and new fabricated /erected steel structure including scaffolding (both inside and outside faces).	200.00	SQM						
10	10 37 Painting with best quality synthetic enamel paint of approved make and brand and colour including smoothening surface by sand papering etc. including using of approved putty, scaffolding, etc. on the surface, if necessary. For High gloss two coats.		500.00	SQM						
10	38	Supplying, fitting, fixing, Chain link fencing of approved quality with iron posts by means of galvanised "C" clips to grid of horizontal strands of galvanised high tensile spring steel wire of 12 S.W.G which have to be tensioned and fixed to the vertical posts by means of galvanised special clips, bolts and nuts etc.(The rate is exclusive of the cost of posts), 50 mm. x 50 mm. x 8 q.	170.00	SQM						
10	39	Supplying bubble free float glass of approved make and brand conforming to IS: 2835-1987. 5mm thick coloured / tinted / smoke glass	20.00	SQM						
10	40	MS (IS-2062) Holding down bolt (duly hot dip galvanised) with 100 x 100 x 6 mm plate washer at bottom, MS Insert Plates, Pipe Sleeves etc including complete fitment & embedded in concrete as per EIC. Size of bolt as per detail design drawing.	10.00	MT						
10	41	Filler joint Providing and filling joint sealing compound as per drawings and technical specifications with coarse sand and 6% bitumen by weight	200.00	RM						
10	42	Supplying & laying Double Wall Corrugated (with external annular corrugation and smooth internal walls) High Density Polyethelene Pipes with all fittings and accessories conforming to IS 16098 (Part-II):2013 having Stiffness Class of SN 8 with Ring Stiffness not less than 8.00 KN/Sqm. and Impact Resistance TIR value not more than 10% including necessary jointing materials for nonpressure underground Drainage, Sewerage & Cross drainage app 300mm internal dia.	70.00	М						
10	43	Providing and laying reinforced cement concrete pipe NP4 with spigot socket for culverts on first class bedding of granular material in single row including fixing with cement mortar 1:2 as per Technical Specification Clause 1106 for Rural Roads of MORD 300MM	10.00	RM						
10	44	Supplying, fitting and fixing in position G.I. pipes of TATA make for underground works with all necessary accessories, specials viz.socket, bend, tee, union, cross, elbow, nipple, short piece etc.including cost of all materials, jointing materials, cutting pipes, making threads, cutting trenches upto 1.5 metre below surface in all sorts of soil and refilling the same as directed	20.00	RM						



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LINE ITE M	SUB LINE ITEM	Description	Qtý.	MON	Rate (INR)	nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
		with two coats of painting on G.I. pipes and specials with bituminous paint complete in all respect. 150 mm dia. heavy quality								
10	45	C.I. sluice valve 150 mm dia. with flanged ends drilled to as per I.S. 1358/62 and having all cast iron components as per I.S. 780/71 solid forged bronze inside screw spindle having ultimate tensile strength not less than 4.72 MT per sq. cm. Spindle nut valve and seat faces of hard wear resisting, manufactured from best quality gunmetal conforming to I.S. 780/71, painted black all over with asphalt base paint tested to 21 kg (hydraulic pressure) per sq. cm., valve opening to anticlockwise direction, fitted and fixed complete.	2.00	EA						
10	46	Providing & injecting high performance non shrink, Anti- washout Polymer Cement Grout per pack of 225gm for 50kg bag of cement as per manufacturer's specifications into honeycombing area / porous concrete with suitable pump at pressure of 2.0 Kg/Cm2 and subsequently cutting /removal of nozzles and sealing of holes	50.00	Bags						
10	47	Supplying, fitting & fixing of partly glazed partly panelled or fully glazed single leaf Aluminium swing door of all aluminium sections viz door frame (top and side frame), shutter(top rail, bottom rail, lock rail, door vertical), glazing clip made of Aluminium Alloy Extrusions conforming to IS: 733-1983 and IS: 1285-1975, annodized conforming to IS:1868-1983, fitted with all other accessories viz. EPDM gusket, cleat, angle screws, handle, door stopper. including labour charges for fitting and fixing of aluminium door with door spring, /aluminium hinges, glass / Panel board all complete as per architectural drawings and direction of Engineerincharge, 10-12 Micron thickness Annodizing film colour powder coating	25.00	Kg						
10	48	Supplying, fitting & fixing of 2-Track / 3-Track Aluminium sliding Window of all Aluminium sections viz. window frame (top, bottom & side frame), shutter (top, bottom, side & interlock member) made of aluminium alloy extrusions conforming to IS 733-1983 & IS 1285-1975, annodised conforming to IS 1868-1983, fitted with all other accessories viz. PVC roller, EPDM gasket, maruti lock, screws etc. including labour charges for fitting & fixing of aluminium 2-track/3-track sliding window with fixing of glass (excluding cost of glass) all complete as per architectural drawings and direction of Engineer-in-charge. 10-12 Micron thickness Annodizing film colour powder coating	15.00	Kg						
10	49	M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Flats and bars of	2.00	Qntl						



LINE ITE M	SUB LINE ITEM	Description	Qty.	МОИ	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		windows, railing etc. fitted and fixed with necessary screws and lugs								
10	50	Godrej Hydraulic door closer fitted and fixed complete Heavy type	1.00	EA						
10	51	Supplying 'Godrej' mortice lock chromium plated with keys 6 levers including fitting & fixing complete	1.00	EA						
10	52			RM						
10	53	Anodised aluminium barrel / tower / socket bolt (full covered) of approved manufactured from extruded section conforming to I.S. 204/74 fitted and fixed with cadmium plated screws	1.00	EA						
10	54	80 mm thick interlocking designer concrete paver block M-40 grade for medium-traffic zone & utility cuts on arterial roads etc. as per IS: 15658-2006 (over 20-40 mm medium sand bed on 250mm thk WBM/ WMM base course & 250 mm thk bound gnaular/ granular sub-base course & filling the interstices of blocks with fine sand by brooming & subsequent watering including cost of sand for sand bed but excluding cost of base, sub-base course & subgrade preparation.) complete as per direction of Engineer-in-Charge	10.00	Sqm						
10	55	Supplying, fitting and fixing CPVC 25 mm (Chlorinated Polyvinyl Chloride) pipes of approved make conforming to IS-15778: 2007 . with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accesories, specials	48.00	М						
10	56	Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq. cm. (for water lines only).	4.00	EA						
10	57	Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75 mm X 75 mm wooden blocks, C.P. waste fittings of 32 mm dia., one approved quality brass C.P. pillar cock of 15 mm dia., C.P. chain with rubber plug of 30 mm dia., approved quality P.V.C. waste pipe with C.P. nut 32 mm dia., 900 mm long approved quality	2.00	EA						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	Mon	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		P.V.C. connection pipe with heavy brass C.P. nut including mending good all damages and painting the brackets with two coats of approved paint								
10	58	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete.	2.00	EA						
10	59	Chromium plated Bib Cock with wall flange (Equivalent to Code No. 5047 & Model - Florentine of Jaquar or similar brand)	2.00	EA						
10	60	Chromium plated angular Stop Cock with wall flange (Equivalent to Code No. 5053 & Model - Florentine of Jaguar or similar brand).	3.00	EA						
10	61	Areca Palm 4 - 5 suckers of height 90 cm to 105 cm in earthen pots of size 25 cm.	15.00	EA						
10	62	Providing and fixing at or near ground level precast cement concrete in kerbs (size: 410 mm x 310 mm x width 150 mm at bottom with circular nosing at top) (Nano kerb) of cement concreat M25 Grade without reinforcement, fixing as per approved pattern and setting in position at site after preparing the bed grade and slopes by laying Cement concrete with jhama khoa (1:4:8) as per specification and direction of Engineer-in-Charge including filling of joints with 10 mm thick cement morter (3:1) and back filling the vertical piece properly with earth duly compacted and curing the morter joints for atleast 3 days including cost and carriage of all materials complete.	20.00	M						
10	63	Supplying, fitting and fixing P.V.C. water storage tank of approved quality with closed top with lid (Black) - Multilayer (b) 1000 litre capacity	1.00	EA						
10	64	Supplying, fitting and fixing of MS seamless pipe for O ₂ and DA ,32 mm NB, Schedule 40, with all necessary accessories specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary fittings (except Valves & flame arrestor) as required, jointing materials in any position above and below ground.	210.00	M						
10	65	Supplying, fitting and fixing of MS seamless pipe for O2 and DA, 15 mm NB, Schedule 40, with all necessary accessories specials viz. socket, bend, tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary fittings (except Valves & flame arrestor) as required, jointing materials in any position above and below ground.	60.00	М						
10	66	Supply, Fitting and fixing of SS Ball Valve 1/2 inch(NB),screw end (both side) with fixture and required accessories	10.00	EA						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	MOU	Rate (INR)	nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
10	67	Supply ,Fitting and fixing of Flame arrestor for DA with required accessories	10.00	EA						
10	68	Supply, Fitting and fixing of NRV for O2 outlet with required accessories	10.00	EA						
10	69	Supply ,Fitting and fixing of screw type gas valve 1/2 inch with required accessories	10.00	EA						
10	70	Installation commissioning and testing charge of DA and O2 gas pipe line	1	LS						
10	71	Supply, Erection, Testing & Commissioning of Cubicle Type floor mounted front operated Main Power Distribution Panel with following technical specification for Ship Building Shop MPDP-1 (Lifting arrangement also should be provided). Incoming Terminal - 400A FP MCCB (36kA) - 2 no. (One number Spare Incomer MCCB for Solar System) Outgoing Terminals - 200A TPN MCCB (25 kA) = 02 NOS. 100A TPN MCCB (25 kA) = 07 NOS. ECO SMART LIGHTING ENERGY SAVER = 01 NOS. Following instruments to be provide-R,Y,& B Indicator lamps, Voltmeter (0-500 V). Voltmeter & individual ammeter to be provide with CT for each Outgoing Terminals, Selector switches, control fuse with link. 600 A rating Aluminium Basbar with PVC (R,Y,B & Black) insulation. The Cubicle Enclosure to be fabricate by 14 SWG CRCA Sheet with powder coated paint with IP - 54. Protection	1.00	No.						
10	72	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240V, on surface/recess complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required (But without MCB/RCCB/ISOLATOR) of Street Light Distribution Board & Flood Lighting Distribution Board for Ship Building Shop. "12 Way Double Door"	2.00	EA						
10	73	Supply, Erection, testing & commissioning of Industrial Plug & Socket board with 240 V, 20A, SPN & Earth Metal Industrial Plug socket & 20A Industrial top incl. S&F 20 A SP MCB breaking capcity 10kA (C- Curve) in SS enclosure fixed on wall and with all auxiliary accessories for erection, suitable for AC supply with following Technical Specification for Ship Building Shop (2Nos Socket & MCB in 1no Borad) -	6.00	No.						
10	74	20 A SPN & Earth Metal Industrial Plug socket with top = 12 NOS. Supply, erection, Testing & commissioning of indoor type 250 W LED Flood light fittings. Including all auxiliary accessories & erection materials for out side lighting of Ship Building Shop (Hanging type)	30.00	No.						
10	75	Supply, erection, Testing & commissioning of outdoor type 36W	10.00	No.						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	WON	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	nt Includ ing GST (INR)
		street light fittings with single piece die cast aluminium housing & UV stabilised acrylic cover, all accessories, erection materilas of Ship Building Shop.				, ,				
10	76	Supply, Erection, testing & commissioning of SDF 63A TPN 4P, 415V AC Open Execution & SS Enclosure, CE Handle DIN Type SFU, with following Technical Specification for Ship Building Shop -	6.00	No.						
10	77	63 A TPN, 4P, 415V SFU = 06 NOS. Supply, installation, Testing & Commissioning of 20 kVA, 415V / 110V, AC Panel cum ACDB including Transformer & all accessories with as per following specification - For Transformer - KVA rating - 20 KVA, Input Voltage - 415V, AC Out put Voltage - 110V, AC AC incoming switch - 63 A TPN Switch Disconnector = 1 no. For 110V AC Distribution - 400A copper Basbar for distribution - eone set AC Out going Teminals - 32A DP MCB = 18 nos. Following instruments to be provided - R,Y,& B Indicator lamps, Voltmeter (0 - 500 V) & individual ammeter with CT for each Incoming & Outgoing Terminals, Selector switches, control fuse with link. 400 A rating copper busbar with PVC insulation. The Cubicle Enclosure to be fabricate by 14 SWG CRCA Sheet with powder coated paint, lifting arrangement to be provided with IP - 54. Protection	1.00	No.						
10	78	Supply, erection, Testing & commissioning of 20A, 110V SPN Industrial sockets with complete set and all auxiliary accessories for erection, suitable for 110V AC supply with following Technical Specification for Ship Building Shop - 20 A SP MCB (10kA) = 6 NOS. 20 A SPN & Earth Metal Industrial Plug socket with top = 6 NOS.	6.00	No.						
10	79	Supply, installation, testing and commissioning of 11KV grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination.'3.5C x 400 sq.mm	50.00	М						
10	80	Supply, installation, testing and commissioning of 11KV grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination."3.5C x 185 sq.mm	100.00	M						
10	81	Supply, installation, testing and commissioning of 11KV grade XLPE insulated, armoured aluminium cable as per specification and SLD including termination."3.5C x 25 sq.mm	400.00	М						
10	82	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 X 4 sq. mm and 1x4.0 sq. mm. (for Earthing) Cu. Wire through 25 mm dia 14 SWG GI conduit, with JB, Circular Box, connector And other erection materials, the conduit should	1000.00	M						



