



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN - 01

Ref: PSER:SCT:KLN-C1843:TCN-01

Date: 26-07-2017

Sub	TCN-01
Job	Construction of Sub-Structure for Field Hostel, Residential Quarters, Site Office & Covered Store; Hard Surfacing and misc. Civil Works at 2x660 MW Maitree, Rampal, Bangladesh.
Ref	1.0 Tender no PSER:SCT:KLN-C1843:17.
	2.0 BHEL's NIT, vide reference no PSER:SCT:KLN-C1843:5801 Date: 05-07-2017.
	3.0 All other pertinent issues till date.

With reference to above, following points/ documents, relevant to tender, may please be noted and complied with while submitting offer.

- 1.0 Revised Volume-IF-TCC-CML-Rev-01 is attached herewith, superseding Volume-IF-TCC-CML-Rev-00 issued earlier along with NIT. (Revision in cl. no. 10.0, 11.0, 12.0, 34.0). However, bidder shall go through entire volume before submitting their bid.
- 2.0 Revised Price Schedule, VOLUME-III-R-01 attached superseding PRICE SCHEDULE VOLUME-III-R-00 issued earlier along with NIT. Bidder shall quote as per this revised Volume-III, Rev-01 only. Bidders are also requested to submit a declaration in techno - commercial offer that they have submitted their price bid as per **REVISED price schedule** format (**VOLUME-III-PRICE SCHEDULE, REV-01**).
- 3.0 Extension of due date of offer submission from 26-07-2017 to **05-08-2017 (15:00 Hrs)**.
- 4.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 5.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

SR ENGR (SCT)

Encl : As above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

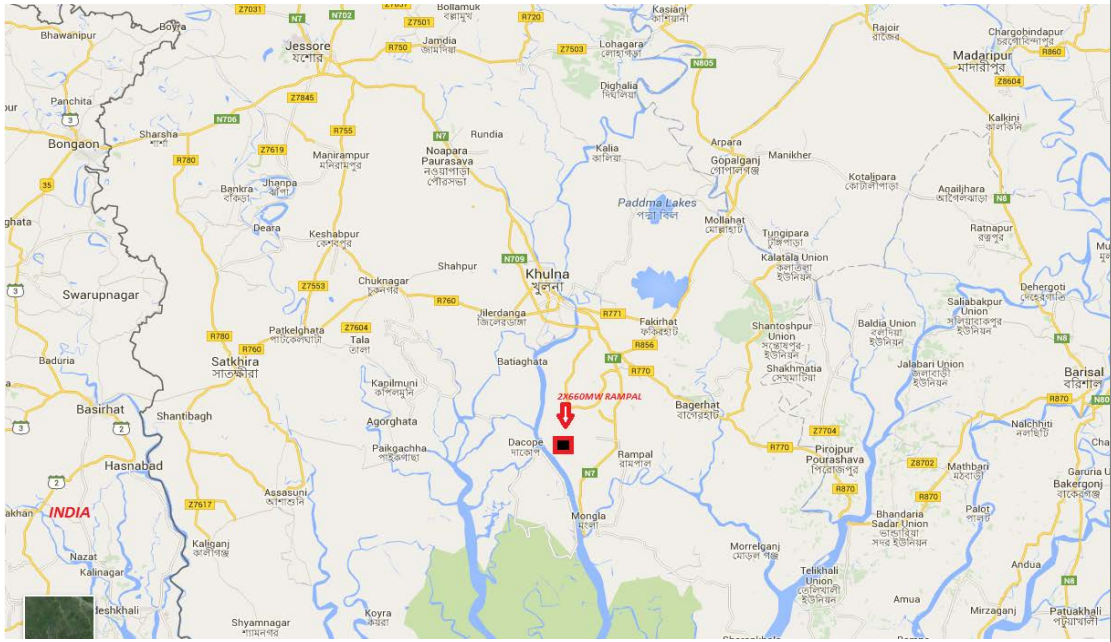
POWER SECTOR EASTERN REGION, DJ-9/1, SECTOR-II, SALT LAKE CITY, KOLKATA - 700 091

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1.0	PROJECT SYNOPSIS AND GENERAL INFORMATION
1.1	<p>The 2x660 MW MAITREE SUPER THERMAL POWER PROJECT is located in Moithara Village, Rampal Upazila, Bagerhat District, Bangladesh.</p> <p>The Bidder shall acquaint himself by a visit to the site, if felt necessary, with the conditions prevailing at site before submission of the bid. The information given here in under is for general guidance and shall not be contractually binding on the Owner. All relevant site data/information as may be necessary shall have to be obtained / collected by the Bidder.</p>
	
LOCATION MAP:2X660MW MAITREE RAMPAL PROJECT	



LOCATION MAP:2X660MW MAITREE RAMPAL PROJECT

1.2	<p>APPROACH TO SITE</p> <p>The nearest town Khulna is at a distance of 23 km from project site. The site is Connected by road from Mangla- Khulna Highway.</p> <p>Nearest Domestic airport is Jessor, Bangladesh at a distance of about 93 KM and international airport is Dhaka at a distance of 263 KM, Bangladesh</p>
1.3	<p>Owner: BIFPCL (BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT.) LIMITED)</p>
2.0	<p>BROAD SCOPE OF WORK</p>
2.1	<p>The scope broadly covers providing manpower including supervision, materials T&Ps, consumables etc. including supply of cement, reinforcement steel, area leveling & grading, shifting of materials, approach road works, etc. all complete and all miscellaneous civil work in all respect as per drawings & specification for of the following jobs for 2x660MW Maitree, Rampal Project, Bangladesh.</p> <p>Cutting/removal, disposal of any vegetation, trees, grass etc. at various work fronts within the project premises is in the scope of work and shall be carried out by you as per direction of BHEL engineer.</p>
2.1.1	Design and drawing of Pre-cast Pile
2.1.2	Construction of Sub-Structure work for BHEL office, store, field Hostel, BHEL Residential Quarters, etc.
2.1.3	Hard surfacing of open storage yard
2.1.4	Fencing of storage yard, office area & residential area.
2.1.5	Any other Misc. civil & structural work as per requirement of BHEL.

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2.2	The intent of this tender is to provide services for execution of the project according to most modern and proven techniques & codes. Omission of specific reference to any method, equipment or material necessary for the proper and efficient services towards installation of the plant shall not relieve the contractor of the responsibility of providing such services/ facilities to complete the work or portion of work awarded to him. The quoted/ accepted rates/ price shall deem to be inclusive of all such contingencies.
2.3	It is not the intent of this tender to specify herein all the details of construction. However, the system shall conform in all respects to high standards of quality & workmanship for performing the required duties in a manner acceptable to purchaser who will interpret the meaning of drawings & specifications and shall be entitled to reject any work or material, which in his judgments is not in full accordance herewith.
2.4	Following shall be the responsibility of contractor and have to be provided within finally accepted rates/ prices.
2.4.1	Provision as required of all types of labour, supervisors, engineers, watch & ward, tools & tackles, calibrated MMD as specified and otherwise required for the work, consumables for construction including material handling.
2.4.3	Proper out-turn as per BHEL plan and commitment.
2.4.4	Completion of work as per BHEL schedule.
2.4.5	Good quality and accurate workmanship for proper performance of the equipment.
2.4.6	Repair and rectification during Working & Guarantee period
2.4.7	Preservation/ re-conservation of all components during construction till handing over.
2.5	Entire job under this tender shall be completed as per specification, drawing and direction of BHEL. Drawing/ sketch for construction will be issued after award of job and during construction.
2.7	SERVICES TO BE RENDERED BY THE BIDDER Services for construction under the tender shall include but not be limited to the following.
2.7.1	Completion of all works to the satisfaction of owner / BHEL.
2.7.2	Deployment of all skilled & unskilled manpower required for construction, watch & ward, other services to the rendered under this tender.
2.7.3	Deployment of all tools & tackle, construction machinery, transportation vehicles and all other implements in adequate number & size, appropriate for the work to be handled under scope of this tender, except otherwise specified.
2.7.4	Supply of all consumables, as well as materials required for temporary supports, scaffolding etc. as necessary for such work, unless specified otherwise.
2.7.5	Providing support services for the contractor's erection staff, e.g. construction of site offices, temporary stores, residential accommodation and transport to work site for personnel, watch & ward for security & safety of the materials under the contractor's custody etc. as required.
2.7.6	Maintaining proper documentation of all site activities undertaken by the contractor as per proforma mutually agreed with BHEL, submitting monthly progress reports as also any such document as and when desired by BHEL / owner, taking approval of all statutory authorities, as applicable for respective portions of work under the jurisdiction of such statutes of laws.
2.7.7	All the materials issued to the contract by BHEL, if applicable, shall be reconciled by the bidder and the unused materials have to be returned back to BHEL stores / yard

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	<p>or any other place as specified by BHEL. However, issue of no material by BHEL is envisaged for this project at this stage.</p>
2.8	Any other service, although not specifically called for but required for a contract of the size & nature indicated in the specification.
2.9	CONSTRUCTION SERVICES
2.9.1	As part of the overall project management activity, the contractor shall be responsible for proper co-ordination of activities during various phases of execution of the contract. The contractor shall identify a person designated as Construction Manager, with whom BHEL shall interact on matters related to execution of the contract. The Construction Manager shall be the single point contact person on behalf of the contractor. BHEL shall interact with the Construction Manager only on all matters on co-ordination between BHEL and the contractor.
2.9.2	The contractor shall confine all field operations to those works which can be reformed without subjecting the equipment & materials to adverse effects, during inclement weather conditions, like monsoon, storms, etc. and during other unfavorable construction conditions. No field activities shall be performed by the contractor under conditions which might adversely affect quality & efficiency thereof, unless special precautions or measures are taken by the contractor in proper & satisfactory manner in the performance of such works and with the concurrence of the engineer. Such unfavorable construction conditions in no way relieve the contractor of their responsibility to perform the works as per schedule.
2.9.3	The contractor shall supply all skilled workmen in addition to other semi-skilled & unskilled workmen required for all the works of handling & transportation from site store to site contemplated under this tender. Only fully trained & competent men with previous experience on the job shall be employed. They shall hold valid certificates wherever necessary. BHEL reserve the right to decide on the suitability of workers & the other personnel who will be employed by the contractor. BHEL reserves the right to insist on removal of any employee of the contractor at any time, if they find him unsuitable and the contractor shall forthwith remove him.
2.9.4	The supervisory staff employed by the contractor shall be technically qualified and experienced in the area of work. They shall ensure proper out turn of work and discipline on the part of labour put on the job by the contractor and in general see that the works are carried out in a safe & proper manner and in coordination with other labour and staff employed directly by BHEL or other contractor of BHEL and owner/ owner's consultant.
2.9.5	The contractor shall also furnish daily labour report showing by classification the number of employees engaged in various categories of work a progress report of work as required by BHEL engineer.
2.9.6	The work shall be executed under the usual conditions affecting major power plant construction and in conjunction with numerous other operations at site. The contractor and their personnel shall co-operate with other personnel, and other contractor, coordinating his work with others and proceed in a manner that shall not delay or hinder the progress of work as a whole.
2.9.7	The contractor's supervisory staff shall execute the work in the most substantial and workman like manner in the stipulated time. Accuracy of work and aesthetic finish are essential part of this contract. The contractor shall be responsible to ensure that assembly & workmanship conform to the dimensions & tolerance given in the drawing/ instruction given by BHEL engineer from time to time.

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	It is the responsibility of the contractor to engage their workman in shifts or on overtime basis for achieving the target set by BHEL during construction period. Contractor's quoted rate shall include all these contingencies.
3.0	SITE VISIT
3.1	Contractor should visit site and acquire full knowledge & information about site conditions prevailing at site and in and around the plant premises together with all the statutory, obligatory, mandatory requirements of various authorities before submission of the bid.
3.1	OPEN SPACE
3.1.1	Open spaces for material storage yard & construction of temporary site office may be allocated as made available by the customer / BHEL free. Contractor has to make his own arrangements for labour colony including Electricity and water for the labour colony
3.2	WATER AND ELECTRICITY
3.2.1	Bidder has to make his own arrangement for Water and Electricity for construction purpose. Bidder has to make his own arrangement for Water and Electricity for construction purpose. No underground water shall be used for construction purpose
4.0	TOOLS & PLANTS
4.1	All the tools and plants required for execution of the above work are in contractor's scope.
5.0	MATERIAL SUPPLY
5.1	SUPPLY OF MATERIALS (Cement & Steel).
5.1.1	Cement and Steel required for this package need to be supplied by you.
5.1.2	Cement shall be as per Technical specification of the contract.
5.1.3	Reinforcement shall be grade B500B confirming to BS 4449:2005+A:2009
5.1.4	Test certificates in respect of both Steel and Cement to be furnished. You shall submit the consumption statement of cement and steel used in the works along with bill.
5.2	All the required materials to be supplied and erected by the bidder within the quoted cost. The use of materials shall be subject to inspection at site before erection / installation. Any damaged materials received at site shall be suitably replaced & rectified up to the satisfaction of BHEL / Owners Engineer.
6.0	INSPECTION, TESTING AND INSPECTION CERTIFICATES
6.1	The engineer, his duly authorized representative and / or an outside inspection agency acting on behalf of BHEL / owner shall have access at all reasonable times to inspect & examine the materials & workmanship of the works during its manufacture and if part of the works is being manufactured or assembled on other premises or works, the vendor shall obtain for the engineer and for their duly authorized representative permission to inspect as if the works were manufactured or assembled on vendor's own premises or works. Necessary arrangement for carrying out inspection including supply of labour, IMTEs, area illumination and scaffolding, if required will be vendor's responsibility and same has to be carried out within the quoted price.
6.2	To facilitate advance planning of inspection in addition to giving inspection notice the vendor shall furnish quarterly inspection program indicating schedule dates of inspection at customer hold point and final inspection stages. Updated quarterly inspection plans will be made for each 3 consecutive months and shall be furnished before beginning of each calendar month.

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6.3	Before any plant / equipment leaves the place of manufacture, BHEL shall be given the option of witnessing inspections & tests for compliance with specifications & related standards. The vendor shall give the engineer / inspector 15 days written notice of any material being ready for testing. Such test shall be to the vendor's account except for the expenses of the inspector. The engineer / inspector, unless the inspection is waived will attend such tests within 15 days of the date on which the equipment is notified as being ready for test / inspection, failing which the vendor may proceed with test which shall be deemed to have been made in the inspector's presence and he shall forthwith forward to the Inspector duly certified copies of test reports.
6.4	The engineer or inspector shall within 15 days from the date of inspection as defined herein give notice to the vendor of any objection w.r.t. drawing / equipment / workmanship which in his opinion not in accordance with the specification / contract. The vendor shall either make modification as may be necessary to meet the said objection or explain to the engineer / inspector giving reasons that no modifications are necessary to comply with the contract.
6.5	When the factory tests have been completed at the vendor's or sub-vendor's works, the engineer or inspector shall issue a certificate to this effect within reasonable time after completion of tests but if the tests are not witnessed by the engineer or Inspector the certificate shall be issued within 15 days of the receipt of vendor's test certificate by the engineer inspector. Completion of these tests or the issue of the certificates shall not bind BHEL to accept the equipment should it on further tests after erection be found not to comply with the contract.
6.6	In all cases where the vendor provides the tests at the premises of the vendor or any sub-vendor, the vendor except where otherwise specified shall provide free of charge such items as labour, materials, electricity, fuel, water, stores, apparatus and instruments as may be reasonably demanded by the engineer/ inspector to carry out effectively such tests on the equipment in accordance with the contract and shall give facilities to the engineer/ inspector to accomplish testing.
7.0	INSURANCE
	The contractor shall make available the original insurance cover(s) taken by him, against his T&P, assets and workmen compensation and any other cover as may be pertinent to his works and obligatory in terms of law, to BHEL for necessary verification in regard to their adequacy, before commencement of work. However, irrespective of such verification / acceptance, the responsibility to maintain adequate insurance coverage at all times during the period of the contract shall be of the contractor alone. Such insurance covers to be taken shall be in the joint names of the owner and the contractor. The contractor shall however be authorised to deal directly with the Insurance company(s) and shall be responsible in regard to maintenance of such insurance covers. Insurance covers to be taken by BHEL / Customer shall be as stipulated under relevant clause of Volume-IB.
8.0	DEVIATIONS/ CLARIFICATIONS
8.1	Normally no deviation with respect to tender is acceptable to BHEL. However, in case of unavoidable circumstances, the bidder may submit their query for seeking clarifications of BHEL as per modality stipulated in NIT or may submit the same along with his offer as per prescribed schedule / format without any ambiguity. Any

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	assumptions, presumptions, deviations etc. indicated or implied anywhere by the bidder except those indicated in the deviation schedule / format will not be recognized and will not form a part of consideration / offer. In the absence of such filled-up schedule/ format it will be understood and agreed that the bidder's offer is based on strict conformance to the specification and no negotiation would be allowed in this regard. BHEL reserve the right not to recognize any/ all deviations submitted after opening of the bid.		
9.0	DEWATERING		
9.1	Contractor shall ensure at all times that his work area & approach / access roads are free from accumulation of water, so that the materials are safe and the erection / progress schedule are not affected. No separate claim in this regard shall be admitted by BHEL. No separate payments for dewatering of subsoil, surface water or catchments water, if required, at any time during execution of the work including monsoon period shall be considered by BHEL.		
10.0	TIME SCHEDULE/ COMPLETION PERIOD		
10.1	<p>The entire work under the scope of work shall be successfully completed in all respect within 12 (Twelve) months from date of start of work, as certified by Construction Manager, BHEL.</p> <p>Mobilization at site shall be done within 20 days from date of written intimation from BHEL. The exact date of start of work shall be reckoned based on certificate of Construction Manager, BHEL</p> <p>O&M -</p> <ul style="list-style-type: none"> i) Operation 48 Months from Commissioning of Weigh Bridge (to be certified by BHEL). ii) AMC after completion of 1 year warranty period from the date of commissioning. 		
10.2	CONSTRUCTION SCHEDULE		
10.2.1	Entire work shall be carried out in accordance with the broad construction schedule given below, within the stipulated completion period. Within 30 days of LOI, the contractor shall discuss with BHEL site engineer & furnish detail construction schedule (L-3/ L-4) indicating all milestones on the basis of major activities and get it approved from BHEL engineer. This schedule will undergo review and based on progress vis-à-vis project requirement, contractor shall have to submit revised schedule for approval of BHEL.		
10.2.1.1	SI no.	Major Milestone	Months from date of start of work
	1	Completion of RCC foundations of BHEL office	3
	2	Completion of RCC foundations of Filed Hostel, Residential Quarters	4

	3	Completion of RCC foundations of 3 Nos Store	5
	4	Completion of RCC foundations of balance 3 Nos. Store	6
	5	Completion of Floor finish and other finishing work of office, Filed Hostel and Residential Quarters and handing over to BHEL	7
	6	Completion of Floor finish and other finishing work of Store and handing over to BHEL	8
	7	Hard Surfacing	10
	8	Fencing	11
	9	Any other Misc. Structure/Job	12
11.0	PRICE BID & CONTRACT PRICE		
11.1	<p>Bidders should quote prices in USD as per format, Volume-III provided in the tender. Bids shall be evaluated based on total price quoted.</p> <p>Total price for Civil (SCH 3) and AMC& Operation (SCH 4) together will be considered for evaluation and awarding. However two separate LOI shall be placed for Civil (SCH 3) and AMC& Operation (SCH 4)</p>		
11.2	<p>Payment shall be made in USD as per order.</p> <p>However for reasons, solely at the discretion of BHEL, if USD amount is not possible to be paid then BDT equivalent of USD will be paid at the Buying Exchange Rate of USD (of our banker) as on the date of payment.</p> <p>The quoted / accepted rates shall remain Firm throughout the contract period including extension period, if any, without any escalation till handing over.</p>		
12.0	TERMS OF PAYMENT		
12.1	PAYMENT FOR CIVIL:		
12.1.1	<p>The contractor shall submit his running bill (RA bill) once in a month at the end of each month in line with payment terms/ billing schedule indicated below. The RA bill complete in all respects accompanied by BHEL engineers certified/ measurement sheet, jointly signed, will be paid after passing of the bill subject to completeness & correctness. The measurement will be taken as specified in terms & conditions of contract and certified by the BHEL engineer of actual work. However, no extra payment shall be made in the event of delay in release of payment.</p> <p>90% pro-rata monthly RA payment shall be considered for payment based on monthly work completion certificate to be issued by BHEL engineer as per approved BBU/Price Schedule.</p>		

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	The payment shall be released within 60 days from the date of receipt of complete invoice along with all necessary documents including Engineering Certificate.
12.1.2	Out of above 90%, 1.5 % of gross bill amount shall be paid in the following manner on certification by BHEL engineer after compliance of each of following activity in each month. In case of non-fulfilment of respective activity by contractor in each month, no payment shall be made by BHEL against corresponding activity and no claim of bidder at a later date, whatsoever, in this regard shall be entertained by BHEL.
12.1.2.1	0.7 % shall be paid on compliance of housekeeping of contractor's working area and store/ office areas.
12.1.2.2	0.3 % shall be paid on compliance of general illumination of contractor's working area and stores, office area.
12.1.2.3	0.2 % shall be paid on compliance of applicable OHSAS requirement as per guidelines of BHEL/ PSER and as specified in the tender.
12.1.2.4	0.3 % shall be paid on compliance of applicable safety requirement as per guidelines of BHEL/ PSER and as specified in the tender.
12.1.3	5% of contract value shall be paid against PAC (Preliminary Acceptance Certificate) to be issued by BHEL/BIFPCL on completion of job
12.1.4	Balance 5% of contract value shall be paid against FAC (Final Acceptance Certificate) to be issued by BHEL / BIFPCL after completion of warranty period. However, if desired by vendor, this 5% may be released by BHEL against submission of equivalent amount bank guarantee as per Performance Bank Guarantee format, to be kept valid till warranty period, subject to the followings:
12.1.4.1	(i) Receipt of certificate that all works are completed in all respects;
12.1.4.2	(ii) Reconciliation of materials / T&P / MMD;
12.1.4.3	(iii) Completion of final bill formalities and
12.1.4.4	(iv) Handing over to BHEL.
12.1.5	Contractor shall make their own arrangement for making payment of impending labour wages and other dues in the meanwhile.
12.2	PAYMENT FOR ALL ITEMS OF SCH 4 OF PRICE SCHEDULE FOR AMC: On completion of the item of work as per Speciation and Instruction of Engineering In charge of BHEL-95% Balance 5% retained from each RA bill will be released along with the final bill. Contractor shall eligible for AMC bill to BHEL after completion of warranty period (1 year from the date of commissioning). However, contractor shall eligible to bill for supply of operator from the date of commissioning (certified by BHEL).
12.3	Contractor have to submit BHEL entry gate pass for cement, steel, and other materials required for the work, in absence of which their corresponding RA bills shall not be processed.
12.4	Subject to any deduction which BHEL may be authorized to make under the contract, the contractor shall on the certification of the BHEL engineer at site, be entitled to payment explained hereunder.
12.5	The bills will be sent to BHEL, Site Finance for scrutiny and payment will be made after processing / verification only.
12.6	The measurement will be taken by BHEL engineer as per relevant clause of GCC and certify regarding actual work executed in measurement book and bills for work.

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	However no additional payment shall be made in the event of delay in release of payment beyond the stated period.	
12.7	All admissible recovery / adjustment, etc. shall be made from interim payable amount.	
12.8	BHEL site at its discretion may split up percentage break up and effect payment to suit the site condition, cash flow requirement, according to the progress of work.	
13.0	PAYMENT FOR ADDITIONAL/EXTRA ITEMS FOR WORKS	
13.1	It shall be as per relevant clause of the GCC. However, “BPWD Schedule of Rates 2014” as mentioned in the price schedule will be considered.	
14.0	TAXES, DUTIES ETC	
14.1	<p><u>For Imports</u></p> <p>Bidder may please note that import for the project shall be in the name of our Employer / Owner of the Plant / Project and such import other than Office and Household Equipment shall be exempted from payment of Customs Duty, VAT & AIT. Hence successful Bidder is requested to furnish EXHAUSTIVE ITEM –WISE LIST OF IMPORTED MATERIALS for the instant jobs/ works to facilitate us to arrange the requisite papers for exemption purposes. Any documentation needed for availing of Duty Free Imports will be submitted by the bidder in reasonable time having regard to the time for delivery of the work and the time for completion.</p> <p>Temporarily imported erection materials, machineries and spare parts during construction period of Project are exempted from payment of Customs Duty and VAT. Such items shall be exported within six months from the commercial operation date. Documentation for the same to be submitted / maintained by the bidder.</p> <p>Bidder shall quote their rates/ price inclusive of all taxes, duties in line with provisions as mentioned above etc. together with variation thereto during contract period including extension, if any. BHEL shall not release any additional payment in this regard.</p> <p><u>For domestically sourced / Execution</u></p> <p>BHEL will not deduct any VAT from Bidder’s Gross Bill and such bidder need not to load any Output VAT in Bidder’s quoted price.</p> <p>A.I.T unless Exemption Certificate from the appropriate authority/ authorities is/ are furnished under Income Tax Act of Bangladesh , shall be deducted at prevailing rates on Gross Invoice Value from the bills</p> <p><u>For Both Imports & domestically sourced/ Execution</u></p> <p>Except otherwise mentioned above all taxes, Charges, Royalties, Cess any State or Central Levy and other Taxes in or outside Bangladesh for materials supplied for the work and for the execution of the contract shall be borne by contractor and shall</p>	