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LINE ITE M	SUB LINE ITEM	Description	Qty.	Mon	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)	
		be earthed separately along the length, for Bay light & Power Plug Supply.									
10	System by 50 x 6 mm Hot deep Gl flat laid in between Earth Bar to LDB, PDB & others Electrical Equipments and also laid along the in side wall of SBS at 600 mm height from the floor height.		50.00	М							
10	84	Supply, Erection & Testing of Chemical Earthing at SBS by 3M long 50 mm. Dia.perforated Hot Deep Galvanised Iron pipe vertically grouted out side of SBS. Chemical provided for erection as per IS standard.	6.00	No.							
10	85	Supply, erection Testing & commissioning or pre fabricated hot deep galvanised Iron Ladder type cable tray for LT cable with proper supporting arrangement.450 mm cable tray	50.00	М							
10	86	Supply, erection Testing & commissioning or pre fabricated hot deep galvanised Iron Ladder type cable tray for LT cable with proper supporting arrangement.300 mm cable tray	500.00	М							
10	87	SITC of fully autonomous Early Streamer Emission Lightning Air Terminal (ESEAT) Supply, installation, fixing, fitting, testing and commissioning of fully autonomous Early Streamer Emission Lightning Air Terminal Lightening Arrester (ESEAT) of Type DMSGI-45 with Level-1 protection of 63 Mtr. Radius. Device is confirming to standard NF C 17-102.Device shall be mounted at least 5 meter clear to highest point by support-mast of 40 mm dia GI Pipe duly galvanized with minimum 85 micron zinc coating with foundation to suit Mast, for Level 1 protection of 63 m (as per NFC 17-102 & IEC 60-1:1989.) radius with accessories complete as required for all other structures and designated open spaces covered by general area lighting mast on which ESE (Early Streamer Emission) can be installed similar to OPR 30 with active system. The Insulation material used to electrically isolate the panels shall be comprised of a base polymer which provides high Ozone & UV resistance with di-electric strenght of 24-38 KV/mm tested as per NFC 17-102 & IEC 60-1:1989. The ESE terminal shall not contain any electronic circuits or any moving parts for its operation. The ESE terminal shall be tested & certified by CPRI (Central Power Research Institute, Govt of India) for the Impulse current of 45 KA (8/20 micro sec) with 5 positive & 5 negative impulse. The ESE (Early Streamer Emission) terminal shall be approved by DGMS (Director General of Mines Safety), Govt of India. Make:- ABB/Altec Corporation/Ingesco/LPI / Erico. The above advanced New Generation Lightning Arrester with ESE Technology consist of following items:-Air Terminal:- Providing of Early Streamer Emission Air Terminal made of pure Stainless Steel grade A316	1.00	Set							



LINE ITE M	SUB LINE ITEM	Description double layer (DIN 4301)	Qţ.	Mon	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		Mast:- Providing of Extension support Mast made of 40 mm dia class A GI Pipe duly galvanized with minimum 85 micron zinc coating with foundation to suit Mast, for Level 1 protection of 63 Mtr. radius (as per NFC 17-102 & IEC 60-1:1989.), with accessories complete as required for all other structures like couplers, guywires to fix the mast to the building /structure at highest point such that the Air terminal is 5 meters above the tallest structure including supporting 1.25 m FRP Mast. (as per NFC standard)and properly secured in a vertical position. Lightning Flash Counter: Poviding fitting fixing and testing of Lightning Flash Counter (Search / Strike counter) (6 Digit Display), suitable for 10kA-100kA (250A) to be installed on one of the down conductors approximately 5 Mtr. from the ground level. It registers every lightning discarage intercepted by the air terminal as direct lightning protection Testing Joints:- Poviding, fitting, fixing of testing joints to be located just below the lightning counter on the down conductor from the earthing system in order to faciliate periodical checking of earthing resistivity. Protective Sheath:- A 3 inch dia approximately 3 Mtr long plastic pipe is fitted at the ground level to prevent accidental shocks to human beings/animals during a lightning discharge. Down Conductor:- Supplying, laying, fixing of 70 sq mm pvc insulated copper flexible cable for down conductor including fixing of suitable clamps and other accessories from the ESE Air Terminal to the earth pit as per detailed technical specification, Make:-Havells/Finolex/Gloster. The product specifications of above fully autonomous Early Streamer Emission Lightning Air Terminal Lightening Arrester (ESEAT) shall be as follows Material - Stainless Steel 316 (DIN 4301) Weight - 2.9 Kgs. Length- 55cm (including the rod). Width - 12.5 Cm. Total cost of fully autonomous Early Streamer Emission Lightning Air Terminal (ESEAT)								
20	FOUND	ATION WORK FOR ROBOTIC STATION								
20	1	Dismantling R.C. floor, roof, beams etc. including cutting rods and removing rubbish including stacking of steel bars.	30.00	CUM						
20	2	Providing M25 grade reinforced cement Concrete as per IS: 456 with coarse aggregate of size 20 mm downgraded in columns, lintels, chajjas, canopies, staircase slabs, walls, coping, pipe encasement, floor slab, roof slab etc. at all levels as per drawing and finishing with trowel floating etc., to obtain top class finish	40.00	CUM						



LINE ITE M	SUB LINE ITEM	Description	Qty.	MON	Rate (INR)	Amou nt Exclud ing GST (INR)	GST HSN/ SAC Code	GST%	GST Amount (INR)	Amou nt Includ ing GST (INR)
		including compacting, curing, etc., but excluding Reinforcement and formwork.								
20	3	Supplying tor steel reinforcement (of approved manufacturer) of tested quality of any diameter upto 32mm dia Fe 500 confirming to IS:1786 for reinforced concrete work in all sorts of structures at all depth and height including distribution bars, stirrups, binders (dowel bar should be installed as per normal practice) etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction.	3.30	MT						
20	4	Providing, erecting & fixing in position plywood shuttering of thickness than 9 to12mm or steel shuttering at all locations for all shapes etc in all complete including deshuttering of the same after specified period without damaging the concrete works as directed by Engineerincharge, etc. Providing and applying approved form oil on all surfaces of formwork coming in contact with concrete as per specifications and drawings and as directed by Engineerin-charge.	200.00	SQM						

Note:

Unpriced copy of the Price breakup indicating the GST SAC/HSN Code & GST percentage is to be uploaded alongwith the Techno-commercial offer (Part-I).

The bid shall not be considered if Price is indicated in any part of Techno-commercial offer (Part-I).

L1 offer shall be evaluated on TOTALITY BASIS INCLUDING GST.



GARDEN REACH SHIPBUILDERS & ENGINEERS LTD. गार्डन रीच शिपबिल्डर्स एण्ड इंजीनियर्स लिमिटेड

(A GOVERNMENT OF INDIA UNDERTAKING) / (भारत सरकार का प्रतिष्ठान)

Address: 43/46, Garden Reach Road, Kolkata-700 024 43/46, गार्डन रीच रोड, कोलकाता-700 024

Phone/दूरभाष:(033) 2469-8100 to 8113 (Extn/बिस्तार:200/204/206/211), FAXफैक्स: (033) 2469-3932

Web siteवेंब: www.grse.in, E-Mailई मेल: Nandi.Suchita@grse.co.in

CIN / सी आई एन: L35111WB1934GOI007891

ANNEXURE 1C: PAYMENT TERMS

NIT SLA No / निविदा संख्याः	SCC/NK/NIC/OT/YM/SBS/022/ET-2006 DTD: 04-SEP-2023
Job Title / कार्य का नाम	EXTENSION OF BAY-4 OF SHIP BUILDING SHOP (SBS) AT GRSE- MAIN
SOR No:	NIL (Annexure-1A)
Tender issuing Dept. / बिभाग द्वारा जारी	Contract Cell (संविदा बिभाग)

1. Payment Terms भुगतान की शर्तें:

- a. **90%** (Ninety percent) of the value of work done will be paid progressively against R/A bill supported with Work Done Certificate. Maximum of 01 (one) R/A bill shall be accepted per month.
- b. **10%** (Ten percent) of the certified value of work shall be shall be retained as Performance Guarantee and shall be released on:
 - Completion of the Guarantee period / defect liability period subject to satisfactory liquidation of defects duly certified by Bill Certifying Authority.

OR

Submission of performance Bank Guarantee of equivalent amount valid till expiry of Guarantee period.

For release of this remaining percentage i.e. retention money (if any) either after guarantee period or on submission of PBG; work done certificate shall not be required. While releasing PBG after expiry of guarantee period, the PBG release application to be submitted to Contract Cell duly certified by Bill Certifying Authority.

- c. Recoverable from contractor, if any, is to be adjusted from respective stage payments as per certification of Bill Certifying Authority.
- d. Moreover, release of payment is subject to clearance of ESI / P.F and other labour oriented mandatory liabilities of the Contractor.

2. Bill Certifying Authority बिल प्रमाणन प्राधीकर:

CGM (Tech) / his authorised representatives.

3. Bill Submission बिल प्रस्तुति:

- a. Invoice is to be raised after issue of Work Done / Completion Certificate.
- b. Bills are to be submitted along with supporting documents (Work Done Certificate etc.) at the Bill Receiving Counters located at the respective units of Company. Bill is to be submitted (in 03 copies) in sealed envelope super-scribing on the envelope the Purchase Order No., Vendor code, Bill / Invoice No., Name of person /employee to whom bill is addressed, for processing. The Name of the person to be mentioned on sealed envelope will be the Bill certifying officer.

Note: Transaction fee of Rs. 500.00 for first return & Rs. 1000.00 for subsequent return of bill with inappropriate documents will be charged.



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ANNEXURE -2: STANDARD TERMS & CONDITIONS (STAC) मानक निबंधन और शर्तें (एसटीएसी)

- STC 1 Integrity Pact / समग्रताअनुबंध (For the value of Contract more than Rs.2.0 Cr.)
- STC 1.1. All the participating vendors in this tender are required to enter into agreement by signing an Integrity Pact.
- STC 1.2. "The Pact essentially envisages as agreement between the prospective vendors/bidders and the buyer, committing the persons/officials of both the parties, not to exercise any corrupt influence on any aspect of the contract".
- STC 1.3. Signing of Integrity Pact will be preliminary qualification for participation of this tender, only those vendors who have entered into this Pact with GRSE will qualify for the contract. This Integrity Pact will be effective from the stage of invitation of bids till the date of complete execution of this contract.
- STC 1.4. Signing Authority for Integrity Pact:
 - STC. 1.4.1. Vendor: Proprietor / Director / Authorized representative
 - STC. 1.4.2. GRSE: Head of the Ordering Department, not below the rank of DGM / AGM
- STC 1.5. Vendors need to sign on each page of the Integrity Pact document and provide the same on a Govt. issued bond paper of Rs.100/-. The scanned copy of the same need to be uploaded along with the technical Bid documents and original copy of the same to be forwarded to Tendering Department before the due date of the tender.
- STC 1.6. The vendor has to submit Integrity Pact as per GRSE Format along with Techno-commercial bid, wherever applicable as per NIT.
- STC 2 Micro & Small Enterprise (सूक्ष्मऔरछोटेउद्यम)
- STC 2.1. Purchase preference will be given to eligible Micro and Small Enterprise firms as per MSME Act on submission of valid Udyam Registration Certificate (URC) or NSIC copy along with their offer to claim the benefit. Tendered Service is to be listed in the URC or NSIC submitted else they are disqualified to avail the benefit.
- STC 2.2. Out of 25% target of annual procurement from MSEs, 4% (within the 25%) reservation will be provided for MSEs owned by Schedule Caste (SC) /Scheduled Tribe (ST) entrepreneurs and 3% (within the 25%) reservation will be provided for MSEs owned by women entrepreneurs. Necessary documents to be submitted along with the techno-commercial bid as evidence failing which benefit shall not be accorded. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and L1 price, 4% reservation for MSEs owned by SC/ST entrepreneurs and 3% reservation for MSEs owned by women entrepreneurs will be met from other MSEs.
- STC 2.3. Following facilities/benefits may be given to MSEs: -
 - STC. 2.3.1. Exemption for payment of Tender Fee & Earnest Money Deposit.
 - STC. 2.3.2. Relaxation in prior Turnover and prior Experience Criteria (Specially for Start Ups- Certificate of DIPP is required to Claim the benefit)

STC 2.4.

STC. 2.4.1. MSEs registered with MSME authority as stated above, quoting price within the band of L1 +15% will be allowed to supply a portion of the requirement by bringing down their price to



- L1 price in a situation where the L1 price is from someone other than MSE. Such MSEs will be allowed to supply at least 25% of total tendered value. To avail this purchase preference, submission of Udyam Registration Certificate /NSIC is mandatory failing which the benefit will not be accorded.
- STC. 2.4.2. In case L1 is not an MSE and there is more than one MSE within the range of L1 +15%, only the lowest MSE shall be considered for 25% order in case of divisible item or 100% in case the order quantity is not divisible, subject to matching the L1 prices.
- STC. 2.4.3. If the lowest MSE refuses to accept the L1 price, then the second lowest MSE within the range of L1 +15% will be considered. This process will continue till a MSE in the range accepts the L1 price or the MSEs in the L1 + 15% range are exhausted.
- STC. 2.4.4. In case no MSE accepts the L1 price or there is no MSE available in the L1 +15% range, then the order shall be placed to the L1 bidder without applying this principle.
- STC 2.5. Non-Divisibility of Tender Items: In case of non-divisible / non-splittable item in tenders, an MSE quoting in the price band of L1+15% may be awarded for full/complete supply of total tendered value, considering the spirit of policy for enhancing the government procurement from MSEs subject to matching the L1 prices by the MSE concerned. However, contract will be awarded as per GOI policy and at discretion of GRSE.
- STC 2.6. To qualify for entitlement as SC/ST owned MSE, the SC/ST certificate issued by the District Authority must be submitted along with the offer or the same should be indicated in the relevant document NSIC / Udyam Registration Certificate.
- STC 2.7. For the MSEs owned by SC/ST owned entrepreneur, the benefits as stated above shall be accorded only in the following cases:
 - STC. 2.7.1. For proprietary MSE, proprietor(s) shall be SC/ST.
 - STC. 2.7.2. For partnership MSE, the SC/ST partners shall be holding at least 51% shares in the unit.
 - STC. 2.7.3. For Private Limited Companies, at least 51% share shall be held by SC/ST promoters.

STC 3 Tender Fee (निविदाशुल्क)

- STC 3.1. Amount of declared non-refundable tender fee is to be submitted in the form of Demand Draft / Pay Order, Payable at Kolkata and issued in favour of "Garden Reach Shipbuilders & Engineers Limited" by any Nationalized/Scheduled Bank other than Co-operative Bank. Physical DD/PO to be forwarded to Tendering Department of GRSE within 07 days of tender due date. A scanned copy of the same is to be uploaded as an attachment to the PART-I of e-bid submission.
- STC 3.2. MSE registered firms having the tendered service listed in their MSE document will be eligible for exemption of tender fee. To claim the exemption, a copy of the valid MSE certificate with its annexure is to be scanned and uploaded as an attachment to the PART I of e-bid submission. The same is to be confirmed in the techno-commercial concurrence format.
- STC 3.3. Exemption of Tender Fee is not applicable for JV / Consortium even if all the parties of the JV / Consortium are eligible for such exemption on individual basis.
- STC 3.4. Non-submission of tender fee or a valid MSE certificate may lead to offer rejection.

STC 4 EARNEST MONEY DEPOSIT (INTEREST FREE) बयाना जमा (ब्याज रहित)

- STC 4.1. Amount of declared interest free Earnest Money Deposit (EMD) is to be submitted in form of Demand Draft / Pay Order, Payable at Kolkata and issued in favour of "Garden Reach Shipbuilders & Engineers Limited" by any Nationalized/Scheduled Bank other than Co-operative Bank. Physical DD/PO to be forwarded to Tendering Department of GRSE within 07 days of tender due date. A scanned copy of the same is to be uploaded as an attachment to the PART I e-bid submission.
- STC 4.2. EMD may also be submitted in the form of Bank Guarantee with six months validity as per enclosed GRSE format of Bank Guarantee and is to be forwarded directly to GM (Finance), GRSE in Bankers' sealed envelope failing which same will not be accepted. Details of B.G. are to be in Techno-Commercial part of offer.



- STC 4.3. MSE registered firms having the tendered service listed in their MSE document will be eligible for exemption from submitting EMD.To claim the exemption a copy of the valid MSE certificate with its annexure is to be scanned and uploaded as an attachment to the General Document part of E-PROCUREMENT. The same is to be confirmed in the PART I concurrence format.
- STC 4.4. MSE Registered Firms has to be submit Bid Security Declaration In lieu of Earnest Money Deposit as per GRSE format.
- STC 4.5. Exemption of EMD is not applicable for JV / Consortium even if all the parties of the JV / Consortium are eligible for such exemption on individual basis.
- STC 4.6. Non-submission of EMD /Bid Security Declaration and valid MSE certificate may lead to rejection of offer.

STC 4.7. Refund of Earnest Money Deposits

- STC. 4.7.1. EMD of unsuccessful bidders will be refunded/ returned within 30 days of finalisation of order on surrendering the original copy of GRSE Money Receipt with an application by bidder addressed to HOD of Ordering Department, GRSE on receipt of intimation from GRSE.
- STC. 4.7.2. EMD of disqualified bidders in TNC/CNC will be returned within 30 days from the date of receipt of application along with original copy of Money Receipt from the bidder. EMD, if not claimed within 1 year from the date of notification EMD will be forfeited.
- STC. 4.7.3. EMD of successful bidder will be returned after receipt of security deposit against work order as per contractual terms.
- STC 4.8. **Forfeiture of Earnest Money Deposit** (बयाना जमा की जब्ती): EMD may be forfeited under the following circumstances:
 - STC. 4.8.1. The bidder withdraws the bid after opening of Price Bid during the period of validity of offer.
 - STC. 4.8.2. The bidder does not accept the correction of error in bid price as indicated in Clause pertaining to **CORRECTION OF ERRORS** hereinafter.
 - STC. 4.8.3. The successful bidder fails within the specifies time limit to:
 - a. Acknowledge the LOA/Order
 - b. Furnish the required Security Deposit
 - c. Non-performance of the contract by the Contractor
 - d. If any registered vendor with Fixed EMD withdraws its bid prior to finalisation of the order and during the period of bid validity, the Fixed EMD as deposited by the vendor shall be liable to be forfeited.

STC 5 VALIDITY OF OFFER (प्रस्ताव की वैधता)

STC 5.1. Offer should remain valid for a period of as per terms of specific NIT Terms & Requirements (90/120/180 days) from the due date of the tender.

STC 6 VENDOR'S CONFIRMATION W.R.T. LIMITED TENDER ENQUIRY

STC 6.1. In case of Limited tender any bidder is not interested to quote, Vendor's confirmation of having received the tender but not willing to quote / regretting to quote, must be forwarded for GRSE reference & records. This should be treated as a requirement for the Vendor's name to be retained in GRSE's select list. In case where a particular Vendor has not responded to tender enquiry for more than 3 times, its name will be liable for de-registration.

STC 7 SECURITY DEPOSIT (INTEREST FREE) प्रतिभृति (ब्याज रहित)

STC 7.1. Successful bidder will deposit an amount equivalent to the declared per cent of the total contract value as interest free Security Deposit (SD) in the form of Pay Order/D. D/Bank Guarantee (with validity of sixty days beyond contract period as per GRSE format) on any schedule bank other than Co-operative bank payable at Kolkata, duly crossed favouring Garden Reach Shipbuilders &



- Engineers Limited., within 15 days from the date of site clearance/receipt of LOA or PO/as specified in the NIT. In case of non-submission of SD as per schedule, penal interest will be charged for delayed period of submission of SD beyond 15 days at the prevailing SBI cash credit rate on the amount of SD to be submitted.
- STC 7.2. If S.D is submitted in the form of B.G then same is to be forwarded directly to Gen. Mgr. (Finance) in Banker's sealed envelope failing which same will not be accepted. Details of B. G. should also be confirmed to Ordering Department, GRSE.
- STC 7.3. S.D. amount would be refunded / returned after successful execution of the job and certification of Material Reconciliation Statement by Internal Audit, if applicable. Vendor is to apply for release of their SD along with Job Completion Certificate which has to be certified by PL/ Engineer-in-charge /authorized representative of concerned department through GRSE Ordering Dept. In the event of failure to execute the order satisfactorily or default by the contractor/ sub-contractor, the security deposit will be forfeited.

STC 8 WORK DONE CERTIFICATE (W.D.C.) (किए हुए काम का प्रमाणपत्र)

STC 8.1. Firm will put up Work Done for certification to site engineer /PL /or as specified in the NIT, along with clear inspection report signed by Quality Assurance Authority. W.D.C. is to include whether work has been completed as per delivery schedule or the delay in days/weeks occurred in completion of work.

STC 9 BILL SUBMISSION (बिल प्रस्तुति)

- STC 9.1. On obtaining WDC, bills are to be raised on monthly/quarterly/half-yearly/annually (as specified in NIT) progressive basis in accordance with the Checklist as per GRSE format. Bills are to be submitted at the Bill Receiving Counters located at the respective unit of Company. Bill is to be submitted (in 03 copies) in sealed envelope super-scribing on the envelope the Purchase Order No., Vendor code, Bill / Invoice No., Name of person /employee to whom bill is addressed, for processing. For this Service Name of the person to be mentioned on sealed envelope will be concerned Project Leader of the Ship/Bill certifying officer.
- STC 9.2. Transaction fee of Rs. 500.00 for first return & Rs. 1000.00 for subsequent return of bill with inappropriate documents will be charged.

STC 10 COMPLIANCE OF ESI & PF (ईएसआई और पीएफ़ का अनुपालन)

- STC 10.1. Compliance of ESI & PF of the engaged workman is the responsibility of the contractor.
- STC 10.2. For execution of job inside GRSE premises, vendor has to obtain clearance from HR Dept. regarding statutory compliance of minimum wages, PF, ESI, etc. of their engaged workmen for release of payment.

STC 11 POLICE VERIFICATION FOR CONTRACT LABOUR WORKMEN (ठेका श्रमिकों का पुलिस सत्यापन)

- STC 11.1. Police Verification certificates of character antecedents in respect of all employees of Contractors/Sub-contractors for operating inside GRSE Ltd. are required to be submitted to Security Dept./GRSE Ltd. before processing of Gate Passes.
- STC 11.2. A certificate from the contractor's labour, clearly endorsing that characters of all his labourers have been duly verified and found to be satisfactory be submitted to GRSE at the time of making Gate Pass.
- STC 11.3. Photo Identity Card /Gate Pass as required by GRSE will be arranged by the contractor for his employees at his own cost.

STC 12 GST REGISTRATION (जी एस टी पंजीकरण)

STC 12.1. The vendor will have to submit copy of GST registration certificate (Part A & Part B) along with the Technical bid. Any bidder without having GST Registration Certificate will not be considered for Ordering.



STC 13 GUARANTEE PERIOD (गारंटी अवधि)

- STC 13.1. Guarantee / Warranty is applicable for a Period of as stipulated in NIT Terms & Requirements from the date of completion of work.
- STC 13.2. Workmanship will be guaranteed for satisfactory performance for a period as stated in NIT. Any faulty work carried out by the sub-contractor is to be rectified by them within the time stipulated by the GRSE. In case of failure of sub- contractor to meet the ship's programme, outstanding deficiencies shall be rectified by GRSE and all costs of such work shall have to be borne by the sub-contractor).
- STC 13.3. During guarantee/ warranty period if any equipment or any component thereof supplied by the contractor, suffers due to defective material and/ or due to improper design and/ or due to defective drawing or due to faulty workmanship, the contractor will assume full responsibility of rectification of such defective equipment or component thereof including all direct expenses relating to removal and re-positioning of the replacement/ repaired equipment or component thereof and subsequent test & trial, incurred thereon without any financial implication to GRSE.

STC 14 PRICE (मृल्य)

STC 14.1. For Tender in NIC Portal (एन आई सी पोर्टल टेंडर हेतु)

STC. 14.1.1. Price bid need to be filled up (excluding GST) in html format only through e-portal. No other attachment regarding price will be allowed, if so, then offer will be rejected. For break-up of prices, GRSE may attach excel sheet with the html format price bid and the bidder has to fill up their prices in excel sheet and also in html format as per instruction in NIT.

STC 14.2. For Tender in GeM Portal (जे ई एम पोर्टल टेंडर हेत्)

- STC. 14.2.1. Price bid needs to be filled up (with or without GST as specified in NIT) only through GeM portal for the total job.
- STC. 14.2.2. The Bidder may have to upload the breakup of their quoted price in line with BOQ, as specified in NIT, along with their price offer in GeM portal.
- STC. 14.2.3. The price should remain firm & fixed till satisfactory execution of the entire contract as per NIT. GST percentage has to be indicated in the offer. GST registration certificate for the service being tendered is to be enclosed with the techno-commercial bid. GST registration number is to be quoted in all bills.

STC 15 QUANTITY VARIATION (मात्रा भेद)

STC 15.1. Quantity as specified in the NIT/SOTR/Price Bid is tentative and it may vary according to the actual requirement of the job. The selected bidder has to execute the required quantity at the same rate, terms & conditions up to variation (+/-25%) or as specified in the NIT in addition to the initial tendered quantity. Necessary amendment of Purchase Orders will be issued accordingly.

STC 16 UNREASONABLE QUOTES अतर्क संगत भा

STC 16.1. For Job Contract (कार्य संविदा हेतु)

- STC. 16.1.1. In case the price of L-1 Bidder is found to quote unreasonably low and/or express desires to withdraw from the tender then such bid will be cancelled and EMD will be forfeited and punitive action will be taken in line with the provision as per GRSE Vendor Policy.
- STC. 16.1.2. However, in case the L1 Bidder agrees to take-up the job with such unreasonable low quote, lower by 30% or more than estimate and also if the difference in price between L1 & L2 is 30% or more, then the quoted price to be analysed w.r.t tender requirement and if the L1 bidder fails to justify their quoted rate, the obtained L1 quote will be rejected and punitive action will be taken in line with the provision as per GRSE Vendor Policy.
- STC. 16.1.3. If the justification is acceptable to GRSE, then the bidder has to submit Bank Guarantee of 10% of the total Contract value (inclusive of GST) in addition to the Security Deposit (SD) and



Performance Bank Guarantee (PBG) for execution of the job till satisfactory completion of entire contract. There shall be no exemption / relaxation for the Guarantee against unreasonable quote. In case of breach of contract GRSE shall reserve the right to invoke the BG and may impose tender holiday for a period as per GRSE Vendor policy.