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	<p>not be payable extra by BHEL</p> <p>Bidder should have valid 12 digit TIN number in Bangladesh prior to start of work.</p> <p>The bidder is responsible for compliance of all relevant Tax Laws of Bangladesh and all other related places outside Bangladesh in connection with this contract and BHEL will not bear any such liability.</p>
14.2	<p>New tax & duties, if imposed subsequent to latest due date of offer submission, as per NIT & TCN, as applicable, by statutory authority after due date of submission of latest price offer and within the contract period including extension, if any (provided reason for extension is not attributable to vendor), shall be reimbursed by BHEL at actual on production of relevant supporting document to the satisfaction of BHEL.</p> <p>However, the Benefits and/or abolition of all existing taxes must be passed on to BHEL against new Taxes, if any, proposed to be introduced at a later date. Vendor shall obtain prior approval from BHEL before depositing new taxes & duties.</p>
15.0	QUALITY CONTROL & QUALITY ASSURANCE
15.1	<p>Contractor's engineers & supervisors shall be adequately qualified and also inclined to do a quality job. The quality assurance engineer shall co-ordinate all aspects of quality control, inspection, implementation of quality assurance procedures laid down in Quality Plan and technical specification by BHEL. He shall fill up quality assurance log sheets/ formats and submit to BHEL for joint inspection and acceptance. The contractor shall fill up, maintain & preserve the quality records in computerized media. BHEL's authorized representative shall be given free access at all time to such quality related records etc. for inspection, review etc.</p>
16.0	QUALITY ASSURANCE PROGRAMME
16.1	<p>The contractor shall arrange for suitable quality assurance programme to control all activities pertaining to the scope of work, as necessary. Such programs shall be outlined by the contractor & shall be finally accepted by BHEL. A quality assurance programme of the contractor shall generally cover the following</p>
16.2	<p>Organization structure and qualification data for key personnel of the contractor for the management and implementation of proposed quality assurance programme</p>
16.3	<p>The procedure for source inspection, incoming raw material inspection, verification of material purchased etc.</p>
16.4	<p>System for maintenance of records.</p>
17.0	GENERAL REQUIREMENTS – QUALITY ASSURANCE
17.1	<p>All materials, components and equipment covered under the specification shall be procured, manufactured, erected, commissioned and tested, as applicable, at all stages as per comprehensive quality assurance program. An indicative program for inspection / test, to be carried out by the contractor, for some of the major items is given in the respective technical specification.</p>
17.2	<p>Field quality plan will detail out the quality practices and procedures etc. to be followed by the contractor's site quality control organization, during various stages of site activities from receipt of material / equipment at site.</p>
17.3	<p>BHEL reserves the right to carry out quality audit and quality surveillance of the systems and procedures of contractor's quality management. Contractor shall provide all necessary assistance to enable BHEL to carry out such audit.</p>
17.4	<p>Quality audit / approval of the results of test & inspection will not prejudice the right</p>

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	of BHEL to reject an equipment service not giving desired performance and shall not in any way limit the liabilities and responsibilities of the contractor in earning satisfactory performances of equipment/ service as per specification.
17.5	Repair / rectification procedure to be adopted to make any job acceptable shall be subject to the approval of BHEL.
17.6	All the latest relevant codes as per technical specification should be available with the contractor at site within 15 days from the date of placement of LOI or otherwise specified by Construction Manager/ Project Manager, BHEL.
18.0	HEALTH, SAFETY & ENVIRONMENT
18.1	REFER DOCUMENT NUMBER ; HSEP:14-MAITREE: DATE:01.03.16
	DOCUMENT TITLE:-HEALTH, SAFETY AND ENVIRONMENT PLAN FOR 2X660MW MAITREE SUPER THERMAL POWER PROJECT
19.0	SPECIFIC REQUIREMENTS FOR ISO 9002
19.1	Contractors shall ensure that all their staff / employees are exposed to periodical training programs conducted by qualified agencies/ personnel on ISO 9002 Standards.
19.2	Contractor shall ensure that the quality is maintained in all the works connected with this contract at all stages of the requirement of BHEL.
19.3	Contractor shall ensure that all MMDs that are used, whether owned by the contractors or used on loan, are calibrated by the authorized agencies and the valid calibration certificate will be available with them for verification by BHEL. A list of such instruments possessed by the contractor at site with its calibration status is to be submitted to BHEL Engineer for control.
19.4	Contractor shall ensure that fitness certificate of the tools & plants, that are in use, whether owned by contractor or issued on loan, are tested by authorised agency and the valid fitness certificate is available for verification by BHEL.
19.5	Contractors shall arrange for the inspection of the works at various stages as required by BHEL. The contractors shall take immediate corrective action for the non-conformances if any, observed and pointed out by BHEL.
20.0	INTEREST BEARING RECOVERABLE ADVANCE/ MOBILISATION ADVANCE
20.1	Not applicable for this tender.
21.0	OVER RUN CHARGES
21.1	Not applicable in this tender.
22.0	REVISION ON ACCEPTED CONTRACT RATE
22.1	Not applicable in this tender
23.0	PRICE VARIATION CLAUSE / ESCALATION
23.1	Not applicable for this tender
24.0	LIQUIDATED DAMAGE
24.1	If the contractor fails to maintain the required progress of work which results in delay in the completion of the works as per the contractual completion period, BHEL shall have the right to impose Liquidated Damage / Penalty at the rate of 0.5% of the contract value, per week of delay or part thereof subject to a maximum of ceiling specified below. For this purpose, the period of delay shall be the delay attributable

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	to the Contractor for the completion of work as per contract. Contract Value for this purpose, shall be the final executed value exclusive of ORC, Extra Works executed, Supplementary / Additional Items and PVC.
24.2	If Completion of work goes beyond specified contract period of 12 (Twelve) months from date of start of work, as certified by Construction Manager, BHEL.LD will be imposed with maximum LD amount i.e.10 % of total contract value.
24.3	BHEL shall deduct the amount of such compensation from any money due or which may become due to the contractor and/or recover such compensation from the bank guarantees / security deposit of the contractor. To be entitled to impose such compensation, BHEL will not be required to prove that he has incurred such amount as actual damage.
24.4	BHEL reserve the right to cancel the order/ contract or a portion thereof at the risk & cost of the contractor and the contractor shall be liable to BHEL for any excess costs thereof.
25.0	GUARANTEE/WARRANTY
25.1	Even though the work will be carried out under supervision of BHEL, the contractor will be responsible for the quality of workmanship, quality of materials/ items and design for which the contractor is responsible.
25.2	Guarantee period shall be 12 months from the date start of guarantee period as per relevant clause of GCC. Commencement of guarantee period shall be from the date completion of work under the contract as certified by BHEL.
26.0	EXTENSION OF TIME FOR COMPLETION
26.1	If the completion of work as detailed in the scope of work gets delayed beyond the contract / completion period due to reasons not attributable to contractor, the contractor shall make request for an extension of the contract and BHEL at its discretion may extend the contract.
26.2	Based on review of agreed & jointly signed L-2 / construction schedule (as enumerated in the tender), the balance work at the end of original contract period less the backlog attributable to the contractor shall be quantified, and the number of months of 'Time extension' required for completion of the same shall be jointly worked out. Within this period of 'Time extension', the contractor is bound to complete the portion of backlog attributable to contractor. Further 'Time extension' or 'Time extensions' at the end of previous extension shall be worked out similarly.
26.3	However if any 'Time extension' is granted to the contractor to facilitate continuation of work and completion of contract, due to backlog attributable to the contractor alone, then it shall be without prejudice to the rights of BHEL to impose penalty / LD for the delays attributable to the contractor, in addition to any other actions BHEL may wish to take at the risk and cost of contractor.
26.4	A joint program shall be drawn for the balance amount of work to be completed during the period of 'Time Extension', along with matching resources to be deployed by the contractor as per specified format. Review of the programme and record of shortfall shall be done.
26.5	During the period of 'Time extension', contractor shall maintain their resources as per mutually agreed program
26.6	At the end of total work completion as certified by BHEL engineer, and upon analysis of the total delay, the portion of time extensions attributable to (i) Contractor, (ii) Force majeure conditions, and (iii) BHEL, shall be worked out and shall be considered to be exhausted in the same order. The total period of time extensions shall be the sum of (i), (ii) and (iii) above and shall be equal to period

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	between the scheduled date of completion and the actual date of completion of contract. LD shall be imposed/ levied for the portion of time extensions attributable solely to contractor after adjusting delay attributable to BHEL& Force majeure and recoverable from the dues payable to the contractor.
27.0	EARNESTMONEYDEPOSIT(EMD)/SECURITY DEPOSIT / PERFORMANCE BOND
27.1	EARNESTMONEYDEPOSIT(EMD)
27.1.1	<p>EMD is to be paid by tenderers for securing fulfilment of any obligations in terms of the NIT.</p> <p>In case of EMD submitted in USD by the successful tenderer, the same shall be converted and adjusted towards the required amount of Security Deposit of 50%. In case of EMD in INR, whole EMD shall be converted into USD as per stipulated selling conversion rate of INR to USD as per State Bank of India (SBI) publication on tender floating date. In case of EMD in BDT, whole EMD shall be converted into USD as per stipulated selling conversion rate of BDT to USD as per Bangladesh Bank publication on tender floating date.</p> <p>Tender cost & EMD can be submitted in INR/ USD/ BDT for this tender.</p> <p>Exchange Rate of currency as available in the web site of Bangladesh Bank on the tender floating/publishing date. If the date happens to be a holiday / or rate is not published, then the exchange rate of next day / next published day will be considered.</p> <p>Irrespective of submission in any of the aforesaid modes, amount of refund of EMD shall be net of submitted EMD less applicable Bank charges.</p>
27.1.2	<p>EMD & Tender cost amount can also be submitted directly by Foreign Bidders (other than Indian bidders) to the followings Bharat Heavy Electricals Limited bank account in Bangladesh-</p> <p>1. SBI (Branch Address:-24-25, DILKUSHA C/A, DHAKA-1000, Branch Code 4984), A/C No. 05160293520001, BDT Account.</p> <p>2. SBI (Branch Address:-24-25, DILKUSHA C/A, DHAKA-1000, Branch Code 4984), A/C No. 05160293510001, USD Account</p>
27.1.3	<p>EMD & Tender cost amount can also be submitted directly by Indian Bidders to the followings Bharat Heavy Electricals Limited bank account in India-</p> <p>1. SBI (Branch Address:-Commercial Branch, Salt Lake, Sector V, Kolkata, Branch Code SBIN0004289), A/C No. 11107800029, INR Account.</p>
27.1.4	Amount of EMD exceeding INR 20 Lakh may be submitted in the form of Bank Guarantee (INR or equivalent USD).
27.1.5	All other terms & conditions shall be as per GCC.
27.2	SECURITY DEPOSIT(SD)
27.2.1	The total amount of Security Deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.

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	<p>At least 50% of the required Security Deposit, including the EMD, shall be collected in before start of the work .Balance of the Security Deposit shall be collected by deducting 10% of the gross amount in USD progressively from each of the running bills of the Contractor till the total amount of the required Security Deposit is collected.</p> <p>If the value of work done at any time exceeds the contract value, the amount of Security Deposit shall be correspondingly enhanced and the additional Security Deposit shall be immediately deposited by the Contractor or recovered from payment/s due to the Contractor.</p> <p>The recoveries made from running bills (cash deduction towards balance SD amount) can be released against submission of equivalent Bank Guarantee in acceptable form, but only once, before completion of work, with the approval of the authority competent to award the work.</p>	
27.2.2	All other terms & conditions shall be as per GCC.	
27.3	Performance bond is not applicable for this tender.	
28.0	CERTIFICATE TOWARDS COMPLETION	
28.1	The work under the scope of the contractor shall be deemed to have been completed in all respects only when so certified by BHEL / owner. The decision of BHEL in this regard shall be final and binding on the contractor.	
29.0	LABORATORY EQUIPMENT	
29.1	You shall provide the following equipment to carry out following tests as listed below.	
29.1.1	Sieve analysis of fine aggregates and coarse aggregates.	
29.1.2	Concrete Cubes shall be taken at site as per instruction of BHEL and the same shall be tested at Site / Govt. approved laboratory / Institution.	
29.2	Other than above mentioned test, any testing required to be carried out at site as per joint discussion at site and technical specification have to be arranged by you for all the works at your own cost.	
30.0	MATERIAL HANDLING	
30.1	No material is envisaged to be issued by BHEL in this contract.	
30.2	However, the civil materials (to be supplied by you as envisaged) are to be handled by you and you will be solely responsible for safe custody of the same.	
31.0	FACILITIES TO BE PROVIDED BY THE CONTRACTOR	
31.1	TOOLS, TACKLES AND SCAFFOLDINGS	
31.1.1	The contractor shall provide all the construction equipments, tools, tackles & scaffoldings required for construction covered under the tender. They shall submit a list of all such materials to BHEL/ customer before the commencement of pre-assembly at site. These tools & tackles shall not be removed from the site without the written permission of BHEL. The T&Ps to be arranged by the contractor shall be in proper working condition.	
31.1.2	The tentative list of T&P to be deployed by you for successful completion of work is mentioned as detailed below.	
31.1.2.1	Sieve Analysis set (for coarse & fine aggregate) – 1 Set each	
31.1.2.2	Slump Cone – 1 Set	

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31.1.2.3	Cube Moulds – 18 Nos.
31.1.2.4	Excavator – 1No.
31.1.2.5	Dozer - 2 Nos.
31.1.2.6	Compaction Equipment-1 No
31.1.3	It may be noted that the list is not exhaustive and is only for general guidance. You are required to provide all necessary T&P (other than those specified to be provided by BHEL) measuring (calibrated) instruments and handing equipments for timely completion of the total works as per contract. In case of project requirement, some activities may have to pre-pone. In such cases you may have to deploy additional T&P. The accepted rate shall be inclusive of such requirements. However, you shall submit deployment plan of all T&P along with tender bid.
31.1.4	In the event of any failure of your part, BHEL may at his discretion also terminate the contract on this ground and take out any or whole amount of the contract from your scope. In the event of your failure to deploy necessary and sufficient T&P/IMTEs. BHEL will be at liberty to arrange the same at your risk and cost including transportation cost of same from any of BHEL site/other agency and charges as applicable shall be deducted from your R/A bill. Decision of BHEL in this regard will be final and binding on you.
31.2	The period of completion being stringent, contractor must ensure sufficient availability of construction materials particularly ply for staging/shuttering /scaffolding at all times of the project/contract period to avoid any delay whatsoever. Initial mobilization of all tools/tackles/construction materials/ scaffolding etc. must be sufficient to maintain desired progress of work. Multiple sets of staging materials must be available with the contractor to avoid any delay on account of any recycling.
31.3	COMMUNICATION
31.3.1	The contractor shall be responsible for arranging all communication facilities for himself at site. The contractor has to establish independent internet / e-mail facilities with mobile connection for all key site personnel and same shall have to be integrated with BHEL's data network and database systems at site.
31.4	FIRST-AID
31.4.1	The contractor shall provide necessary first-aid facilities for all his employees, representatives and workmen working at the site.
31.5	CLEANLINESS
31.5.1	The contractor shall be responsible for keeping the entire area allotted to them clean & free from rubbish, debris etc. during the period of contract. The contractor shall employ enough number of special personnel to thoroughly clean his work-area at least once in a day. All such rubbish & scrap material shall be stacked or disposed in a place to be identified by BHEL/ customer. Materials & stores shall be so arranged to permit easy cleaning of the area.
31.5.2	Similarly the labor colony, the offices and the residential areas of the contractor's employees and workmen shall be kept clean and neat to the entire satisfaction of BHEL/ customer. Proper sanitary arrangements shall be provided by the contractor in the work-areas, office and residential areas.
31.5.3	Contractor shall note following.
31.5.3.1	No staff quarter shall be provided by BHEL.
31.5.3.2	If any minor work such as filling/levelling for movement of vehicles, machinery is required to be done, that shall arranged by the contractor at their own cost.
31.5.3.3	The contractor shall solely be responsible for the safety, quality, & quantity of material, if any, after it is handed over and issued to contractor by BHEL.