STC 16.2. For Manpower Contract (श्रमशक्ति संविदा हेतु)

- STC. 16.2.1. The quoted price of the L1 bidder should comply with the prevailing Minimum Wages Act & Other Statutory requirements i.e PF, ESI etc.
- STC. 16.2.2. In case the quoted price of the L1 bidder is found unreasonably low i.e does not comply with the Minimum Wages Act & Other Statutory requirements and the L1 bidder fails to justify their quoted rate then the obtained L1 quote will be rejected and punitive action will be taken in line with the provision as per GRSE Vendor Policy.

STC 17 JOINT VENTURE (संयुक्त ऊधम)

- STC 17.1. The bids submitted by a joint-venture company of two or more firms/persons/entities as partners/promoters shall comply with the following requirements:
- STC. 17.1.1. The Joint Venture Agreement must be a registered document under the Indian Registration Act and must be an independent and registered entity under the Companies Act/Indian Partnership Act, having its own trade name and having separate CIN, PAN, GST and other Statutory Licenses/Registrations independent of its promoters/partners.
- STC. 17.1.2. All partners/promoters of the joint venture shall be liable jointly and severally for the execution/performance of the project/contract and for all sorts of contractual obligations, responsibilities and liabilities and consequences arising out of breach of terms and conditions of contract.
- STC. 17.1.3. A Certified/True copy of the Joint Venture Agreement shall have to be submitted with the bid along with the resolution of Board of Directors (in case of a company) or a Power of Attorney to be executed by all the Partners (in case of Partnership Firm) of JV entity authorizing such person who will sign on behalf of JV entity.
- STC. 17.1.4. Submission of EMD/SDs/Performance Guarantee etc., to be made by the Joint Venture Company/Firm and similarly all payments would also be remitted to/in favour of the JV entity.
- STC. 17.1.5. In order for a joint venture to qualify/meet the minimum criteria as may be specified in the Tender, the experience and financial capability of each of its promoters/ partners would be considered jointly to judge the experience and/or the financial capability of the JV entity as an independent entity. That is to say that the individual experience/qualification of each partner/promoter of the JV would be considered together for ascertaining the experience/qualification criteria of the JV. However, if any specific criteria/qualification is mentioned in the Tender that has to be met by each of the partners, then in such case each of the JV partner/promoters have to meet the same.
- STC. 17.1.6. Neither the JV entity nor any of its partners/promoters should have been blacklisted, banned or debarred from issuing any Tender or suffering Tender Holiday from participating in any Tender process of Government of India or any of its Agencies or by any State Government or by an PSU (both Central & State included) or by any Court/Tribunal. If so, then the bid is liable to be rejected.
- STC. 17.1.7. If selected, PO would be issued in favour of the JV.

STC 18 CONSORTIUM (अल्पकालीन संघटन)

- STC 18.1. The bids submitted by a Consortium of two or more firms as partners shall comply with the following requirements:
- STC. 18.1.1. There must be a written Agreement for formation of the Consortium amongst its members which should inter alia include the role of each member, the ratio of investment and the ratio of profit/loss sharing. The terms of the Agreement cannot be modified post submission of the bid and during execution of Contract, if awarded, without the express consent of GRSE. The



Consortium Agreement must record that as to which member would act as the Lead Member in the Contract/Tender. This authorization shall be evidenced by submitting with the bid a Power of Attorney authorizing such member to act on its behalf as Lead Member, signed by legally authorized signatories of all other partners/members.

- STC. 18.1.2. Each partner firm/company of a Consortium must legally authorize its representative who will represent the partner firm/company to sign and execute the Consortium Agreement and all other necessary papers/documents required for the formation of Consortium and all other purpose relating to activities of Consortium.
- STC. 18.1.3. The leader shall be authorized to incur liabilities and to receive instruction for and on behalf of any and all partners/members of the consortium and the entire execution of the contract and all other related documents shall be done under the supervision and involvement of the lead member.
- STC. 18.1.4. All partners of the consortium shall be liable jointly and severally for the execution of the project or contract without any limitation of liability. Any default or lapse on the part of any of the members of the Consortium regarding performance of the contract will be treated as default on the part of the Consortium as a whole and the Lead Member alone will be responsible for all consequential losses and damages that may be sustained by GRSE for such default or lapse on the part of a member.
- STC. 18.1.5. A Certified True copy of the Consortium contract/agreement entered into by and between the consortium partners and a certified True copy of the Power of Attorney, referred above, must be submitted with the bid and failure to submit any of such documents will make the bid of the Consortium liable to be rejected.
- STC. 18.1.6. If Contract is awarded to the Consortium, an Agreement would be executed by and between GRSE and all the Consortium members wherein, inter alia, the role of each member and the mode of payments to be specifically defined and/or mentioned. However, all the consortium members shall remain, jointly and severally, responsible for execution and completion of the Contract and also to make good for all losses and damages if any sustained or to be sustained by GRSE in the subject contract due to default and/or negligence of the Consortium as a whole or of any of its members. Any statement or clause seeking to limit the liability of each member of the Consortium, such statement or clause to be treated as incompatible with the principle of joint and several liability and the bid of the Consortium will be liable to be rejected as not in compliance of tender specifications, without further evaluation.
- STC. 18.1.7. In order to qualify/meet the qualification criteria, each of its partners/members or combination of partners/members must meet the minimum criteria set for the individual bidder. Failure to comply with this requirement will result in rejection of the Consortium's bid. The data/figures of each of the partners/members of the Consortium shall be added together in proportion to their participation in the Consortium, to determine the bidder's capacity as a whole to comply with the minimum criteria.
- STC. 18.1.8. The percentage of partnership of the lead partner shall be highest among all the Consortium partners. Bid has to be submitted by the Lead Partner in its name however it should be clearly indicated that the lead partner is submitting such bid on behalf of a Consortium of which it is the Lead Partner.
- STC. 18.1.9. The lead partner shall be responsible for payment of Bid Security/EMD as well as the Security Deposit & Performance Guarantee. However, the same has to be submitted by MSME/NSIC firms also if such firm acts as a Lead partner.
- STC. 18.1.10. All Payments to be made to the Lead Member pursuant to satisfactory execution of the job as specified in the Contract irrespective of the performance by all the members. Payments made to Lead partner of the Consortium would be construed as valid payment. Further the Consortium members agree not to entangle GRSE in any internal dispute between the Consortium members regarding payment/non-payment or any other issue and accordingly waives their rights, if any in this regard.



STC. 18.1.11. None of the consortium partners/members should have been blacklisted, banned or debarred or issued any Tender holiday from participating in Government Contracts by either the Government of India or any of its Agencies or by any State Government or by an PSU (both Central & State included) or by the Courts/Tribunals. If so, then the bid is liable to be rejected.

Note: The Consortium Agreement & the PoA is to be submitted by the Consortium's Lead partner along with the Bid for examination by GRSE. If the Consortium Agreement or the PoA does not meet the criteria as specified in the clause then such bid would be liable to be rejected.

STC 19 MAINTENANCE OF MACHINES (यंत्रों का अनुरछण)

STC 19.1. The maintenance of machines brought in by contractors are to be undertaken as per OEM recommendations. Certificate to this effect is to be rendered by the contractor.

STC 20 SUB-CONTRACTING OF SUB-CONTRACTED JOB (उप संविदा कार्य का उप संविदा)

- STC 20.1. Sub-Contracting of the Sub-Contracted job is usually discouraged. When a contract is being finalised with a Vendor/ Contractor for execution of a particular job, the Contractor shall not sub-contract the job / a part of the job.
- STC 20.2. However, in case of requirement, the job in part or full could be sub-contracted with an approval from GRSE and copy of the same has to be forwarded to Ordering Dept. & HR Dept. for their information.
- STC 20.3. For sub-contracting of the sub-contracted job, the Vendor/Contractor has to submit the details of the sub-contractor to whom the job will be loaded including their name, credentials, document of past performance etc. for approval of GRSE Engineer In-Charge/ In-charge of User Dept./Project Leader / Project Superintendent /Head of Units.

STC 21 EXCESS/WASTE/REJECTED MATERIALS (अतिरिक्त/बेकार/ अस्वीकृत सामग्री)

STC 21.1. Removal of excess/waste/rejected materials etc. generated during execution of work should be arranged by the Contractor at their own cost immediately after completion of work each day and for non-removal of same by the Contractor, the expenditure incurred by GRSE (if any) in removing these materials will be recovered from the available dues of the Contractor.

STC 22 FIRE &SAFETY PRECAUTIONS अग्नि एवं संरक्षा सावधानियाँ

STC 22.1. The Vendor/Contractor shall abide by the Safety regulations/rules of the GRSE as detailed in Fire & Safety Guidelines (please refer www.grse.in). The Vendor/Contractor should take all safety precautions and provide adequate supervision & control for their workmen in order to carry out the job safely. In case of any violation of safety precaution and non-usage of safety equipment, Contractor shall be liable for a penalty which is detailed in Fire and Safety Guidelines (please refer www.grse.in). Penalty amount depends on the type and frequency of violation mentioned in the safety guideline and the same will be deducted from the defaulter's bill.

STC 23 SAFETY GUIDELINE FOR MATERIAL HANDLING EQUIPMENT (सामग्री चालन उपकरण हेतु मार्गदर्शन)

STC 23.1. The Vendor/Contractor shall abide by the Safety Guidelines /regulations of GRSE as detailed in NIT. The Vendor/Contractor should comply with all the Safety requirements like Statutory Examination and Certification of Crane & associated lifting tackles, Display of SWL, Competency requirement of Crane Operators, PUC etc. in order to carry out the job safely. In case of any violation GRSE will take appropriate action as per policy.

STC 24 MANDATORY USE OF ISI MARKED PPE BY CONTRACTOR EMPLOYEES (संविदा कर्मचारी द्वारा आई एस आई निशान पी पी ई व्यवहार की अनिवार्यता)

STC 24.1. The Contractor shall ensure the use of ISI marked PPE by their engaged Employees. An indicative list of ISI marked Personal Protective Equipment, is appended below for mandatory compliance by the vendors without any deviation:



STC 24.2. LIST OF PPES (पी पी ई की सूची)

Γ <u>C 24.2.</u>	LIST OF PPES (पी पी	T									
SI. No.	Description	Name of PPE	Applicable area of Protection	Standard							
(i)	Head Protection	Safety Helmet	In the shop floor / on board ship / working at height / under the suspended load or any other place where there is any possibility of head injury.	IS: 2925 or EN 397.							
(ii)	Foot Protection	Safety Shoes	(a) Mandatorily wear safety shoe while working in shop floor / on board ship/ Stores/ Dock floor or any other place where there is possibility of foot injury.(b) Mandatorily wear closed footwear while entering the shipyard.	(a) IS 15298 / EN ISO 20345							
			(c) Wear Rubber Gumboot while working in water logged condition for removing of water from ship's tank, compartment, Dock Galley etc., cleaning of Dock floor / acid pickling area/canteen cooking and washing areas etc.	(b) Non ISI (c) IS: 12254							
(iii)	Eye Protection	Safety Goggles	When engaged for welding / gas cutting / grinding / chipping / painting / chemical handling or any other activity where there is a possibility for eye injury due to penetration of flying particles / ultra violet radiation / splashing of chemical etc.	ANSI Z87.1 or EN166.							
(iv)	Ear Protection	Ear Plug	In high noise area (>90 db).	IS: 9167/ EN 352							
(v)	Hand Protection	Hand Gloves	 (a) Leather Hand Gloves – During material handling / welding / gas cutting or any other activity where there is possibility of hand injury due to contact with sharp edges, hot spatter from welding or gas cutting processes. (b) Electrical Rubber Hand Gloves – While executing any electrical maintenance jobs. (c) Acid / Alkali Proof Rubber Hand gloves – During handling of acid, skin irritants chemical & solvent etc. 	(a) IS:6994/EN 407 for heat applications (gas cutting / welding) / EN 420 for general requirement / EN 388 for mechanical hazard (b) IS 4770 for electrical work (c) EN 420 for general requirement (d) EN 388 for mechanical hazard							
(vi)	Respiratory Protection	Welding Fume	Dust Respirator – To be worn during grinding job, floor cleaning, dusting or	(a) IS: 9473 / EN: 149							



SI. No.	Description	Name of PPE	Applicable area of Protection	Standard
		Respirator, Paint Fume Respirator	any other activity where there is possibility of producing dust.	
		or, Dust mask	(b) Welding Fume Respirator – To be worn during welding, gas cutting, brazing job etc.	(b) IS: 9473 / EN: 149
			(c) Chemical Respirator – To be worn during painting, mixing of paint with solvents & FRP activities handling of acid, skin irritants, chemical & solvents etc.	(c) IS: 15323 (Selection to be made according to the particular chemical hazard)
(vii)	Fall Protection	Double lanyard Safety Belt	To be worn while working in height: (a) Double Lanyard Full Body Harness –	
		& harness, automatic fall arrestor	During working at height such as on scaffolding structure / suspended working platform / ship's mast / fragile roof / inclined surface on the roof top or at any other height where there is a possibility of person to fall and get injured.	(a) IS: 3521
			(b) Automatic fall arrestor (in addition to full body harness) – To be worn during carrying out job in the vertical ascending / descending on the scaffolding structure, working on the suspended working platform and inclined surface on the roof top, horizontal movement at height.	(b) EN 361
(viii)	Electric Arc Flash Protection	Electric Arc rated flash suit jacket, pant, hood and gloves	To be worn during operation & maintenance of electrical installations inside the HT Switch Gear Rooms.	As per guideline of NFPA-70E
(ix)	Fire-Fighting protection	(a) Three Layer Fire Close Proximity Suit (b)Self-Contained Breathing Apparatus (SCBA) Set	Personnel engaged in Fire Fighting service should wear Fire Close Proximity Suit and use Self-Contained Breathing Apparatus (SCBA) Set during combating fire in a hazardous environment.	Fire Proximity Suit approved by EN-469:2005 + A1: 2006 + AC: 2006D and CE. Jacket & Trouser (EN- 469) Hand Gloves (EN-659) Outer Head Protection Helmet (EN- 443/1997) and inner Protection EN 1391, Self-Contained Breathing



SI. No.	Description	Name of PPE	Applicable area of Protection	Standard					
				Apparatus(SCBA) Set, as per approval of CE and EN-137 CLASS II standards and Approval of PESO					
(x)	Face protection	Industrial safety face shields with plastic visor	When person engaged for grinding / chipping / buffering or any other activity where there is a possibility for face injury due to penetration of flying particles	IS 8521 Design of visor may be selected as per design of safety helmet					
(xi)	Protective Clothing	Cotton boiler-suit	In the shop floor / on board ship / production floor and in any other areas of operation.	IS: 177- 1989 (Reaffirmed in 2003), Variety 3 standard					
	Note: Cotton-boiler suits should bear name of the contractors' firm on the back-side of the boiler-suit in legible manner for easy identification.								

STC 24.3. Role of Contractors

- STC. 24.3.1. Shall ensure attendance of their workmen and other personnel deployed by them, in the scheduled safety-briefings, appropriate use of required PPEs and adoption of various safety measures in their respective workplaces.
- STC. 24.3.2. Shall provide adequate and appropriate PPEs conforming to IS / EN standards, as mentioned at Para 3 and 4 of the Policy, at their own cost and ensure that their workmen mandatorily use those PPEs as specified in this Policy vide SI. No. 3 or as advised by Safety Department from time to time, according to the job requirement.
- STC. 24.3.3. Shall ensure submission of PPE Issue Matrix Register (as per Annexure II) to the user department before commencement of work. Such Register should comprise of the name of the contractor, P.O No., name of the workmen being deployed, allotment of PPEs and signature of contractors' workmen substantiating allotment of PPEs to them as per the IS parameter laid down at Para 3 and 4 above.
- STC. 24.3.4. Every contractor should ensure that their workmen have undergone safety training programme, as per their nature of work, prior to commencement of work. Contractor has to submit a report to the engaging / user department after completion of safety training programme for obtaining permission to commence work under the particular P.O. A copy of that report has to be forwarded to Safety Department for information and record.
- STC. 24.3.5. In the event of any accident, the concerned contractor / their site In-charges / supervisors must immediately inform the respective dealing officer of user department regarding occurrence of such accident, who in turn will inform Works Manager of the respective unit and Officer from Safety Department for initiation of further necessary action.
- STC. 24.3.6. Ensure that no workman or other personnel deployed by them should loiter or work in shop floor, onboard ship or in the yard without wearing basic PPEs like helmet, safety shoes etc.

STC 24.4. Role of contractors' workmen

STC. 24.4.1. Adhere to all necessary safety-guidelines at their work-sites and use appropriate PPEs.



- STC. 24.4.2. Inform their supervisors / site In-charges in the event of loss or damage of their safety gears / PPEs so that the same can be replaced immediately by the concerned contractor and should not be a reason for non-compliance.
- STC. 24.4.3. To communicate proper use of PPEs to their co-workers in the event there is any non-compliance.

STC 24.5. PENAL PROVISIONS FOR NON-COMPLIANCE

S/N	Type of violation	Penalty (INR)				
		1 st Instance	2 nd Instance	3 rd Instance	4 th Instance	
(i)	Not having / not using PPEs properly	INR 10,000/-	INR 15,000/-	INR 20,000/-	Discontinued / debarred from participating in future tender upto 06	
(ii)	Use of defective / non IS PPEs	INR 5,000/-	INR 10,000/-	INR 15,000/-	months / 02 consecutive tenders.	

STC 24.6. DISCONTINUATION OF CONTRACT

STC. 24.6.1. In the case of repeated violation of safety guidelines, i.e, for more than 04 (four) instances during any Financial Year, GRSE shall have the sole discretion to terminate all / such affected contracts of the concerned non-complying contractor. GRSE may also impose Tender Holiday up to maximum period of 03 years in the event of 05 instances of violation. Tender Holiday will be issued on recommendation of existing Standing Committee and approval of Competent Authority.

STC 25 ENVIRONMENT MANAGEMENT AND OCCUPATIONAL HEALTH & SAFETY(पर्यावरण प्रबंधन एवं व्यावसायिकस्वास्थ्य सुरक्षा)

STC 25.1. The vendor shall ensure compliance of Environment Management System (ISO14001:2014), Occupational Health & Safety (ISO 45001:2018) & Energy Management System (ISO 50001:2011) while carrying out their activity in the yard.

STC 26 ENERGY CONSERVATION (ऊर्जा संरक्षण)

STC 26.1. GRSE will provide power supply at free of cost for execution of job. The vendor should ensure that the power during execution of job shall be used in a very economical way to save energy as per Energy Management System of ISO 50001: 2011.

STC 27 GUARANTEE FOR RAW MATERIAL (अनिर्मित सामग्री की गारंटी)

- STC 27.1. This Clause will be applicable for Collection of Raw materials /Free Issue materials from GRSE for the jobs which are to be executed outside GRSE premises.
- STC. 27.1.1. Raw materials will be required to collect from GRSE against submission of Bank Guarantee as per GRSE format for the equivalent value of material as specified in NIT/Purchase Order. Transportation of materials from GRSE to Sub-contractor's premises and transportation of finished materials from Sub-contractor's premises up to GRSE is the responsibility of the contractor or as specified in NIT.
- STC. 27.1.2. Indemnity Bond affixing the Common Seal from the registered sub-contractors may be accepted in lieu of Bank Guarantee but it should be backed by Insurance Coverage with GRSE as the beneficiary on case to case basis. If the contractor is unable to take coverage, GRSE will cover such risk and cost of premium will be borne by the contractor/recovered from their dues.
- STC. 27.1.3. Indemnity Bond has to be submitted as per GRSE Format on the non-judicial Stamp paper of value Rs. 100/- and to be Notarized if Common Seal is not applicable.
- STC. 27.1.4. During collection of material, the Transporter of the Sub-Contractor has to submit L-R copy, failing which materials will not be issued to the Sub-Contractor.
- STC. 27.1.5. For the jobs which are to be executed inside GRSE premises, submission of Bank Guarantee or Indemnity Bond for Collection Raw materials is not required.



STC 28 MATERIAL RECONCILIATION STATEMENT (MRS) (सामग्री मिलान विवरण)

- STC 28.1. Firms are to furnish the material reconciliation statement (running MRS) to GRSE, for items supplied by GRSE for execution of a job at vendor's premises. Furnishing of MRS to be done immediately on delivery of the Finished item/Block but not later than 30 days of delivery of the finished item showing details of raw materials received, material actually consumed, excess material returned, wastage etc. This statement should be submitted with documentary evidence of material issued/returned/wastage duly accepted by competent authority of GRSE and as per the GRSE format and filled up check list for MRS. Permissible variation in MRS is 1.5% of design weight of structure. MRS certification is to be completed by GRSE within 60 days of receipt of the same from vendors.
- STC 28.2. Quantity of stiffeners used in transportation are to be mentioned in delivery challanclearly indicating whether the stiffeners are: -
- STC. 28.2.1. Temporary stiffeners supplied by vendor.
- STC. 28.2.2. Sections of ABS quality supplied by GRSE.
- STC 28.3. While submitting MRS of Finished item/Block, copies of certified MRS of all previous Finished items/Blocks are to be enclosed. This will be called the final MRS.

STC 29 INSURANCE (बीमा)

- STC 29.1. In case the sub-contracted job has to be executed at contractor's premises, the Insurance has to be taken by the contractor with appropriate value coverage for the underlying risks (the beneficiary would be GRSE by endorsement) e.g. Loss due to following:
- STC. 29.1.1. Fire as per AIFT including EQ, STFI at Contractors premises.
- STC. 29.1.2. Burglary including theft during Storage at Contractors premises.
- STC. 29.1.3. Marine transit to and fro as per ITC(A) including SRCC (on the basis of agreed valuation between GRSE & contractors).
- STC. 29.1.4. Loading & unloading including TP liability at all fabricator's premises.
- STC. 29.1.5. Loss due to infidelity of contractors whilst in storage.
- STC. 29.1.6. Spoilage of material by contractors by any accidental reasons whatsoever.
- STC 29.2. If the contractor is unable to take coverage, GRSE will cover such risk and cost of premium will be borne by the contractor/recovered from their dues.
- STC 29.3. For the jobs which are to be executed inside GRSE premises, Insurance coverage will not be the responsibility of contractor.
- STC 30 SITE-INCHARGE/ LOG BOOK/ HINDRANCE & OTHER RECORDS (कार्यस्थान प्रभार/कार्यपंजी/बाधा एवं अन्य रिकार्ड)
- STC 30.1. One fully responsible and Qualified Site-in-charge has to be posted at the site during progress of work.
- STC 30.2. Attendance Register, Wage Register etc. are to be maintained daily for the particular job on board and to be shown as and when required.
- STC 30.3. Details of technical personnel deployed for the job.
- STC 30.4. Monthly progress report.
- STC 30.5. Log book for re-work/ modification.
- STC 30.6. Details of materials brought by vendor along with copies of challan.
- STC 30.7. Proper record of hindrances is to be maintained by the sub-contractor for the purpose of timely removal of the hindrance and is to be put up for approval by Project Leader/Site Engineer on weekly basis. A copy of the same would have to be enclosed while submitting any request for waiver of liquidated damages.



STC 30.8. Sufficient Supervisory Staff should be provided by the contractor during execution of work and in case of any accident/ damage to GRSE properties, full responsibility will be attributed to the contractor and loss incurred will be recovered from the contractor.

STC 31 WORKING HOURS (कार्य समय)

STC 31.1. The Contractor's normal working hours shall be in between 8 AM-5:06 PM from Monday to Friday & from 8:00 AM to 1:00 PM on Saturday. 1st & 3rd Saturday is Non-Duty Saturday. Work may also be required to be carried out in shifts (A, B & G shifts) as per GRSE's requirement. Also, work may be required to be carried out on Sunday/Holiday or beyond schedule working hours as per requirement of GRSE and the Contractor will have to arrange for same as per NIT Terms.

STC 32 RISK PURCHASE (जोखिम खरीद)

- STC 32.1. In case the progress of work is not satisfactory and the contractor fails to maintain the schedule, GRSE reserves the right to get the work done by alternative source at the risk and cost of subcontractor.
- STC 32.2. GRSE shall be at liberty to purchase/obtain the service from the alternative source as it deems fit, to make good such default and or in the event of the contract being terminated, the balance of the remaining service to be delivered there under. Any excess over the job price / service rates, paid and incurred by GRSE, as the case may be, over the contract price shall be recoverable from the firm. To make good the recoverable excess amount paid, GRSE shall be at liberty to invoke Bank Guarantee and/or with other available dues of the firm.

STC 33 INDIVIDUALITY OF THE CONTRACT (संविदा की वैयक्तिकता)

STC 33.1. This Contract should be treated as an individual contract and should not be related with other orders with GRSE in respect of progress of work or payment.

STC 34 SECRECY OF INFORMATION (सूचना की गोपनियता)

- STC 34.1. All documents and drawings of this project are of confidential in nature and should be used explicitly for the purpose for which they are provided. Drawings should not be copied and should be returned to GRSE on completion of work.
- STC 34.2. No information in respect of contracts/orders shall be released to the national or international media or any one not directly involved its execution without the express written approval of the Integrated Headquarters, MOD (NAVY). In the event of any breach of above provisions, the vendor would have to make good of any loss/ cost/ damage/ any other claim whatsoever preferred by anybody to GRSE in this respect.
- STC 34.3. Non-Disclosure Agreement (NDA) as specified in the NIT has to be submitted as per GRSE Format.

STC 35 REGISTRATION OF NEW VENDOR (नए बिक्रेता का पंजीकरण)

STC 35.1. The contractor has to confirm if they are registered with GRSE and Indicate Vendor Code (5 digits) and Product Code group accordingly in their offer. If the contractor is not registered with GRSE, then documents required for provisional vendor registration has to be submitted to the Ordering Department. For Permanent Vendor Registration with GRSE, the contractor has to submit their application to GRSE Vendor Development Cell.