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32.0	PROJECT MANAGEMENT/ CONSTRUCTION MANAGEMENT
	To meet the need of construction management at site, contractor shall provide the following services within quoted/ accepted rates.
32.1	CUSTOMS CLEARANCE
	<p>The Contractor shall be responsible for Bangladesh customs clearance of all materials, supplies, equipment, tools and other articles shipped into Bangladesh by him for the implementation of his works, including the food and the personal effects of the Contractor's personnel.</p> <p>All payment for clearance charge, storage charge, etc. which are imposed by the relevant agencies of the Government of Bangladesh, relating to the clearance of equipment, materials and Plant that will be incorporated in the Permanent Works or relating to the Temporary Works shall be borne by the Contractor. Further, if the Contractor is delayed in submitting necessary shipping documents to the Employer, the demurrage charges by the Port Authority will be borne by the Contractor.</p> <p>Tools and equipment and other equipment of the Contractor for use during construction but which are to remain the property of the Contractor and which are to be exported by the Contractor from Bangladesh at the completion of the Work shall be carefully documented and specially listed to facilitate both import and export. The Contractor shall determine prior to shipment the customs regulations applicable to this special case as well as normal import rules and regulations applicable. The Contractor shall also be responsible for inland transport by barge/ truck/train to the Site.</p>
32.2	RECEIVING, TRANSPORTING, HANDLING AND STORAGE
	<p>The Contractor shall receive, transport, handle, store and install all materials and equipment furnished under these specifications, or otherwise involved in the implementation of this Contract. It shall be the responsibility of the Contractor to determine the availability and capacity of transportation and unloading facilities (including for the transportation, delivery and receipt of all equipment, materials, Plant to the Site) and to make the required arrangements to secure the necessary facilities for the same.</p> <p>The Contractor shall be responsible for the prompt unloading of all equipment or materials. The Contractor shall pay any demurrage incurred due to delay in unloading and for any other reasons.</p> <p>The Contractor shall handle materials and equipment carefully to prevent damage or loss. The use of bare rope slings for handling will not be permitted unless specifically approved by the Engineer. Special handling devices shall be used when necessary to avoid damage.</p> <p>In addition the Contractor shall also comply with the requirements of Technical Specification with respect to the receipt, transportation, handling and storage.</p>
32.3	PLATFORMS
	Open platforms shall be constructed by the Contractor at least 50cm above grade and shall have adequate flooring and base structure to support the stored materials and equipment.
32.4	INDOOR STORAGE
	Indoor storage sheds shall be constructed by the Contractor by suitable means for keeping materials and equipment from contact with the ground and to protect it from

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	<p>the environment and outside atmosphere. Sensitive equipment (including inter-alia, electrical, I&C and other equipment) must be kept in dust proof and ventilated rooms and means have to be provided to maintain the moisture content at required levels, in accordance with Good Industry Practices.</p>
32.5	<p>SHORING</p> <p>Shoring shall be provided by the Contractor to safely support materials and equipment not less than 30 cm above the ground. The ground shall be compacted and concreted or asphalted.</p>
32.6	<p>WEATHERPROOF COVERINGS</p> <p>Weatherproof and flame resistant sheeting of sufficient size for outdoor storage shall be provided by the Contractor. The sheeting shall be carefully placed and tied down to prevent moisture and wind from entering underneath the sheeting and to otherwise protect the equipment, materials and other Plant.</p>
32.7	<p>IDENTIFICATION OF CONTRACTOR'S EMPLOYEES, VEHICLES & BUILDINGS</p> <p>The Contractor shall provide each of his employees and his Subcontractor's employees with a name tag bearing the picture, the name or initials of the employee, a serial number and the name of the Contractor. Each employee shall wear his badge visibly to the security personnel at any time.</p> <p>Subcontractor's employees with a name tag bearing the picture, the name or initials of the employee, a serial number and the name of the Contractor. Each employee shall wear his badge visibly to the security personnel at any time.</p> <p>All vehicles and large equipment furnished and used by the Contractor or his Subcontractors on the Work shall be clearly marked with the Contractor's or Subcontractor's business name. The Contractor's offices, stores, depots and other facilities shall also be clearly identified. The detailed requirements are defined in the Safety Health and Environmental (SHE) Plan to be provided by the Contractor.</p> <p>The Contractor shall be liable for and shall provide all aspects of security and security measures for the Site, Employer's site offices and Employer's living accommodation, including guard services, transfer organizations and transport etc.</p> <p>Around-the-clock security presence and operational routine shall be maintained throughout the year. Passes and temporary identification permits shall be issued and examined and access to any part of the Site, the site offices and living accommodation shall be controlled and limited to those who have an authorization.</p>
32.8	<p>EXPATRIATE PERSONNEL</p> <p>The Contractor shall submit to Employer data of all personnel he intends to bring into Bangladesh for the performance of the Work. This data shall include the name and present address of each person, his intended assignment and responsibility in connection with the Work and a concise resume of his experience in the type of work to which he will be assigned. This data shall be submitted to the Employer at least thirty (30) days prior to their expected arrival in Bangladesh.</p> <p>Any expense associated with illness of the Contractor's personnel, including</p>

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	<p>replacement thereof, shall be to the Contractor's account.</p> <p>Costs of passports, visas, travel documents, inoculations and other incidental expenses incurred by the Contractor's non-Bangladesh employees and their dependents occasioned by travel to and from Bangladesh shall be borne by the Contractor.</p> <p>All accommodations and amenities for the Contractor's personnel and families (including all staff and labour) must be provided by the Contractor, and the Employer shall not have any liability for the same.</p>
32.9	SAFETY
	<p>The Contractor shall comply with all ordinances and regulations including ,but not limited to, National, State, Municipal laws and Department of Labour, Transmigration and Co-operation Regulations, and other Applicable Laws that are in force in the locality of the Works and shall comply with any instructions that may be from time to time issued by Employer. The safety rules and regulations laid down in the Safety Health and Environmental (SHE)Plan are to be strictly adhered to</p>
32.10	CONTRACT PLANNING AND CONTROL
	<p>Before starting the Work at the Site, the Contractor shall submit the detail site management organization for approval by the Employer. Such proposals shall show clearly the Contractor's key personnel, classification and qualification with the detailed information and curriculum vitae for above key personnel.</p> <p>The Contractor's Representative, site manager and senior key personnel who will be responsible for working closely with the Employers staff to achieve efficient execution of the Contract shall be competent to conduct meetings and communications in the English language.</p> <p>The management organization shall include a planning and programming tools covering the Work, and shall apply the latest techniques in communication and analysis. The Contractor shall nominate a planning engineer to co-ordinate all planning activities.</p>
32.11	RELEASE OF INFORMATION
	<p>The Contractor shall not communicate or use in advertising, publicity, or sales release, photographs or other reproductions of the Work under this Contract, or descriptions of the size, dimensions, quantity, quality, or other information concerning the Work unless prior written permission has been obtained from the Employer.</p>
32.12	SAFETY AND ACCIDENT PREVENTION
	<p>It shall be the Contractor's responsibility to maintain throughout the construction period, a safety and accident prevention program satisfactory to the Employer which meets the requirements of Applicable Laws and of all other Governmental Authorities authority having jurisdiction over the Works. The rules and regulations laid down in the Safety Health and Environmental (SHE) Plan must be adhered to at all times.</p>
32.13	SECURITY

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	<p>The Contractor shall be solely responsible for the security of all equipment and materials incorporated or to be incorporated in the Work by him and all equipment, materials, tools, supplies, structures, facilities and others properly used in the execution of the Work while in his care and custody.</p> <p>The Contractor shall conform also to any specific security requirements of Employer but such compliance shall not relieve the Contractor from the total responsibility for security.</p>
32.14	HOUSING & TRANSPORT
	<p>The Contractor shall arrange for suitable housing units together with furnishing and utilities in the close proximity of the construction Site for accommodation of all his expatriate personnel. If the services of any expatriate personnel of the Contractor or its Subcontractors.</p> <p>If the Contractor decides in consultation with the Employer that the health or safety of any of his personnel is or might be jeopardized by political or health hazards in Bangladesh, the Contractor may, after forty eight (48) hours' notice, order its employees and the employees of its Subcontractors and suppliers to return to their headquarters or other safe location, in which case the Work will be deemed to be suspended for the duration as may be jointly decided, Provisions of Clause 34.0 of the General Conditions of Contract "SUSPENSION OF THE WORK" will apply in case of such suspension of work.</p> <p>The Contractor shall provide to the extent agreed transport vehicles for use during construction period by the expatriate as well as local personnel.</p>
32.15	PROPRIETARY NAMES
	<p>Whenever a material or article is specified or described on the plants by using the name of a proprietary product or by using the name of a particular manufacturer or vendor, the specific item mentioned shall be understood as establishing the type, function and quantity desired. Unless otherwise specified, other manufacturers' products which in the opinion of the Employer are equivalent of those specified will be accepted. Such items shall be submitted for approval prior to their incorporation in the Works.</p>
32.16	PERFORMANCE OF THE WORK
	<p>The Contractor shall conduct all Works in such a manner as to cause the least possible disturbance or damage to the environment. In cases where some temporary disturbance or damage is unavoidably caused due to the nature of the work, the Contractor shall, as soon as possible, remove the cause of such temporary disturbance, repair the damage and, in general, restore the affected areas to their original condition to the extent possible, and in a manner satisfactory to the Employer, the landowner and any authorities.</p> <p>Prior to commencement of the Work, the Contractor shall provide details of its EMP specifically addressing the following: Environmental management system and manual – policies, standards and procedures, and programs; organization / responsibilities;</p>

	<p>Training Incident and accident investigation; Management support; Environmental protection, mitigation and restoration; Emergency preparedness and response;</p> <ul style="list-style-type: none"> • Socio-economic plans, including historical and cultural resources; • audit, monitoring and corrective action; • information and records management; and, • Integration of safety & health requirements with the EMP. <p>All aspects of the EMP and the environment work requirements are the Contractor's accountability and the Contractor, its management and its Site supervisory staff will be held responsible for its implementation.</p> <p>All relevant Safety and Health Environment (SHE) issues, results of audit and monitoring plans and programs, and SHE performance indicators will be communicated to the Contractor's management and the Employer through daily inspection meetings and reports, weekly construction meetings, monthly meetings, and in terms of the monthly project report.</p> <p>The Contractor shall ensure that he has complete knowledge of all the laws, statutes, statutory instruments, regulations, rules, treaties and conventions (by whatever name or title), environmental protection regimes and other Applicable Laws, in each of the jurisdictions where he shall perform the Work. The Contractor shall also take all necessary measures to protect the atmosphere, ocean, rivers, groundwater, seaports and land from pollution. In any event the Contractor shall promptly use its best efforts to eliminate and clean up any pollution caused, directly or indirectly, by the Contractor or which occurs at the Site, or other sites associated with this Work.</p> <p>The Contractor shall cooperate in all respects with any participant environmental representatives and with governmental persons, and allow them to inspect any and all equipment or operations that they wish to observe. The Contractor shall, at all times, be ready to discuss the implementation of the Contractor's safety, health and environmental protection program.</p>
32.17	INSTRUCTION TOWORKERS(ORIENTATION/ INDUCTION)
	<p>The Contractor shall ensure that all employees, subcontractors, servants and agents (and employees, servants and agents of all Subcontractors) participating in the Work, are advised about the strategy and plan for managing the environmental-social issues related to the work, and on their role and responsibility; instructed on the requirements of environmental laws, rules, regulations and specific permit conditions applicable to the area and the Work;</p>