STC 36 CONTRACT WORKMAN WAGE PAYMENT (संविदा कामगार का मजदूरी भूगतान)

STC 36.1. Payment of wages to the contractor's employee/workmen should be made through individual bank account on monthly basis instead of cash payment. PF-UAN activation of all the contractor's employee/workmen is mandatory.

STC 37 INSPECTION (निरीक्षण)

STC 37.1. Quality assurance authority: As per NIT/SOTR.



- STC 37.2. Inspection to be carried out stage wise by Quality Assurance Authority. On completion of work for any stage, vendor has to submit Inspection Offer to GRSE (Inspection Agency) for stage inspection. GRSE (Inspection Agency) shall co-ordinate with the Outside Inspection Authorities (as applicable) for carrying out inspection of completed job.
- STC 37.3. GRSE reserve the right to inspect all operations to be carried out by the contractor. Free access to the work site at all the time shall be ensured by contractor. The presence or absence of GRSE representative does not relieve contractor of the responsibility for quality control. The contractor shall provide all assistance for carrying out inspection of completed work.
- STC 37.4. Repeat inspection for any particular job is to be discouraged as far as possible. Hence the vendor should complete the job in all respect prior to submission of Inspection Offer to avoid reoffering. In case of repeat inspection happens for more than two occasions then the additional cost implication incurred by GRSE will be deducted from the bills of the vendor at actual. Number of occasions of repeat inspection for any particular job is to be indicated by GRSE in inspection note and same is to be incorporated in the work done certificate for deduction of additional cost implication for repeat inspection. Cost of deduction shall be calculated by Executing Dept., GRSE with the help of Finance Dept., GRSE.

STC 38 CORRECTION OF ERRORS (त्रुटि सुधार)

STC 38.1. Bids determined to be responsive will be checked by GRSE for any arithmetic error. Errors will be corrected by GRSE as follows:

STC 38.2. For Manual Tendering: -

- STC. 38.2.1. Where there is a discrepancy between the rates in figures and in words, the rates in words will govern.
- STC. 38.2.2. Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

STC 38.3. For Tendering through NIC Portal: -

STC. 38.3.1. Where there is a discrepancy between the rates in html format and the attachment to price bid (if applicable), the rates in attachment to price bid will govern. In attachment to Price bid; if any discrepancy found between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will be considered.

STC 38.4. For Tendering through GeM Portal: -

STC. 38.4.1. Where there is a discrepancy between the total price quoted in GeM Portal and the attachment (i.e break up of quoted price in line with BOQ) to price offer, the total price quoted in GeM portal will govern. In attachment to the Price offer, if any discrepancy found between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will be considered.

STC 39 FORCE MAJEURE (अप्रत्याशित घटना) :

- STC 39.1. In the event of contractor being unable to fulfil the obligation under the agreement owing to force majeure, such as War, Fire, Earthquake, Flood, Strike/ Lockout at GRSE premises where the contractor is working, the party affected shall not be held responsible for any failure or non-performance of the duties and obligations under the agreement, provided that all responsible efforts have been made to overcome the consequences of such failure, or non-performance. The time for performances of the contractual obligation shall then be extended by period not more than the duration of such events.
- STC 39.2. In the event of Force Majeure condition existing at contractor's site in GRSE Premises or CPT areas for GRSE work, GRSE is to be intimated with details of such happenings and cessations thereof, within 3 days. Force Majeure is to be limited to contractor's site in GRSE/CPT premises for GRSE's work only. Lock out/ Closure of contractor's factory premises or office or any other place outside



GRSE/CPT/GRSE nominated place as indicated above cannot be considered as a Force Majeure condition under this contract.

STC 40 TERMINATION OF CONTRACT (अनुबंध की समाप्ती)

STC 40.1. In the event of non-performance or non-engagement of manpower for the execution of the job within the notice period, GRSE reserves the right to cancel the order in part or in full, and no compensation whatsoever will be entertained.

STC 41 DAMAGE OF MATERIALS / EQUIPMENTS (सामग्री/उपकरण की छती)

STC 41.1. The contractor will ensure that no damage is caused to the materials, equipment or any other property of GRSE due to negligence and / or any reason whatsoever by the contractor's personnel. The cost of such damage will be suitably recovered from contractor's bills.

STC 42 OFFICE & STORAGE SPACE (कार्यालय एवं भंडारण स्थान)

STC 42.1. The contractor will have to arrange their office & storage required for execution of job, for cumulative order value of Rs.75 lakhs and above, of their own. However, space for placing up to one container will be provided free of cost by GRSE. Container will have to be removed by the contractor within 03 months from the date of final settlement with GRSE. In case of non-removal of container within specified period penalty as deemed fit will be imposed for the occupied area of GRSE.

STC 43 ARBITRATION (मध्यस्थता)

- STC 43.1. If at any time, before during or after the contract period, any unsettled claim, question, dispute or difference arises between the parties, upon or in relation to or in connection with or in any way touching or concerning this order, the same shall be settled/adjudicated through Arbitration to be conducted by a Sole Arbitrator, to be appointed by the parties on mutual consent, in accordance with the provisions of the Arbitration and Conciliation Act, 1996.
- STC 43.2. In the event the parties fail to mutually appoint a Sole Arbitrator within 30 days from the receipt of a request by one party from the other, then either of the parties may approach the Hon'ble High Court at Calcutta under the provisions of the Arbitration and Conciliation Act, 1996 for appointment of a Sole Arbitrator by the Hon'ble Court.
- STC 43.3. Such arbitration shall, in all respects, be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the rules framed there under or any statutory modification or re-enactment thereof for the time being in force.
- STC 43.4. The Award of the Sole Arbitrator shall be final, conclusive and binding upon the Parties.
- STC 43.5. In the event of the death or resignation or incapacity or whatsoever of the said Sole Arbitrator if appointed by the parties mutually the said parties may again appoint a suitable Substitute Arbitrator in place of the erstwhile Sole Arbitrator to continue with the proceedings. In the event of appointment of the Sole Arbitrator by the Hon'ble High court at Calcutta on death or resignation or incapacity or whatsoever of the said Sole Arbitrator, either of the parties in this behalf, may make an application to the Hon'ble High court at Calcutta for appointment of a Substitute Arbitrator and the Hon'ble Court may pass such orders as it deems fit and proper.
- STC 43.6. Also, in the event an Arbitration award is set aside by a competent court the parties may appoint a Sole Arbitrator mutually or on failing to appoint a Sole Arbitrator mutually within the statutory period then either of the parties may file an application before the Hon'ble High Court at Calcutta under the provisions of the Arbitration and Conciliation Act, 1996 for appointment of a Sole Arbitrator by the Hon'ble Court in accordance with the provisions of the Arbitration & Conciliation Act.
- STC 43.7. The cost of the arbitration, fees of the arbitrator, remuneration of the stenographer and clerk, stamp paper etc. shall be shared equally by the parties, unless otherwise directed by the Sole Arbitrator. The venue of arbitration shall be at Kolkata and unless otherwise decided by the parties or by the Sole Arbitrator himself, the venue shall be the premises of Garden Reach Shipbuilders & Engineers Ltd. located at 43/46, Garden Reach Road, Kolkata 700 024.
- STC 43.8. The language of the proceeding shall be in English.



STC 44 JURISDICTION (न्याय अधिकार)

- STC 44.1. Litigation, if any, pertaining to this contract will come under the jurisdiction of High Court at Kolkata.
- STC 44.2. All contracts shall be deemed to have been wholly made in Kolkata and all claims there under are payable in Kolkata City and it is the distinct condition of the order that no suit or action for the purpose of enforcing any claim in respect of the order shall be instituted in any Court other than that situated in Kolkata City, West Bengal State, India.
- STC 44.3. The Firm is warranted that all service rendered by them shall conform to applicable city, states & central laws, ordinances and regulations and the said Firm shall indemnify / defend / relieve GRSE harmless, from / of against loss, cost of damage, by reason or any actual or alleged violation thereof.
- STC 44.4. GRSE shall not be liable under the workmen's compensation Act of 1923; in case any employee or workmen receives injury while actually serving his employer in connection with the latter's work inside the compound of GRSE Ltd.
- STC 44.5. All existing applicable Laws such as ESI, PF, SERVICE, CONTRACT LABOUR, CHILD LABOUR etc. as applicable, shall be binding for the contract.

STC 45 PREVALANCE OF NIT/STAC & CLARIFICATION

- STC 45.1. For any discrepancy between NIT (Notice Inviting Tender) and STAC, NIT statement may be taken as final.
- STC 45.2. Clarification required, if any, regarding Tender Document, should be got resolved by contacting competent authority of GRSE prior to submission of bid.



ANNEXURE – 3: EXECUTED RELEVANT JOBS for TECHNICAL ELIGIBILITY DURING LAST 03 YEARS

(To be submitted in Letterhead of bidder)

1. Name of the Bidder:

2. <u>Job Description:</u>									
	3. <u>Tender Reference:</u>								
	(A) <u>Deta</u>	ails of Executed r	elevant j	obs:					
SI. No	Description of Executed relevant jobs	Order No. & Date (Supporting soft or, hard copy to be submitted)	Start & Completion date as per Order	Actual start date	Actual Completion Date	Order placed by	Value of Purchase order & length of Plumbing work completed	Work completion certificate Ref. No. & date (Supporting soft or, hard copy to be submitted)	
	Note: Please add additional pages if required								
(Signature of Authorized Representative)									
	<u>Date:</u> Name:								
	Designation:								



ANNEXURE – 4: FORMAT for FINANCIAL ELIGIBILITY (To be submitted in Letterhead of bidder)

Name of the	ne Bidder:					
Job Descri	Job Description:					
Tender Ref	ference:					
Financial Da	ata for evaluating Financial Eligibility					
		Turn Over (Da)				
SL. No.	Financial Years	Turn Over (Rs.)				
SL.		Turn Over (Rs.)				
SL. No.	Financial Years	Turn Over (Rs.)				

Date:

Name:

Designation:

Note: Financial Statements to be attached



ANNEXURE-5: FORMAT OF SELF-CERTIFICATION FOR DECLARATION REGARDING BLACKLISTING/ TENDER HOLIDAY

(To be submitted in Letterhead of bidder)

1. Name of the Bidder with Address:	Date:
2. Job Description:	
3. Tender Reference:	
Sub: SELF-CERTIFICATION	
I / We, Proprietor/ Partner(s)/ Director(s) of M/s	hereby declare that our
firm/company namely M/shave neither been black	listed nor have received any
tender holiday by any PSUs/Central $\&$ State Govt. Organizations or any other Gove	rnment / Quasi Government
Organizations during last 03 (three) years ending on(date) from taking part	in Government tenders.
Or	
I / We Proprietor/ Partner(s)/ Director(s) of M/s	hereby declare that our
firm/company namely M/shas received tender holiday	y from M/s
(name of PSUs/Central & State Govt. Organizations or any other Gover	nment / Quasi Government
Organizations) from taking part in Government tenders for a period ofr	months w.e.f
to(date). The period is over on(date) and now our	firm/company is entitled to
take part in Government tenders. (relevant withdrawal/revocation document is atta	ached).
In case the above information is found inappropriate / false, I/We are fully aware	that the offer submitted by
our firm / contract awarded to our firm/company namely M/s w	vill be rejected/cancelled by
M/s GRSE, and EMD/SD shall be forfeited and appropriate action will be taken in	accordance with the vendor
policy of GRSE.	
(Signature of Authorized Representative with official seal)	
Date:	
Name:	
Designation:	
NB· PLEASE ENCLOSE COPY OF RELEVANT DOCUMENTS	

*Strike out / omit whichever is not applicable



ANNEXURE-6: FORMAT FOR DISCLOSURE BY CONTRACTOR OF EXISTING WORK (To be submitted in Letterhead of bidder)

1. Name of the Bidder:

2. Job Description:

3.	lender Reference:										
4.	Details of Ex	kisting relevan	nt jobs:								
	1		<u> </u>		T						
SI. No.	Description of Existing relevant jobs	Order No., Date & Value (in INR) (Supporting soft or, hard copy to be submitted)	Start & Completion date as per Order	Actual start date	Order placed by	Scope of work for existing contract (To quantify)			Deployment of operatives for the	existing contract (category wise)	
	Description o	Order No., E (Supporting s	Start & Cor	Act	Orc	Scope of wor	USK	SSK	SK	HSK	Equipment
(Signature of Authorized Representative with official seal) Date: Name: Designation: Note: Please add additional pages if required.											



ANNEXURE-7: FORMAT FOR DISCLOSURE BY CONTRACTOR OF PROPOSED EXECUTION / DEPLOYMENT PLAN OF THIS TENDERED JOB

(To be submitted in Letterhead of bidder)

5.	Name of the Bidder:									
6.	Job Description:									
7.	Tender Reference:									
8.	Details of Existing relevant jobs:									
Sl. No.	D	eployment of operativ	es per month for the Ter	ndered job contract (cate	gory wise)					
31. 110.	USK	SSK	SK	HSK	Equipment					
	(Signature o	f Authorized Represe	entative with official sea	<u>al)</u>						
	Date:									
	Name:									
	Designation :	<u>.</u>								

Note: Please add additional pages if required.