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	instructed on the application and use of the required personal protective equipment (PPE) for their job duties and functions; and, have received the appropriate training in the use, application and maintenance of PPE.
32.18	RISKMANAGEMENT
	The Contractor shall clearly state the management methods and techniques to be used to identify potential hazards and risks at any stage prior to the execution of a particular activity. If required, specific procedures shall be developed by the Contractor to eliminate or mitigate the hazard to a safe level prior to the work being authorized. All requirements of the project’s environmental impact assessments (“EIA”) and other relevant assessments and conditions of approvals accorded by the relevant Governmental Authorities must be considered by the Contractor in the development of the Contractor’s Safety and Health Environment (SHE) Plan, EMP and other related/relevant plans. The Contractor is required to implement a system whereby all risks associated with hazardous substances, whether chemicals, by-products, effluents or waste materials, are minimized and/or eliminated. In conjunction with its emergency plans and procedures, the Contractor shall develop and submit to the Employer’s Representative a “Safety Philosophy Document” that details the strategy to be adopted for control and shutdown systems, including alarms and programmable electronic control systems.
32.19	EMERGENCYPREPAREDNESS, RESPONSE&CONTINGENCYPLAN
	The Contractor shall prepare an Emergency Preparedness, Response and Contingency Plan (a detailed program of action to minimize the effects of an abnormal event requiring prompt actions beyond normal procedures to protect human life, minimize injury and safeguard the environment) for environmental and personal safety emergencies or incidents. This plan shall be found within the Contractor’s Safety & Health and/or Environmental Programs. The purpose of the plan shall be to limit insurance and damage to people, property and the environment respectively. The plans, procedures, and trained personnel shall be in place for the duration of the Contract to manage and control emergency situations and incidents in a proper and expeditious manner.
32.20	SERVICINGAND FUELLING
	To ensure adequate response capability in the event of a fuel, ground spill or other spill, all fuel transport vehicles and the Contractor’s foreman vehicles shall carry a suitable amount of commercial absorbent material. In addition, floating absorbent pads and booms for spill clean- up on open water shall be kept accessible on the construction Site. All service vehicles and/or equipment utilized for re-fuelling must be equipped with automatic shut-off valves. All equipment or servicing activities with the potential for accidental spills (e.g., oil changes, hydraulic repair, coolants) will require appropriate containment methods to be in place (i.e., storage containers, impervious liners, absorbent materials, etc.) prior to the start of the activity.
32.21	SOILANDGROUNDWATER PROTECTION
	The Contractor shall develop and implement soil and groundwater protection

	measures. Protection measures shall include bunding and impervious floors, where appropriate. The Contractor shall make an assessment of groundwater quality prior to the start of construction and prior to commissioning to demonstrate to Employer’s Representative that construction activities have not adversely affected the environment. Groundwater quality shall be monitored throughout the construction phase.
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32.22	HEALTH HAZARDS
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	<p>Worker and public health is a critical part of any SHE management program. The Contractor shall control substances and materials that may be a hazard to worker’s health. These controls shall be a combination of hazard communication, safe work systems and the controlled handling and disposal of hazardous materials The Contractor’s controls shall commence at contract preparations and procurement stages, where all vendors and subcontractors shall be required to submit Material Safety Data Sheets (“MSDS”) for all hazardous materials that will be supplied, provided or brought onto the Site. These MSDSs shall be forwarded to Contractor’s SHE Manager for review and records management.</p> <p>In the event hazardous materials are to be used, the Contractor shall carry out assessments according to recognized international standards, to determine if there are any more suitable or less hazardous materials that could be substituted for the original materials. Only when the Project Manager, Employer and his Engineer and the Contractor are satisfied that assessments have been completed, and control measures are adequate to protect worker health, the materials shall be allowed on the project worksite. The Contractor’s control measures shall include:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Material transport, storage, labelling, packaging, and disposal, <input type="checkbox"/> Personnel protective equipment (PPE), <input type="checkbox"/> Health surveillance and monitoring, and <input type="checkbox"/> Emergency procedures and training. <p>All explosive materials to be used for blasting during Site preparation shall only be handled by approved and qualified personnel. All explosive materials shall be stored in a secure, limited access sites, protected from workers and the public, and removed from the site every day and immediately after use.</p> <p>All radioactive equipment and materials shall only be used by qualified, approved and permitted personnel. Radioactive materials must be stored in approved and protected containers. Radioactive materials and waste products shall not be disposed of on-site but removed in protective containers and disposed at government approved storage and disposal sites</p>
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32.23	WASTE MATERIAL MANAGEMENT
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	The Contractor shall ensure that waste management identification, handling,
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	<p>transport and disposal are addressed in the development of their SHE management plans.</p> <p>The Contractor’s employees responsible for handling hazardous materials (including wastes) shall receive training and certification in the handling, transport, storage and disposal of chemicals and regulated or hazardous materials. Where applicable, Workplace Hazardous Materials Information System (“WHMIS”) certification and training, or its equivalent, shall be made available to employees. Regular written updates shall be included for continued employee awareness.</p> <p>The Contractor shall ensure proper segregation and isolation for wastes that could react together in the event of a leak or other incident. These facilities shall include lockable, fire proof cabinets or storage in shelving units separated by fireproof barriers or walls.</p> <p>The Contractor shall dedicate a space for waste and drum storage. The storage area must be easily accessible for spill containment and emergency response and not be susceptible to flooding.</p> <p>For any waste storage area which could accumulate hazardous gases, vapours, or dust due to the nature of the wastes stored, the Contractor must supply suitable ventilation or other controls to ensure exposure by employees is kept below required minimum standards. Storage areas for hazardous wastes shall be designated as restricted areas and shall be suitably equipped to control an incident involving a leak or spill.</p> <p>The Contractor shall make available suitable fire extinguishing equipment and proper electrical bonding equipment in all areas involving the handling and storage of flammable and reactive wastes.</p> <p>Disposal of wastes by burning will not be allowed on the construction site.</p> <p>Sumps and waste pits shall not be used for waste storage at the work site. Sumps should only be used for temporary control and containment of spills, equipment leaks, etc. If the Contractor encounters former sump sites or waste pits during ground surveys, the Contractor shall be identify and investigate the same. If any contamination is suspected, the Contractor shall excavate, remove and where required replace with an approved sump container system.</p> <p>The Contractor shall develop and implement a waste disposal control system. This system shall control every load of waste leaving the worksite, detailing the type of waste disposal, waste origin and destination, approximate weight, date and transport details on a waste manifest/document. These documents shall be audited.</p>
32.24	SPILL RESPONSE AND CONTROL
	<p>All spills shall be stopped and cleaned up immediately to avoid potential impact to water and soil quality. All spills shall be reported using the Incident Management Process. Under no circumstance contaminated material may be “stored” on the work site.</p>

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	<p>All spills shall be rapidly stopped and appropriately eliminated as defined in the Contractor's Emergency Preparedness, Response and Contingency Plan. Spills shall be contained in a way that will prevent their redistribution. All ground spills shall be contained as quickly as possible through diking, suction methods, excavation and the use of absorbents or other appropriate recovery techniques.</p> <p>A list including the type, quantity and location of the storage of retaining and clean up equipment to be used during construction shall be prepared. The list shall include the procedures and mitigation measures to be used in case of a spill. A written inventory will also be prepared, before starting construction works, including lubricants, fuels, solvents, chemicals and other materials that might be accidentally discharged during construction.</p> <p>All on-site fuel storage tanks shall be located in an impermeable secondary containment area with a holding capacity equal to 110% of the largest tank within the berm. For above ground tanks, the tanks shall be surrounded by a berm, the entire area covered with a suitable commercial absorbent material and with a sealed plastic liner to form an area that can be pumped out in the event of a leak in the tank. A waste handling plan shall be made with the purpose of identifying the procedures necessary for cleaning and disposing of residues from a major spill. In the event of a spill, the Contractor shall make all resources available to contain and clean up the spill. Traffic shall be minimized in and around the spill site.</p>	
32.25	NOISECONTROL	
	<p>Noise level specifications to be followed by the Contractor in design, assessment and monitoring activities are based upon the maximum (acceptable) levels which plant personnel may be exposed during their normal working duties. The Contractor shall be familiar with and comply with the environmental guidelines as issued by the relevant Governmental Authorities in Bangladesh, including the Department of Environment, Government of Bangladesh and other relevant Applicable Laws.</p> <p>All internal combustion motors of vehicles, machinery and equipment used during the construction phase, shall have adequate noise silencers, and shall be kept in good operating conditions, during the entire construction period. Where temporary noise pollution of greater than 85 dBA will occur, temporary silencers shall be used. Equipment noise should not exceed the specified limits at accessible locations.</p>	
32.26	CONSTRUCTION TRAFFICPLANNING	
	<p>The Contractor shall ensure that the construction Site is organized in such a way that pedestrians can move safely and without risk. The Contractor shall firstly select the lowest period of traffic flow for equipment crossings; and secondly, ensure that traffic patterns and entrances to private and public roads for access are not obstructed during construction activities. All site entry will be controlled by vehicular passes. Road closures, on-site and off-site, shall be with the approval of the Contractor's site manager and/or road closure permit. Site traffic shall be minimized and speed limits posted and enforced</p>	

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32.27	HOUSEKEEPING
	<p>All construction debris and other garbage shall be continuously collected and disposed at an approved facility. At the end of each day, all waste material shall be removed from the construction Site and deposited at the approved allocated area. The approved procedures to manage waste shall be specified in the Contractor's waste management plan. All empty hazardous material containers shall be removed from the work area as soon as is practicable. All empty gas containers and bottles shall be returned to their storage area and secured properly. The Contractor's shall prepare a pest and vector control program to address specific site conditions, including a mosquito control program.</p>
32.28	CONSTRUCTION CAMPS
	<p>The location of work places, camps, areas of storage and installation of works, compression, regulation and communication stations shall be located on levelled land, avoiding areas with non-cohesive soils to avoid erosive processes.</p> <p>Health conditions in the camp shall be controlled in order to prevent contamination of adjacent groundwater or surface water resources. Domestic sewage generated at the construction sites shall be eliminated by two systems of septic/absorption tanks or chemical toilets located on the sites.</p> <p>Solid combustible garbage shall be collected and secured daily, until disposal, to prevent the attraction of livestock, vermins and wild animals. Residue shall be disposed of, along with non-combustible garbage, in a disposal location approved by the Authorities.</p> <p>Upon abandonment, the camp site area shall be cleared of all trailers, piping, cable, insulation, lumber, blockage, metal wastes, etc., and re-graded according to the landscaping concept. These guidelines and procedures for the management of domestic and other waste shall be specified in a plan.</p>
32.29	SITREGULATION MANUAL
	<p>The Contractor shall thirty (30) days prior starting any Work at the Site furnish a detailed and comprehensive site regulation manual for its proposed operation and works on the Site, which shall be based on the site related regulations and requirements in the Contract and which shall be subject to Employer's approval. All work on the Site, shall be carried out in compliance with the so approved site regulation manual.</p>
32.30	PLANNING & MONITORING
32.30.1	<p>The bidder shall prepare detail construction schedule (L-3) as per completion dates given in this document. This schedule must include all milestone and key activities for each subsystems / components in the areas of engineering (wherever applicable), procurement, manufacture (wherever applicable), excavation / construction / erection. This network must conform to the overall project schedule. The bidder should also ensure monitoring of these activities at least weekly basis to start with and on daily basis whenever required by BHEL.</p>
32.30.2	<p>The bidder shall also prepare progress report indicating progress on key activities, management summary for critical activities and list of actions requiring attention of BHEL. This schedule is to be preferably made in PRIMAVERA / MS PROJECTS, so</p>

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	that the same is compatible with BHEL's project management software.
32.31	PROGRESS REPORTING
32.31.2.1	The bidder shall submit daily, weekly and monthly progress reports for work force, materials reports, consumables (cement / steel / gases / electrodes) report and other reports as per pro-forma considered necessary by BHEL. In case of any failure on contractor's part to comply with this, BHEL may at its discretion, consider to withhold part payment against their RA bills.
32.31.2.2	The progress report shall indicate the progress achieved against planned with reasons indicating delays, if any, and shall give the remedial actions which the contractor intends to take to make good the slippage or lost time, so that further works again proceed as per the original program and the slippages do not accumulate and effect the overall program.
32.31.2.3	The daily work force reports shall clearly indicate the work force deployed, category-wise specifying also the activities in which they are engaged.
32.31.2.4	Weekly progress review meetings will be held at site during which actual progress during the week vis-à-vis scheduled program shall be discussed or actions to be taken for achieving targets. For discussions, the contractor shall present program of subsequent week. The contractor shall constantly update/revise his work program to meet the overall requirement.
32.31.2.5	Periodic progress reviews on the entire activities of execution in respect of supply and works in scope of bidder will be held once in a month at Kolkata / site. These meetings will be attended by reasonably higher officials of the contractor and will be used as a forum for discussing all areas where progress needs to be speeded up. The contractor shall be further responsible for ensuring that suitable steps are taken to meet various targets decided upon such meetings.
32.31.2.6	Successful bidder has to provide for electronic/ computerized storing and reproduction / printing / plotting of various data, log sheets, protocols, measurements etc. These may be stored in CD (as per requirement) and handed over to BHEL as per requirement.
32.32	PHOTOGRAPHS
	The Contractor shall furnish to the Employer three (3) hard copies (and three (3) soft copies in .jpeg or .pdf format on separate CDs/DVDs) of each photograph taken to show shop assembly of equipment and the monthly stages of equipment installation. Each photograph shall show upon its face, the date, the Contractor's name, and description of the view taken. Photographs shall be taken of each assembly or sub-assembly to indicate the progress of the Work. Additional photographs shall be taken when and where required as directed by Employer and/or the Engineer. Shop photograph shall be not smaller than 120 mm by 150 mm in size.
32.33	SITE ORGANIZATION
32.33.3.1	The contractor shall maintain a site organization of adequate strength in respect of manpower, construction machinery and other implements at all time for smooth execution of the contract headed by a competent construction manager for site operations with sufficient level of authority to take site decisions. The vendor will submit organization chart (showing the name of SITE-IN-CHARGE) with individual bio-data indicating various levels of experts to be posted for supervision in the fields of supervision and execution, quality, material management, planning, safety, etc.

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	The organization shall be reinforced from time to time, as required to make up slippage (if any) from the schedule without any commercial implication to BHEL. The organization chart is to be submitted within 10 days from the date of LOI.	
32.33.3.2	Following (minimum) engineering manpower with power plant construction background to be deployed at site by the successful vendor for their day to day supervision etc.	
32.33.3.3	Deputation of above man-power shall be jointly decided at site in line with construction schedule.	
32.33.3.2.1	Qualified safety officers with assistants (exclusive for safety supervision for project jobs).	Officer – One No.
32.33.3.2.2	Engineer & Supervisors for quality inspection.	One no
32.33.3.2.3	Site supervising engineer and supervisors for civil works	One No. Engineer and one Number Supervisor
32.33.3.4	Engineer / supervisor for other functions like store & purchase, material management, fin, administration etc. are to be provided as per site requirement and not considered above.	
32.33.3.5	In the event of non-deputation of engineer/ supervisor by the bidder as per above agreed schedule, BHEL shall reserve the right to deduct USD 1050 per man-month for engineer, USD 650 per man-month for the supervisor / safety officer / chemist and USD 650 per man-month for safety supervisor from RA bills. Further induction of manpower regarding site supervisor & site engineer will be decided at site as per requirement without any financial implication.	
32.33.3.6	BHEL reserves the right to reject or approve the list of personnel proposed by the contractor. The persons whose bio-data have been approved by BHEL will have to be posted at site and deviation in this regard will not be permitted unless specific & reasonable justification is made.	
32.33.3.7	In addition to above, a well experienced qualified engineer to be designated, as 'Project Co-coordinator', shall be deployed by the contractor. Such engineer shall have adequate exposure on the job and shall remain fully involved in all planning activities, guidance etc. to contractor's own team during the complete execution period of contract.	
32.33.3.8	The contractor should also submit to BHEL for approval a list of T&Ps along with their fitness certificates. The tools & tackles shall not be removed from site without written permission of BHEL.	
32.33.3.9	The contractor should also submit network programs for the erection of various items. These networks shall show the BIFCL/ BHEL hold points, which have to be cleared by BIFCL/ BHEL, or their authorized representatives before further erection can take place. These programs for the erection would clearly identify responsibilities of the contractor and BIFCL/ BHEL. It is the responsibility of the contractor to get the Networks approved by BHEL within four weeks of the date of finalization of award of work/ placement of LOI.	
33.0	TEST CERTIFICATE FOR T&P	
	All T&P, lifting tackles and pulling devices to be deployed by the contractor must bear valid / latest test certificates for their suitability, and the documents shall be	

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	<p>preserved at site.</p> <p>In case of expiry of validity of any such test certificate during construction, the contractor shall arrange for revalidation of the same well in advance, so that the construction activities do not suffer on account of non-availability of such Test certificates.</p> <p>The contractor should also submit to BHEL for approval a list of T&Ps along with their fitness certificates. The tools & tackles shall not be removed from site without written permission of BHEL.</p>
34.0	OTHER TERMS
34.1	All other term & conditions of this specification shall be governed by the pertinent provisions of GCC and other volumes of this tender, as applicable.

34.2 AMC OF WEIGH BRIDGE

SCOPE OF WORK FOR NON COMPRESIVE ANNUAL MAINTENANCE CONTRACT- 1 NO. 60 T CAPACITY WEIGH BRIDGE:

- (1) Successful bidder's Engineer will visit of Rampal plant once in a month for preventive maintenance of the Weigh Bridge and will inspect Weigh Bridge and will enter the inspection report in the work sheet provided by BHEL.
- (2) In case of Breakdown, Successful bidder's Engineer will attain the machine within 48 hours after receipt of intimation.
- (3) Successful bidder's Engineer will note down the wearing parts and spares, accessories and consumable requires for replacement in near future and will intimate the same to BHEL, which shall be arranged and kept ready for replacement during next service visit.
- (4) Separate payment for replacement of wearing parts and spares, accessories and consumable etc. will not reimbursed by BHEL.
- (5) Experienced operator for the round the clock operation as & when required shall be provide by contractor as per the price schedule.

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PREAMBLE	
1	This preamble forms part of tender document and schedule of items. The tenderer should read this preamble carefully before filling in rates for various items. Clauses under this preamble shall be read in conjunction with various volumes of tender and other tender sections as applicable and shall have precedence over any contrary statement mentioned any where in this document.
2	The work shall be carried out strictly as per specifications, description of the items in these schedule and / or engineer's instructions. Drawings enclosed with the tender are only preliminary and for tender purposes and giving some idea of the work involved. The work is to be executed as per drawings & documents, which shall be furnished during execution.
3	Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.
4	Unless specifically mentioned otherwise in the tender document, the tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, constructional plants, temporary works, labour, dismantling of all temporary piping, structures, valves, pumps, tanks & other misc. equipment, strengthening of roads/culverts/bridges etc. including arranging all clearances etc. required for carrying out different activities & tests, materials, levies, taxes(except service tax), transport, layout, repairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the complete tender document and this schedule.
5	The quantities of the various items mentioned in this schedule of items are approximate, based on very preliminary information and may vary to any extent or be deleted altogether. The quoted rates of each item will remain firm throughout the period of execution including extension, for reasons whatsoever, as long as variation in the total value of work executed under any part of this contract including extra items, if any but excluding any price variation remains, within plus minus thirty percent ($\pm 30\%$) of the awarded price as per LOI .
6	Prior written approval of BHEL shall be sought by the contractor in case quantity variation of any item crosses +50% (plus fifty percent) limit during execution and approval to be obtained before execution of further quantity for this item.
7	In case Sealed /Paper Price Bids are opened for finalisation of the tender, for any Item Rate/BOQ based contract, possibility of variation of quantity/ addition/deletion of items can not be ruled out. Under such circumstances, after execution of work, if it is observed that standing as L-1 is changed based on actual quantity executed, the bidder shall give suitable rebate to maintain your standing as L-1. Since this aspect can be assessed at the end of execution, necessary adjustment will be effected at the end of execution in final bill.This condition shall not be applicable where the tender is finalised through Reverse Auction.
8	BHEL reserve the right to rationalize the rates, quoted by L-1 bidder against unit rate items and/ or other optional items with respect to item-wise lowest rates (amongst the participating bidders), before placement of order.
9	The rates quoted shall be inclusive of cleaning of site of any vegetation, dressing , clearing of old structures and leveling etc. including fixing of grid pillars, benchmarks etc. required for commencement of site activities. No separate payment will be made towards the same.However, if separate rate for such item is available in the rate schedule, the same shall be considered.
10	Rates shall be quoted in figures and in words in clear legible writing. No overwriting is allowed. All scoring and cancellations should be countersigned and in case of illegibility the interpretation of engineer shall be final. All entries shall be in English language.
11	All works item wise shall be measured upon completion and paid for at the rates quoted and accepted as per BHEL approved payment schedule/billing break-up.
12	The tender shall be deemed to have visited site and made himself aware of all the site conditions, studied the specifications and details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site.
13	No splitting of the job is envisaged. Decision of BHEL in this regard shall be final and binding to the bidders.
14	Bidders are not allowed to alter the Price Schedule format including item description,quantity etc. and the offer is liable for rejection if the bidders submit their prices in Price Schedules modified by them.BHEL reserves the right to reject the offers of bidders who submit offers in Price Formats which are modified/alterd by them. Also putting any comments instead of rates/price in the designated column of the rate schedule shall make the offer liable for rejection.
15	Bidders to note that for Civil &/Structural packages, against a particular item against a ST No. appearing in more than one schedule of the BOQ, same rate must be quoted in all schedules for that particular items with same descriptions. If by error, different rates are quoted in different schedules for same ST No.(i.e. item with same description), then the higher of the rates shall be considered for evaluation but awarding shall be done with the lower rate ,if the bidder becomes L-1."
16	For Lumpsum Service Contract : The items/components indicated in the tender is indicative and may vary to any extent. No compensation shall be payable in case of any variation in the items/components listed in the bill of quantities if the executed weight remains within the variation limit. However, in case of deletion of any item or addition of new items over and above the items listed or variation of existing quantity beyond variation limit specified, adjustment (i.e. Payment or recovery as the case may be) shall be done on pro-rata basis based on the Rate per MT worked out from the quoted lump-sum Price and the total weight of components listed /indicated in price schedule plus 15% weight variation limit.

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PREAMBLE	
17	Engineer's decision shall be final and binding on the contractor regarding clarification of items in the schedule with respect to the other sections/volumes of the contract.
18	In case of tender for Civil and/or Structural works, if the Non-schedule items are not quoted by the bidder, it will be treated at par with rate of corresponding item of CPWD/PWD/DSR/BPWD schedule as prescribed in the tender/BOQ cum Rate Schedule.
19	No interest, whatsoever, shall be payable by BHEL on the security deposit, any bank guarantee submitted or any amount due to successful bidder/contractor.
20	Size and weights of various items are mentioned in the attached BOQ cum rate/price schedule for reference purpose only & these shall not be taken into consideration for quoting/calculating amount in the rate schedule. These shall be utilised as per relevant sections of tender. Bidders shall quote for each item in the rate column, taking unit as mentioned in the quantity column. Rates shall be filled in both figures and words. Amount shall be calculated based upon these rates multiplied by the mentioned quantity for the respective items.
21	Bidder's Total price will be considered for evaluation unless stated otherwise.
22	In case of BOP packages, if Bidder does not quote/indicate the price for freight chagses against indicated rate schedule, the same shall be considered as 2% of basic price and adjusted with the total quoated price against each item keeping the total quoted price unaltered.

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SCH-1 : TOTAL PRICE			
BIDDER NAME:			
SL NO	DESCRIPTION	PRICE SCHEDULE REF	TOTAL QUOTED PRICE (IN USD)
1.0	SUB-STRUCUTURE FOR FIELD HOSTEL-RESIDENTIAL QUARTERS-SITE OFFICE-COVERED STORE ,HARD SURFACING AND MISC.CIVIL WORKS AT 2X660MW MAITREE RAMPAL PROJECT ,BANGLADESH.	SCH 2 - BREAK UP OF TOTAL PRICE	<u>IN FIGURES:-</u>
			<u>IN WORDS:-</u>
2.0	NON-SCHEDULE ITEM Quote % above or % below or at par for items not covered as above of this schedule. The rate shall be derived from Schedule of Rates 2014, PWD, Govt. of Bangladesh		
1a)	Rate of complete item	% above/	% below/at Per of BPWD Rate Schedule 2014
1b)	Rate of supply of material at site only	% above/	% below/at Per of BPWD Rate Schedule 2014
1c)	Rate for execution complete excluding supply of materials.	% above/	% below/at Per of BPWD Rate Schedule 2014
NOTE			
1.0	Bidder shall quote total price for total price of SCH-1- Part only at sl no 1 above. All other amounts/ rates of each item of works in respective schedules/ parts will be derived based on allocated percentages. As such, any uncalled figure/ amount noted at any other place/ schedule of Volume-III will not be recknoed & will stand null & void.		
2.0	Bidder to note that total price at sl no 1.0 above shall be considered for evaluation & awarding. As such grand total price should be complete in all respect for the full scope defined and considering all terms and conditions.		
3.0	Bidder to note that SCH-3 of respective items, unless specified otherwise in the description of items.		
4.0	Bidder's quoted total priceat Sl. no 1 above respectively shall be apportioned into amount of various items of works based on allocated percentages against respective item, in respective schedules/ parts. As such, bidder shall not indicate/ quote any amount/ rate in these schedules/ parts and any amount/ rate quoted against any item shall not be taken into cognizance/ account and offer may be liable for rejection.		
5.0	Based on the itemwise percentage allocations, the amount for the individual items of the Bill of Quantity shall be arrived at. The rates of individual items shall be derived from the amount against each items after roundeding off .		
6	Bidders to note that this is an item rate contract. Payment shall be made for the actual quantities of work executed at the unit rate arrived at as per SI No.5 above.		

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SCH-1 : TOTAL PRICE	
7.0	Unit rates of each item of works of respective schedules/ parts will be derived by dividing derived amount by corresponding quantities. In deriving the unit rates of each item in this manner, figures only upto 2 decimal places will be taken into account. Any adjustment, if required, due to such methodology, will be effected in final bill.
8.0	Successful bidder shall draw a schedule of quantities of various items of work of SCH-3 and obtain BHEL's approval/ clearance in writing before procurement, supply, etc.
9.0	Any item as per scope of work, if not included in the price quoted above and shown separately will not be taken cognizance of and the offer shall be liable for rejection.
10.0	Price format shall not be changed by bidder in any case and it may lead to cancellation of their offer.
11.0	The quantity of items may vary during execution mainly due to actual requirement etc. The unit rates work out from the overall amount quoted & accepted by BHEL shall be
12.0	For payment of non schedule items, the rate shall be derived from Schedule of Rates 2014, PWD, Govt. of Bangladesh.