SCC/NK/NIC/OT/YM/SBS/022 Annexures Page **99** of **113**



ANNEXURE-8: CONFIRMATION BY BIDDER & CHECKLIST FOR BID SUBMISSION

- 1. Name of the Bidder:
- 2. Job Description:
- 3. <u>Tender Reference:</u>

Bid Number						
I.l. Tal.						
Job Title:						
Bidder's Name						
Proprietorship / Partnership / JV / Consortium						
Bidder's Address						
Phone						
E-mail						
Vendor Regn No. with GRSE (if applicable)						
MSME / MSE (Details if applicable)						
NSIC (Registration Details & Certificate Number,	if applicable)					
GST Registration						
PAN No.						
GEM UNIQUE SELLER ID						
TreDS Regn No.						
PF Details						
ESI Details						
ROC/ Trade Licence						
Joint Venture/ Consortium agreement (if applica	ble)					
EMD (Details of Instrument, if applicable)						
ACCEPTANCE MATRIX FOR NIT [indicate SUBN	IITTED (WITHOUT DEVIATION) / SUBMITTED					
(WITH DEVIATION) / NOT SUBMITTED]	MAITTED (ANTHOLIT DEVIATION), CURNITTED					
ACCEPTANCE MATRIX FOR STAC [indicate SUE (WITH DEVIATION), NOT SUBMITTED]	MITTED (WITHOUT DEVIATION), SUBMITTED					
ACCEPTANCE MATRIX FOR SOTR [indicate SUE (WITH DEVIATION), NOT SUBMITTED]	BMITTED (WITHOUT DEVIATION), SUBMITTED					
FORMAT FOR TECHNICAL ELIGIBILITY [indicate	SURMITTED / NOT SURMITTEDI					
DISCLOSURE BY CONTRACTOR OF EXISTING V	_					
SUBMITTED]	Total [a.cate 55525 /e.					
FORMAT FOR FINANCIAL ELEGIBILITY CRITER	IA					
[indicate SUBMITTED / NOT SUBMITTED]						
AVERAGE ANNUAL TURNOVER FOR LAST 3 FI	NANCIAL YEARS ENDING ON 31-Mar-2022					
TURNOVER FOR FY 2021-22	2					
TURNOVER FOR FY 2020-2	<u> </u>					
TURNOVER FOR FY 2021-2 2	2					
Submission of DOCUMENTS IN SUPPORT OF ISUBMITTED / NOT SUBMITTED]						
SELF-CERTIFICATION FOR DECLARATION REGARDING BLACKLISTING/ TENDER HOLIDAY [indicate SUBMITTED / NOT SUBMITTED and if put on Tender Holiday / Blacklisted]						
NON-DISCLOSURE AGREEMENT (in non-judicial stamp paper of Rs 100/-) [indicate SUBMITTED / NOT SUBMITTED and reference No. if any]						
INTIGRITY PACT (in non-judicial stamp paper SUBMITTED and reference No. if any]	of Rs 100/-) [indicate SUBMITTED / NOT					

(Signature of Authorized Representative with official seal)

Date:

Name:

Designation:



ANNEXURE-9: CHECK LIST FOR BILL SUBMISSION - for Service Contracts CHECK LIST FOR BILL SUBMISSION - for Service Contracts

- A. GENERAL PARTICULARS: (to be checked and submitted by Contractor/Vendor)
- A.1 BTN (as per BTS System):-
- A.2 Invoice No and date / E-Invoice No. & Date (if applicable for the vendor)

(Original & in triplicate)

- A.3 PO Number
- A.4 Name of Vendor
- A.5 Location of work:

MW / RBD/ FOJ/ TU / 61Park/Vendor's premises

	I. For RA Bill (Running/Progressive bill) (Put √ Mark)	YES	NO	NA
A.6	PO Number and date verified with Invoice:			
A.7	Vendor Name & Address in Invoice verified with Purchase Order:			
A.8	Vendor Code as in PO verified with Invoice:			
A.9	Original certified WDC enclosed :			
A.10	Whether WDC is Certified by the Authorized Person as per PO / SOTR with Rubber Stamp			
A.12	HSN/SAC code is as per PO			
A.13	GSTIN No. is as per PO			
A.14	GST % is as per PO			
A.15	Security Deposit (SD) submittded as per PO			
A.16	PBG of equivalent amount submitted, as per PO			
A.17	Compliance of Statutory Liabilities of labour as per PO			
	II. Applicable for Final/Balance Bill (Put √ Mark)			
A.20	Certified Job Completion Certificate (JCC) enclosed			
A.21	MRS as per PO terms enclosed (If applicable)			·
A.22	Guarantee Period (GP) expired as per PO term			
A.23	PBG of equivalent amount submitted, if GP is not over (If Yes, copy to enclose with the bill)			

Signature of Vendor's representative with Seal/Stamp

For GRSE Use Only

В.	To be checked and verified by Bill certifying authority (Put √ Mark)	YES	NO	NA
B.1	Whether Bill has been forwarded through BTS			
B.2	Whether WDC is Certified by the Authorized Person as per PO / SOTR with Rubber Stamp			
B.3	Job starting & Completion Date (Schedule & Actual) indicated in WDC			
B.4	Certification of Penalty/ Recovery from bill indicated in WDC, if applicable			
B.5	Whether Bill is Certified by the Authorized Person as per PO / SOTR with Rubber Stamp			
B.6	Certification of Penalty/ Recovery from bill as per WDC, if applicable			
B.7	Service Entry Sheet (SES)/GR in line with WDC, PO & Invoice			
	For Final/Balance Bill (Put √ Mark)			
B.8	Certified MRS copy as per PO terms enclosed (If applicable)			
B.9	Guarantee Period (GP) expired as per PO term and JCC			
B.10	PBG copy of equivalent amount till GP validity enclosed (if GP is not over)			

Signature of GRSE Bill Certifying Authority with Designation



ANNEXURE-11: INTEGRITY PACT

(to be executed in Non-Judicial Stamp Paper of Rs.100/-)

INTEGRITY PACT

Between

M/s Garden Reach Shipbuilders & Engineers Limited (GRSE) hereinafter referred to as "The Principal" and
M/s hereinafter referred to as "the Bidder/Contractor"
<u>Preamble</u>
The Principal intends to award, under laid down organizational procedures, contract/s for "(Name of the job) ". The principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness /transparency in its relations with its Bidder(s)/ or Contractors(s).
In order to achieve these goals, the principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principals mentioned above.
Section 1- Commitments of the principal
[1] The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
a. No employee of the principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept for self or third person, any material or immaterial benefit which the person is not legally entitled to.
b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The principal will in particular, before and during the tender process, provided to all Bidder(s) the same information and will not provide to any Bidder(s) confidential /additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the

- c. The principal will exclude from the process all known prejudiced persons.
- [2] If the principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2- Commitments of the Bidder(s)/Contractor(s)

contact execution.

- [1] The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- a. The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to in order to obtain in exchange any advantage of any kind whatsoever during the tender process or



during the execution of the contract.

- b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- Bidder(s)/Contractor(s) The will not commit any offence under the relevant C IPC/PC Act, further the Bidder(s)/Contractor(s) will not use improperly, purpose of competition or personal gain, or pass on to others, any information or document provided by the principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s) / Contractor(s) of Indian Nationality shall furnish the name and address of the foreign particulars, if any. Furthers details as mentioned in the "Guidelines on Indian agents of Foreign suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only, copy of the "Guidelines on Indian agent of foreign supplier" is annexed and marked as annex.
- e. The Bidder(s)/Contractor(S) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- [2] The Bidders(s)/ Contractor(s) will not instigate third persons to commit offences, outline above or be an accessory to such offence.

Section 3- Disqualification from tender process and exclusion from future contracts.

If the Bidder(s)/Contractor(s) before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the principal is entitled to disqualify the Bidders(s)/ Contractor(s) from the tender process or take action as per the extant procedure of the company.

Section 4- Compensation for Damages.

- 1) If the principal has disqualified the Bidder(s) from the tender process prior to the award according to section 3, the principal is entitled to demand and recover the damages equivalent to earnest Money deposit/Bid security.
- 2) If the Principal has terminated the contract according to section 3, or if the principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section 5- Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 2) If the Bidder makes incorrect statement on this subject he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealing"



Section 6- Equal treatment of all Bidders/Contractors/Sub-contractors.

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all sub-contractors a commitment in conformity with this integrity pact, and to submit it to the principal before contract signing.
- 2) The principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Sub-Contractors.
- 3) The Principal will disqualify from the tender process all bidders who do not sign this pact or violates its provisions.

Section 7- Criminal charges against violating Bidder(s) Contractor(s)/Sub-Contractor(s)

If the principal obtains knowledge of conduct of a Bidder, contractor or subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Sub contractor which constitutes corruption, or if the principal has substantive suspicion in this regard, the principal will inform the same to the Chief Vigilance Officer.

Section 8- Independent External Monitor/Monitors

- 1) The Principal appoints competent and credible Independent External Monitor for this pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2) The Monitor is not subject to instructions by the representative of the parties and perform his functions neutrally and independently. He reports to the Chairman GRSE.
- 3) The Bidder(s)/Contractor (s) accepts that the Monitor has the right to access without restriction to all project documentation of the principal including that provided by the contractor. The contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s) /Subcontractor(s) with confidentiality.
- 4) The Principal will provide to the Monitor sufficient information about all meeting among the parties related to the project provided such meetings could have an impact on the contractual relations between the principal and the contractor, The parties offer to the Monitor the option to participate in such meetings.
- 5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the management of the principal and request the management to discontinue or take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6) The Monitor will submit a written report to the Chairman, GRSE within 8 to 10 weeks from the date of reference or intimation to him by the principal and should the occasion arise, submit proposals for correcting problematic situations.
- 7) Monitor shall be entitled to compensation on the same terms as being extended to/provided to Independent Directors on the GRSE Board.
- 8) If the Monitor has reported to the Chairman GRSE a substantiated suspicion of an offence under



relevant IPC/PC act, and the Chairman GRSE has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

9) The word 'Monitor' would include both Singular and plural.

Section 9- Pact Duration:

This pact begins, when both parties have legally signed it. It expires for the contractor 18 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairman of GRSE.

Section 10- Other provisions:

- 1) This agreement is subject to Indian Law, place of performance and jurisdiction is the Registered Office of the principal i.e. Kolkata.
- 2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & On behalf o	f the principal)	(For & On behalf of the Bidder/Contractor)		
Place			Place	
Date			Date	
Witness 1				
(Signature, Name 8	k Address)			
Witness 2 (Signature, Name	& Address)			



ANNEXURE-12: NON-DISCLOSURE AGREEMENT

(to be executed in Non-Judicial Stamp Paper of Rs.100/-)

	This Non-Disclosure Agreement executed thisDay of2021.
	Between
	GARDEN REACH SHIPBUILDERS & ENGINEERS LIMITED, a company incorporated under the provisions of the Companies Act, 1956, having its Registered Office at 43/46, Garden Reach Road, Kolkata – 700024, hereinafter referred to as " GRSE " (which expression shall unless excluded by or repugnant to the subject or context be deemed to mean and include its successors-in-interest, administrators and assigns) of the FIRST PART .
	M/s (with full address)., hereinafter referred to as the L1 Bidder (which expression shall unless excluded by or repugnant to the subject or context be deemed to mean and include its successors-in –interest, administrators and assigns) of the SECOND PART .
	WHEREAS For purpose of this Agreement, GRSE discloses (herein after referred to as the "Disclosing Party") to the Bidder (herein after referred to as 'Recipient") Confidential Information as are required to give effect to the terms of the NIT/Purchase Order and the Recipient receives and or accesses the said Confidential Information
	WHEREASThe Bidder being considered inter alia for the purpose of work and as such some of the data, drawings/documents in connection with construction of Anti-Submarine Warfare Shallow Water Craft (ASW SWC) are required to be disclosed which shall be treated as confidential and the said Recipient, shall not disclose or part with such drawings/documents either whole or in part to any other third party, without prior written consent from GRSE.
	AND WHEREAS the said Recipient, is obliged to execute an undertaking in the form of "Non-Disclosure Agreement" on receiving Confidential Information in the form of data drawings/ documents and also confidential/proprietary drawings or technical information of Indian Navy through Government of India or any other party, as the case may be, by GRSE, duly promising and/or undertaking to keep and treat such data, drawings/documents as strictly 'confidential'.
	NOW THEREFORE both GRSE and the Bidder do hereby agree as follows in the premises aforesaid: -
	"Confidential Information" means and includes any and all facts, knowledge, information, data and drawings and documents of any nature whatsoever, whether written or electronic mode owned and/or possessed by GRSE notwithstanding it belongs to any person, government or otherwise not limited to ideas, designs, data, source code, processes, computer programming, flow diagrams, know how, computer programming and other software and software techniques and such other notes, interpretation, derivative or analysis of data that has been or may hereafter be provided or shown to the Recipient or is gathered, received or obtained directly or is otherwise obtained from the review of GRSE's documents. It is agreed that any and all reports, notes, minutes, summaries, flow charts, diagrams and any other information that is prepared based on the discussions and interaction with GRSE pursuant to this Agreement shall be deemed to be Confidential Information under this Agreement.
(b)	During the pre-bid discussion and subsequent agreement between the parties herein, if any, for execution of the job and also for a period of 10 years from the date of Expiry and/or foreclosure and/or termination of the said NIT/PO, M/s

1.