VOLUME-III
PRICE SCHEDULE, REV-01

SUB-STRUCUTURE FOR FIELD HOSTEL-RESIDENTIAL QUARTERS-SITE OFFICE-COVERED STORE ,HARD SURFACING AND MISC.CIVIL WORKS AT 2X660MW
MAITREE RAMPAL PROJECT,BANGLADESH

TENDER DOCUMENT NO - PSER:SCT:KLN-C1843:17
SCH-2 : BREAK UP OF TOTAL PRICE SCHEDULE

SL NO	DESCRIPTION	PRICE SCHEDULE REF	WEIGHTAGE (Nearest to the 6 decimal points) W.R.T THE TOTAL OF VENDOR QUOTED PRICE IN SCH-1
1.0	CIVIL	SCH 3 -Civil	98.9352570%
2.0	AMC & OPERATION OF WEIGH BRIDGE	SCH 4 - AMC & Operation	1.0647430%
	TOTAL ESTIMATED PRICE		100.0000000%

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SUB-STRUCTURE FOR FIELD HOSTEL-RESIDENTIAL QUARTERS-SITE OFFICE-COVERED STORE ,HARD SURFACING AND MISC.CIVIL WORKS AT 2X660MW MAITREE RAMPAL PROJECT,BANGLADESH				
TENDER NO - PSER:SCT:KLN-C1843:17				
<u>SCH-3</u>				
SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
1.0	PILING WORK			
1.1	Pre-cast made in RCC with minimum cement content relates to mix ratio 1:1.5:3 having minimum f _{cr} =30 Mpa , and satisfying specified compressive strength f _c =25 Mpa at 28 days on standard cylinders as per standard practice of code ACI/BNBC/ASTM & cement conforming to BDS EN 197-1-CEM 1/ASTM-C-150 Type -I ,best quality coarse sand (FM 2.2), 20mm down well grade stone chips conforming to ASTM C-33,mixing in standard mixture machine and fed by standard measuring boxes, including all related works like cost of breaking chips, screening through proper sieves,cleaning and washing, centering and shuttering with MS sheet,MS angle, F.I bar, nuts and bolts, champering edges if so, preparation of casting beds, lying polythene there in, placing reinforcement cages in position, casting, compacting by vibrators and tapered rods as where necessary , curing for 28 days etc. ,cost of water, electricity and other charges, providing fitting fixing pile shoes in position as per design and drawing ,tools, plants and equipments, mon tubes by supplying & laying the same on underground / under floor / wall, including laying, termination etc. all complete.; Supplying, fitting, fixing 40 mm dia wheel valve, gun metal of approved brand and make tested to 21 Kg/sq.cm.;Supplying & laying 10 Sq. m 1.1			
1.1.1	360mm x360mm size pre-cast pile (1:1.5:3) with stone chips.(length to be measured from pile cut-off level to the bottom of pile for payment)	RM	4104	5.188195%
1.1.2	Pile shoes as per design	Each	216	0.459716%
1.1.3	Mobilization and demobilization of drop hammer type pre cast pile driving rig.	Each	2	0.005684%
1.2	Driving 360mmx360mm size pre-cast pile with drop hammer type rig and maintaining Driving log in prescribed format. Before commencing driving operation , Contractor shall submit method statement for carrying the driving operation including sequence of driving to the Engineer for approval. However Engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.			
1.2.1	up to 6m	RM	1296	0.671520%
1.2.2	From above 6 m to 12m	RM	1296	0.738348%
1.2.3	From above 12 m to 15m	RM	648	0.406361%

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
1.2.3	From above 15 m to above	RM	864	0.645291%
1.3	Conducting initial load test for lateral load on single pile in accordance with ASTM-D3966 upto a maximum test load of 3 times the safe load capacity of pile including preparation of pile head for testing, necessary excavation, all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, submission of test report but excluding the cost of installation of pile etc all complete as per specification, drawing and as directed by the engineer in-charge for the following.			
1.3.1	360 mm x 360mm square driven pre cast RCC pile	Each	1	0.056300%
1.4	Conducting initial load test for axial tension on single pile in accordance with ASTM-D3689 upto a maximum test load of 2.5 times the safe load capacity of pile including preparation of pile head for testing, necessary excavation, all arrangements of loading, unloading, test equipments/accessories, jacks, recording of results, submission of test report but excluding the cost of installation of pile etc all complete as per specification, drawing and as directed by the engineer in-charge for the following.			
1.4.1	360 mm x 360mm square driven pre cast RCC pile	Each	1	0.119148%
2.0	EARTH WORK			
2.1	Earth work in stripping of top soil upto a maximum depth of 0.30m below ground level so as to exclude all debris, grass, vegetation, bushes, trees having girth upto 300 mm including roots and organic materials etc for leveling and grading including dressing to specified levels & grades and compacting the graded/stripped surface by manual/mechanical means, disposal of stripped materials within a lead upto 1km etc all complete as per specification, drawing and as directed by the engineer-in-charge.	SQM	20000	0.287314%
2.2	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming /compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 1Km, spreading/levelling of disposed materials etc all complete for following depths below ground level.			
2.2.1	Depth from ground level but not exceeding 2 m	CUM	4800	0.326630%
2.2.2	Depth exceeding 2 m but not exceeding 4 m	CUM	120	0.010253%

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
2.3	Filling using selected excavated materials in trenches, plinths, sides of foundations and other underground structures, pipes, area levelling etc. in layers not exceeding 250 mm thickness including lead of 100m and all lifts and including loading from stock pile, carting, unloading, filling, watering and compacting/ramming each layer, all complete as per specifications, drawings and as directed by the engineer to achieve the following densities with 90% proctor density.	CUM	3600	0.253139%
3.0	CONCRETE			
3.1	Cement Concrete (1:3:6) in foundation , floor etc at any depth below finished floor level with cement, sand (F.M. 1.2) and picked jhama chips including breaking chips, screening, mixing, laying, compacting all complete.	CUM	139	0.796872%
3.2	Cement concrete work in foundation with minimum compressive strength of 17 MPa at 28 days (sugessted mix proportion 1:2:4 & maximum w/c ratio 0.45) on standard cylinder as per standard practice of Code AASTHTO/ ASTM/ and cement conforming to BDS EN 197-1 : 2003 CEM-II/A-M 42.5 N, sand of minimum FM 1.8 and 20mm down well graded 1st class/ picked brick chips (LAA value not exceeding 40) conforming to ASTM C 33 including breaking bricks into chips, shuttering, mixing by concrete mixer machine, casting,laying compacting and curing for the requisite period etc. all complete as per direction of the E-I-C. Additional quantity of cement to be added if required to attain the strength at the contractor's own cost.	CUM	3000	19.609736%
3.3	Reinforced cement concrete works using minimum cement content relates to mix. Ratio 1:1.5:3 having minimum f'cr =30 Mpa, and satisfying a specific compressive strength f'c=25Mpa at 28 days on standard cylinder as per standard practice of code ACI/BNBC/ASTM & cement confirming to BDS EN-197—CEM1, 52.5N (52.5 Mpa)/ASTM-C 150 Type -I, best quality Sand (F.M. 2.2) and 20mm down well graded stone chips confirming to ASTM C-33 making, placing shutter in position and maintaining true to plumb , making shutter water tight, properly placing reinforcement in position; mixing in standard mixer machine,compacting by vibrator curing , removing shuttering after specified time all complete.	CUM	700	6.128115%
4.0	FORMWORK			
4.1	Fairface form work with good quality water proof ply wood of minimum 12mm thickness and smooth surface below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, mass concrete, trenches etc. including chamfering of edges as per drawing, specification and instruction of engineer in charge.	SQM	13500	5.634374%
4.2	Fairface form work with good quality water proof ply wood of minimum 12mm thickness and smooth surface above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, etc. including chamfering of edges as per drawing for all heights as per specification, drawing and instruction of engineer in charge.	SQM	110	0.050900%

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
5.0	REINFORCEMENT			
5.1	Providing, straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of grade B500B confirming to BS 4449:2005+A:2009 including cost of binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer.	MT	380	31.017594%
6.0	BICKWORK			
6.1	Exposed brick work (for exterior wall without outside plaster) with special quality sorted out 1st class bricks, very carefully laid in cement mortar (1:4) in uperstructure with Portland Composite cement (CEM II/AM, 42.5N) and best quality sand (minimum FM1.2) with uniform width and depth joints, true to vertical and horizontal lines in/cracking out joints, scaffolding, soaking the bricks at least for 24 hours before use, washing of sand, curing for requisite period and high class flush pointing with cement mortar (1:1) , etc. all complete as per direction of the E-I-C.	CUM	600	3.348121%
6.2	Providing Single layer brick flat soling (BFS) with 1st class or picked bricks, true to level, maintaining camber/super elevation and grade including carrying bricks, filling the nterstices tightly with sand of minimum FM 0.50, etc. all complete in all respect as per approved drawing, specification and direction of the Engineerin-charge.	SQM	2553	0.675217%
7.0	PLASTERING			
7.1	Providing 18mm thick plaster in two layers outside the building/boundary wall in cement mortar 1:6 on walls, finished to a smooth finish including providing 3mmx3mm size grooves at junctions of two dissimilar materials all complete	SQM	2468	0.473971%
8.0	DAMP PROOF COURSE			
8.1	75mm thick damp proof course (1:1.5:3) in cement concrete with cement(CEM-II/A-M) sand (F.M. 1.2) and picked jhama chips including breaking chips screening centering shuttering casting curing and finishing with a coat of bitumen including supply of all material, labour, T&P all complete	SQM	952	0.793360%
9.0	FLOORING AND SKIRTING: Flooring and skirting at all level including base layer, labour, material (cement - PPC to be supplied by contractor with test certificate of approved brand.), equipments, transportation, handling, curing, polishing etc. at all level as per specification, drawings and as directed by engineer - in - charge.			
9.1	Supplying , fitting and fixing country made glazed wall tiles, irrespective of colour & /or design , with 20mm thick cement sand (FM 1.2) mortar (1:3) base and racking out of joint with respective joint filler & binder including cutting , laying and hire charge of machine and finishing with care etc. including water, electricity and other charges, complete all respect accepted by the Engineer.(Cement : CEM -II/A-M) in ground floor			

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
9.1.1.	Wall tiles less than , equal or equivalent to 250mmx330mm in sizes	SQM	220	0.225057%
9.2	Supplying , fitting and fixing country made GP (Gress Porcellanato)-unglazed homogeneous floor tiles irrespective of colour & /or design , with 20mm thick cement sand (FM 1.2) mortar (1:4) base and racking out of joint with respective joint filler & binder including cutting , laying and hire charge of machine and finishing with care etc. including water, electricity and other charges, complete all respect accepted by the Engineer.(Cement : CEM -II/A-M) in ground floor			
9.2.1.	GP(homogeneous) 300x300 mm floor tiles	SQM	250	0.313758%
9.3	Supplying , fitting and fixing country made GP (Gress Porcellanato)-glazed homogeneous floor tiles irrespective of colour & /or design , with 20mm thick cement sand (FM 1.2) mortar (1:4) base and racking out of joint with respective joint filler & binder including cutting , laying and hire charge of machine and finishing with care etc. including water, electricity and other charges, complete all respect accepted by the Engineer.(Cement : CEM -II/A-M) in ground floor			
9.3.1	GP(homogeneous) 400x400 mm floor tiles	SQM	1083	1.432158%
9.4	Supplying , fitting and fixing country made mirror polished homogeneous floor tiles irrespective of colour & /or design , with 20mm thick cement sand (FM 1.2) mortar (1:4) base and racking out of joint with respective joint filler & binder including cutting , laying and hire charge of machine and finishing with care etc. including water, electricity and other charges, complete all respect accepted by the Engineer.(Cement : CEM -II/A-M) in ground floor			
9.4.1.	GP(mirror polished) 600x600 mm floor tiles	SQM	1083	1.835685%
10.0	STRUCTURAL WORK			
10.1	Providing, transporting, fixing of MS foundation/ anchor bolt (Grade-1 of IS:432 & IS:2062) assembly in concrete along with nuts, lock nuts, 25mm dia, 950mm long including furnishing of labour, materials, welding, etc all complete as per specification, drawing and instruction of engineer.	MT	4	0.332120%
10.2	Supply, fabrication, erection and painting of structural steel work for ms gates / misc. structures in columns, beams, wind ties, etc with simple rolled structural members connected to one with another with brackets gusset cleats, bolts & nuts or welding etc as per design & direction complete including fabrication, hoisting & erection including all materials, labour etc complete with one coat of primer & two coats of synthetic enamel painting (Contractor will provide structural steel of approved brand with test certificate).	MT	5	0.400307%