- i) Protected and kept as strictly confidential by them.
- ii) Disclose to and used only by the persons within the organization of M/s______, who have a need to know solely for the purpose of pre-bid meeting and for execution of the work if awarded by GRSE subsequently subject to their taking due care and protection of the system and data.
- iii) Used in whole or in part solely for the purpose of pre-bid meeting and for execution of the work if awarded by GRSE subsequently in the manner as ordered by GRSE or to be ordered from time to time exclusively and shall not be exploited for any other purpose or customers.
- iv) Neither be disclosed nor cause to be disclosed directly or indirectly to any third party.
- v) Neither be copied nor otherwise be reproduced, in whole or in part without prior express consent from GRSE.
- vi) Returned to GRSE forthwith on demand at any point of time and upon immediate foreclosure /expiry of the contract if subsequently entered.
- 2. Nothing in this agreement or the disclosure of the Confidential Information or data or systems, to be intended to be granted or shall be construed as granting to the Recipient., any rights, title, interest or license other than the right to use such Confidential Information for the purpose of pre-bid meeting and for the execution of the contract/job if subsequently awarded by GRSE and shall not be exploited for any other purpose or customers of the Recipient. In this regard for the purpose of pre-bid meeting or for execution of job if any, to be subsequently awarded by GRSE to the Recipient shall at all times remain the exclusive property of GRSE and rest with GRSE.
- 3. The Recipient shall resort to any publicity or advertising in respect of this agreement or the subject matter thereof and the subject matter of PO and/ or any Agreement, if any, to be entered into subsequently.
- 4. The Recipient shall not make any copies or duplicate or reduce in writing the Confidential Information or part thereof in anyway in whole or part any information without the prior written consent of GRSE and where such copies or reproductions are permitted in accordance with this clause, the Recipient shall treat them strictly confidential in accordance with the provisions of this agreement and comply with the instructions of GRSE with regard to the protection and disposal of them.
- 5. If the Recipient is compelled under any law to disclose (whether by way of announce or otherwise) any Confidential Information, it shall give prompt notice in writing of such fact to GRSE and shall provide all cooperation and assistance as may be requested by GRSE in order to seek an appropriate remedy to prevent or restrict such disclosure.
- 6. It is agreed by the Recipient that the Recipient shall take full responsibility while handling the Confidential Information provided by GRSE, which means that the Recipient shall be fully responsible of the acts of its employees/subcontractors/officers/associates who are required to handle the Confidential Information provided by GRSE.
- 7. **Indemnity:** Recipient shall indemnify GRSE and hold harmless from and against all actions, proceedings, claims, demands, losses, damages, costs (including between attorney and clients) charges, expenses and consequences whatsoever that may be brought or made against or sustained or incurred by GRSE in consequences resulting from any act or omission on the part of Recipient including its employees/subcontractors/officers/associates.
- 8. The Recipient agrees and undertakes GRSE that the Recipient shall obtain appropriate indemnity from its sub-contractors and outside personnel/workers to the effect that they will use Confidential Information for construction of the ships only and for no other purpose and also, they would not divulge or pass on any Confidential Information to any third party for any reason whatsoever.
- 9. The Recipient acknowledges the competitive value and confidential nature of the Confidential Information and the resultant damage to GRSE if the Confidential Information is disclosed or allowed to be disclosed to any unauthorized persons or used for the purpose of violation of this Agreement. The Recipient confirms that it is imperative that all Confidential Information remains confidential. The Recipient acknowledges that GRSE possesses Intellectual Property Rights in the Confidential Information.



- 10. The expiry, foreclosure or termination of the PO or any or all of the subsequent agreements entered into by GRSE and the Recipient, if any, in pursuance of the pre-bid discussion, shall not relieve the Recipient of their/its obligations under these presents which shall be effective and remain effective and in full force, for a period of 10 years from the date of such expiry/foreclosure/termination of the PO.
- 11. In the event of expiry, foreclosure or termination, the Recipient shall forthwith return to GRSE, the Confidential Information as received by them/it during tenure of the PO and/or subsequent agreements.
- 12. Neither party shall assign any PO and / or any Agreement, if any, to be subsequently entered into, without the written consent of the other and should there be any re-organization, merger, take over or the like, its successor-in-interest shall be bound by the conditions of this Agreement.
- 13. Failure to enforce any provision of this agreement and/or failure to initiate timely action, will not construe to be waiver and GRSE shall be freely entitled to enforce the provisions of this agreement at any appropriate time thereafter.
- 14. In the event any provision of this Agreement shall be held invalid or unenforceable for any reason, that provision shall not affect any other provision of this Agreement.
- 15. The Recipient acknowledges that Confidential Information belonging to GRSE is a valuable asset. Disclosure in breach of this Agreement will result in irreparable injury to GRSE for which monetary damage alone will not be an adequate remedy. Therefore, the parties agree that in the event of a breach or threatened breach of the terms of this Agreement, GRSE will be entitled to specific performance, injunctive relief or other equitable relief prohibiting any breach of this Agreement. Any such equitable remedy shall be in addition to and not in lieu of, other appropriate relief at law which GRSE may be entitled.
- 16. This agreement shall be governed under the Indian Laws and the Courts in Kolkata shall have exclusive jurisdiction to try determine and adjudicate any disputes arising between the parties in relation to this agreement.
- 17. GRSE' standard arbitration clause as contained in NIT shall apply to this agreement for resolution of disputes between the parties.

IN WITNESS WHEREOF the parties have hereunto set and subscribed their respective hands and seals on the day, month and year first above written.

FOR GARDEN REACH SHIPBUILDERS & ENGINEERS LTD	FC	DR M/s
Signature:	Signature:	
Name:	Name:	
Address:	Address:	
WITNESS 1		WITNESS 2
Signature:	Signature:	
Name:	Name:	
Address:	Address:	



CHECK LIST OF STATUTORY RESPONSIBILITY OF CONTRACTOR THE CONTRACT LABOUR (R& A), ACT, 1970 AND CENTRAL RULES, 1971

SL. NO.	NATURE OF STATUTORY REQUIREMENTS	FORM NO.	RESPONSIBILITY	REMARKS
01	Labour License	Form –II	Contractor	Contractors engaging 20 or more contract labours would apply for obtaining labour license (in triplicate) to the ALC (C), Kolkata. A copy of the license should be submitted to concerned Unit HR Department. Note: The Contractor cannot deploy more than the number of workmen mentioned in the license on any day.
02	Renewal of labour license	Form –II	Contractor	The contractor shall apply to the ALC(C), Kolkata for renewal of license at least 30 days prior to its expiry. A copy of the acknowledgement / renewed license should be submitted to concerned Unit HR Department.
03	Notice for commencement / completion of work	Form-VII	Contractor / Principal Employer	The contractor shall submit Form – VII to the Inspector / Labour Enforcement Officer (C), Kolkata within 15 days intimating the actual date of commencement / completion of the work. The receipted copy of Form – VII should be submitted to concerned Unit HR Department.
MAIR	TENANCE OF REGIS	TERS	1	
04	Employee Register	FORM - A	Contractor	Comprising of personal details like name, father's name, DOB, Address etc. of the workmen engaged by the contractor.
05	Wages Payment Register	FORM - B	Contractor	Comprising of current rate of minimum wages, employees PF & ESI contribution and other allowances, if any.
06	Register of Loan / Recoveries / Fines etc.	FORM - C	Contractor	To maintain record of loans, fines and advances given, if any and monthly record of recoveries.
07	Attendance Registers	FORM - D	Contractor	Data of daily attendance of each workmen engaged by the contractor indicating their in and out time.



SL. NO.	NATURE OF STATUTORY REQUIREMENTS	FORM NO.	RESPONSIBILITY	REMARKS
80	Employment Card	Form – XII	Contractor	Every contractor shall issue employment card / appointment letter to their contract workers within 03 days from their date of employment.
09	Service Certificate	Form – VIII	Contractor	To be issued by the contractor upon termination of employment / completion of work etc.
10	Wage-slip	Form – XIX	Contractor	Contractors shall issue wage-slip to their workmen at least 01 day prior to disbursement of wages.
11	Annual Return	Online Submission	Contractor	Every Contractors shall prepare Annual Return for the previous year which is submitted online by the Contractors' in Shram Suvidha Portal to the Registering Officer within 31st Jan of the following year.



CHECK LIST OF STATUTORY RESPONSIBILITY OF CONTRACTOR COMPLIANCE OF OTHER STATUES FOR ENGAGEMENT OF CONTRACTORS' WORKMEN

SI.	Relevant Statues	Responsibility	Compliances to be ensured as per the Statute
No .	The Factories Act.	Contractor	
01	The Factories Act, 1948 & West Bengal Factories Rules, 1958	Contractor	Leave with Wages: Every worker who has worked for a period of 240 days or more is entitled to get leave with wages to be calculated one day for every 20 days of work performed by him.
			2. <u>Payment of Overtime</u> : Where a worker has worked for more than 09 hours in any day or for more than 48 hours in a week, he shall, in respect of overtime work, be entitled to wages twice the hourly rate.
			3. Hours of Work: The total nos. of hours of work in a week, including overtime, shall not exceed sixty.
			4. <u>Hours of Overtime</u> : The total hours of overtime shall not exceed fifty in any quarter i.e. during three consecutive months for any worker.
02	Payment of Wages Act, 1936	Contractor	Contractors (employer) engaging less than 1,000 persons have to pay wages before expiry of the 7th day after the last day of wage period.
03	The Minimum Wages Act, 1948	Contractor	Contractors (employer) shall pay minimum wages to every worker as per the Central rates circulated by the Management from time to time.
04	The EPF & MP Act, 1952	Contractor	Every contractor shall obtain the following before commencement of work: (a) PF Code No. of the firm. (b) PF UAN i.r.o of the workmen engaged by him. (c) Ensure submission of nominee and dependent details while applying for UAN of workmen.
		Contractor	2. Every contractor shall contribute towards PF @ 12% of the monthly wages of each workman as employer's share and recover 12% of monthly wages from each employee, as employees share and thereafter remit the entire amount to EPFO i.r.o every workman engaged by him. The contribution for the preceding month should be remitted prior to expiry of the 15th day of the following month. Contractors (Employers) are also required to bear the administrative charges as applicable.



SI. No.	Relevant Statues	Responsibility	Compliances to be ensured as per the Statute	
05	The ESI Act, 1948	Contractor	Every contractor shall obtain the following: a) ESI Code No. of the firm (b) ESI code no. i.r.o of the workmen engaged by him (c) Ensure submission of nominee and dependent details while applying for ESI TIC (E-Pehchan Card).	
		Contractor	2. Every contractor shall remit ESI contribution (employers' share @ 3.25% and employees' share @ 0.75%) i.r.o every workman engaged by him for the preceding month prior to expiry of the 15th day of the following month.	
06	The Payment of Bonus Act 1965 & Rules	Contractor	1. Contractors shall pay annual bonus to their workmen (Contract Labour) drawing wages below and upto Rs. 21,000/- per month. Bonus will be payable minimum @ 8.33% and maximum @ 20% of annual wages.	
		Contractor	2. Register in Form - C format {Rule 4(b)} of 'The Payment of Bonus Act, 1965' is to be maintained by the contractor for submission of Annual Return as per the Act.	



RESPONSIBILITIES OF CONTRACTORS OVER AND ABOVE THE STATUTORY REQUIREMENTS

- (i) Contractors shall take all necessary steps for disbursement of wages through bank-transfer and issue a payment notice at least 02 days prior to such bank-transfer for information of respective unit HR Dept. as well his workers. (should be incorporated in the contract document in the Payment Terms).
- (ii) All contractors should obtain labour-licenses prior to commencement of work. Principal Employer shall not allow any contractor without license.
- (iii) All outsourced jobs are required to be supervised by a Supervisor duly appointed by the Contractor. The contractor should declare the name and contact number of the supervisor(s) against each P.O before commencement of work and submit the details of the supervisor(s) to the respective unit HR Department. He should keep adequate nos. of supervisors to supervise and co-ordinate the execution of job by contract labours. (The principal employer must check that the name and number of the supervisor which has been provided by the contractor, whether the same person is coming as the said supervisor).
- (iv) The supervisor's name should not be mentioned in the employee register as he is not a contract labour.
- (v) Supervisor of concerned contractor should be present in the work-site where the contract labours of the concerned contractor are supposed to work. To ensure the presence of the supervisor, their attendance may be recorded by the user department on daily basis.
- (vi) Contractor should mention the name of his Supervisor / agent / manager in Form-II which is to be submitted to ALC (C) for obtaining labour license.
- (vii) The supervisor should maintain the attendance register of their contract labours (Form-D) which may be randomly checked by the Officers of the user department. This attendance register will be submitted by the contractors on monthly basis along with the wages-payment registers to the respective unit HR Depts. for obtaining certification of payment of wages to each contractor labour based on their daily / monthly attendances.
- (viii) Contractors must submit details of their firms in the Appendix B1 format prior to commencement of work. They must also submit details of their contract labours in B2 formats for making new gate-passes for the purpose of entry / exit prior to the engagement of such contract labour.