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
11.0	SANATARY & PLUMBING			
11.1	Supplying, fitting and fixing superior quality Combi-closet glazed porcelain commode with seat cover, water tank with flushing unit, wash hand basin with pedestal including fitting with fitting nut bolt of same brand in wall or floor with all internal fittings (best quality), best quality 12mm dia heavy type concealed C.P. stop cock for lowdown and basin, 12 mm dia heavy type basin pillar cock, 12mm dia basin & lowdown plastic connection pipe with brass coupling,push shower, 30mm dia C.P. basin waste with chain plug, 44mm dia PVC waste water pipe with coupling including making holes in walls or floor or wherever required and mending good the damages and fitting, fixing with all necessary fittings and connection, etc. all complete as per direction of the E-I-C.(Commode, Lowdown, Wash Hand Basin with Pedestal complete set with fittings) Size: W.C. S trap & cistern: 690x360x755mm (S Trap), Wash basin & pedestal : 605x485x 835 Model: RAK Karla or Equivalent	No	76	1.022027%
11.2	Supplying, fitting and fixing single bowl stainless steel sink with sink tray size (450 x 1050 mm.) with heavy type CI steel brackets 12mm dia C.P. bib-cock 40 mm dia C.P. chain plug. 40 mm dia C.P. waste. 40 mm dia PVC waste pipe with brass coupling (750 mm length) including making hole in walls and floors and mending good the damages, finishing with 1:4 cement mortar etc. all complete approved and accepted by the Engineer.	No	69	0.234713%
11.3	Supplying, fitting and fixing BISF -White approx. 485x360x290, 9.0kg glazed vitreous standing bowl urinal, fitting, fixing the same in position after making holes in walls and floors, providing 32 mm dia plastic waste pipe with brass coupling up to grading below, 12 mm dia plastic connection pipe with brass coupling, 12 mm dia brass stop cock including mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer.	No	7	0.011394%
11.4	Providing and fixing white viterous urinal partitions of size 675x325x85mm all complete.	No	4	0.005406%
11.5	Supplying 150 mm inside dia best quality uPVC soil, waste and ventilation pipe having specific gravity 1.35 - 1.45, wall thickness 4.5 mm - 5.2 mm, and other physical, chemical, thermal, fire resistivity properties etc. as per BSTI approved manufacturer standards or ASTM, BS/ISO/IS standards fitted and fixed in position with sockets, bends, with all accessories such as Round grating/domed roof grating bands, sockets etc. approved and accepted by the Engineer (length: 6000 mm each).	RM	402	0.358750%
11.6	Supplying, fitting and fixing of 450 x 350 mm size and 5 mm thick unframed super quality mirror with hard boards at the back with all necessary fitting including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer.	No	77	0.039769%
11.7	Supplying, fitting and fixing CP Shower Mixture including Shower Head only with all necessary hardware and consumables approved and accepted by the Engineer.	No	66	0.186852%

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
11.8	Supplying, fitting and fixing best quality 12 mm CP bib cock complete approved and accepted by the Engineer	No	138	0.078276%
11.9	Supplying, fitting and fixing best quality 12 mm CP Concealed fixed sink cock etc. complete approved and accepted by the Engineer	No	73	0.055918%
11.10	Construction of Septic Tank with brick masonry works in main and partition walls in cement mortar (1:6) as per standard drawing enumerated in Appendix-6 (Typical soak well design) over a single layer brick flat soling and 150mm thick cement concrete flooring (1:2:4), in/c 20mm thick cement plaster (1:4) to inside of walls with neat cement finishing, 25mm thick patent stone (1:2:4) flooring with neat cement finishing including supplying fitting and fixing of two RCC Tees and providing 450mm dia water sealed heavy type C.I. M.H. cover with necessary locking arrangements, 100mm thick RCC (1:2:4) top slab & 125mm thick RCC (1:2:4) wall around inside of the main wall of septic tank with minimum 1% reinforcement including centering, shuttering, fabricating, casting, curing etc. complete up to required depth. The item is inclusive of necessary earth work in excavation and shoring, bailing out water and side filling including the cost of all materials, operations and incidental charges etc. all complete as per the approved plan and direction of the E-I-C.			
11.10.1	For 30 users with 2 manhole covers.	Each	5	0.248235%
11.10.2	For 100 users with 3 manhole covers.		2	0.219230%
11.10.3	For 200 users with 3 manhole covers.	Each	2	0.316317%
11.11	Providing PVC pipe of Supreme or equivalent quality for drinking water system with all fittings and fixtures, labour etc complete.			
11.11.1	For external /internal 19mm dia.	RM	132	0.037766%
11.11.2	For external /internal 25mm dia.	RM	64	0.018789%
11.11.3	For external /internal 50mm dia.	RM	25	0.022393%
11.12	Supplying, fitting and fixing plastic overhead Water Tank of different capacity made with 25mm thick plastic composed sheet with plastic cover on top with locking arrangements, providing inlet and outlet pipe with flanges and plug, jum nuts, 40mm dia ball cock, 12mm dia 1.12m long overflow pipe and with all other necessary fittings etc. all complete in all respects as per direction of the E-I-C.			
11.12.1	2000 liter capacity	Each	2	0.037777%
11.12.2	2500 liter capacity	Each	3	0.070048%
12.0	MISCELLANEOUS :			
12.1	Providing, laying, spreading and compacting (thickness to be measured on finished surface) WBM 63 mm to 0.075 mm jhama brick aggregates to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with 12T road roller / vibratory roller in stages to proper grade and camber, applying and brooming and binding materials to fill up the interstices of coarse aggregate, watering and compacting to the required thickness for open store yard & other places.	CUM	3324	9.341460%

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
12.2	Providing barbed wire fencing with R.C.C (1:2:4) posts @2.43m c/c and of section 100mmx100mm at top and 150mmx150mm at bottom of 2.13m total height (1.37m above G.L. and 0.76m below G.L) in/c 150mm thick, 450mm square spread footings (posts reinforced with 4 nos.10mm dia main rod and 6mm dia stirrups @150mm c/c. footing reinforced with 5 nos. 10mm dia rod both ways) supplying, fitting and fixing 8 lines of barbed wire horizontally (fixed with the post through 6mm dia. rods embedded into the post) and 2 lines diagonally from post to post with 12 BWG 2 ply barbed wire with 4 points barbs @minimum 112mm c/c in/c 6 mm thick cement plaster (1:4) up to 1500mm length of the posts etc. all complete as per direction of the E-I-C.	RM	2933	1.846603%
12.3	Supplying, fitting and fixing 0.46mm (26 SWG) thick galvanized iron corrugated sheet (Bangladesh made)having minimum weight 63-65 kg per bundle (2'-6" width 70 – 72 rft long) roofing fitted and fixed on MS sections with 'J' hook or wooden purlins with screws, limpet washers, bitumen washers and putty etc. all complete as per direction of the E-I-C.	SQM	33	0.019422%
12.4	Supplying, fitting and fixing of aluminium composite swing doors with fixed partition as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification having 1.8mm thick wall frame (size:101.60mm, 44.45mm, 83.21mm), 2.33m thick shutter side (size:54mm, 46mm), 0.99mm thick door glass bit (size:16.54mm, 15.49mm) 2.5mm thick closure section (size:101.60mm, 42.93mm), 1.5mm thick closure cover (size:101.60mm, 4mm) thick floor bottom (size:101.60mm, 12.70mm), 2.3mm thick shutter bottom (size:82.6mm, 43.99mm) 2.3mm thick shutter top (size:51mm, 43.99m) 2.3mm to 4mm thick handle (short) (size:101.60mm, 38.10mm, 25.40mm) 1.8mm thick top and side size:101.60mm, 44.45mm), 1.80mm thick bottom (size:101.35mm, 4.45mm), 1.50mm thick bottom cover (size:44.32mm, 19.61mm), 1.50mm thick groove cover (size:83.21mm, 16.00mm), 1.00mm thick fixed glass protector bit (size:15.75mm, 14.81mm) section of all aluminium members will be anodized to aluminium bronze/silver colour with a coat not less than 15 microns in thickness and density of 4mg/cm2 etc. in/c all accessories like handle, locks (Japan), auto-closure (USA), stopper, flush bolt, weather seal etc. keeping provision for fitting 5mm thick glass in/c neoprene, sealant for all floors etc. complete in all respect as per drawing and direction of the E-I-C.	SQM	28	0.096811%

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12.5	Supplying, fitting and fixing of aluminium sliding window as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification having 1.5mm thick outer bottom (size:75.50mm, 17.79mm), 1.5mm thick outer top (size:75.50mm, 26.80mm) 1.5mm thick shutter top (size:33mm, 26.80mm, 22mm), 1.5mm thick shutter bottom (size:60mm, 24.40mm), 1.5mm thick outer side (size:75.50mm, 19.90mm), 1.5mm thick sliding fixed side (size:31mm, 26mm), 1.5mm thick shutter lock (size:49.20mm, 26.0mm) and 1.5mm thick interlock (size:34.40mm, 32.10mm). Sections all aluminium members will be anodized to aluminium bronze/silver colour with a coat not less than 15 microns in thickness and density of 4mg/cm2 etc. in/c all accessories like handle, locks (Japan), roller, stopper etc. keeping provision for fitting 5mm thick glass in/c neoprene, sealant for all floors etc. complete in all respect as per drawing and direction of the E-I-C.	SQM	17	0.054170%
12.6	Supply, installation, erection testing & commissioning of electronic road weigh bridge pitless type, 60Tx100kg with platform size of 16 Mx3 M with necessary supporting structures, with proper digital indicator, recorder, printer, PC with keyboard, display unit (15"), UPS (500VA), accuracy ±0.25% of actual weight, minimum graduation 10kg, maximum weight 60T.	Set	1	1.137914%
12.7	Supply, Installation , of 1.4(L)X1.8(B)X2.4(H) mtr Moduler Biodigester toilet made of 40mm thick sandwich panel (SIP) including masonary base/founadtion, with four side louvre panel ventilation , complete concealed electrical & plumbing work , Asian Water Closet, Cistern system, Basin, bib cock,. bio digester tank, 300 lit PVC water tank all complete as per drawing and direction of the E-I-C	Set	5	0.756089%

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13.0	BOREWELL			
13.8.1	BOREWELL: (a) Boring:350 mm dia vertical hole up to designed/desired depth(For 150 mm dia upto 50 mtrs, and 100 mm dia. from 50m to 200 mtrs & beyond from GL) and collection of soil samples at every 3m interval and at every change of formation including sinking and withdrawing necessary casing pipe and all necessary arrangements, etc. all complete (b)Supplying the tube well fixtures and pipes(Having density 1350 kg/Cum, opacity 0.2% of visible light as per ISO 7686, minimum required strength 25 Mpa at working site as per standard practice etc.) including best quality 150mm dia uPVC cap for blind pipe/ sand trap,10 0mm dia water grade uPVC blank pipe/ sand trap having wall thickness 4.5 mm to 5.2 mm,100mm dia strainer of any slot as per design made with grade uPVC pipe having wall thickness 4.5 mm to 5.2 mm, 100mmx150mm uPVC Reducer,150 mm dia water grade uPVC Housing pipe having wall thickness of 6.6 mm to 7.6 mm,Supplying centralizer made with 12 mm dia M.S. rod of approved design etc (c) Complete installation of 100 mm dia uPVC tube-well fixtures such as expanded top pipes, reducer, tube well pipes, strainer, blind pipe, pipe cap etc. fitting and fixing with best quality uPVC solution, iron screws and uPVC tape and placing in position with proper size bamboo split centralizer @3m c/c in strainer portion in/c. blank pipe etc. all complete (d) Complete development of the tube well by air compressor and pump of suitable capacity by alternate surging and pumping until satisfactory yield, sand free water and the turbidity condition is reached using necessary quantity of calgon and conducting step draw down test before and after the development, etc.(Development should be started within 24 hours of completion of shrouding) (e) Pumping test:Long term pumping test of the well by required capacity of submersible pump with supply of testing equipment and all materials for 72 hours including draw down and recovery test etc.(f)Disinfections:Disinfecting the well including supply of sufficient quantity of bleaching powder (33% strength) chlorinated water having 150 ppm available free chlorine etc.(g)Filling the bore hole around the tube well from top of the shrouding up to the bottom of sanitary seal by withdrawal of selected soil or local clay, etc (h)Protective top cover: Supplying and fitting fixing best quality 200 mm dia 4 mm thick M.S. pipe 1.0 m long one end blocked with 250 mm dia 4 mm thick M.S. plate and other end minimum 300 mm embedded in sanitary seal for protection of Upvc housing pipe all complete.(rate in lumsum for each	EACH	1	0.324235%

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
13.8.2	<p>Supply,delivery,installation and commissioning of (a) 2 HP capacity (Motor:2 H.P, Suction x Delivery:30mmx30mm,Discharge:20-100 liter/min, Head: 112-45 meter,Column pipe:31.25 mm) multistage sub-mersible water pump motor set manufactured according to DIN/NEMA/IEC/BS/VDE/JIS & ISO 9001 standard comprising of 2900 RPM, 3 Phase sub-mersible motor having insulation: Class F & Protection. IP68(Minimum) , suitable for operation at 400/230±5% volt , 50 Hz AC supply with 18.29 meter (60'-0") column pipe(AP1-5L,grade B) with flange, gasket,Non-return valve,Pressure gauge, 40 meter (131'-0") long required marine cable in a single length etc complete in all respect manufactured by CE certified/UL listed countries as per sample accepted/approved by the Engineer.</p> <p>(b) For installation and commissioning of pump motor all additinal electrical works, such as ICTPN switch with MRC fuses, suitable starter,Drawing the double run submersible cable from the tubewell to the starter through suitable dia class - B medium GI protection tubes by supplying & laying the same on underground / under floor / wall, including laying, termination etc. all complete.;</p> <p>Supplying, fitting, fixing 40 mm dia wheel valve, gun metal of approved brand and make tested to 21 Kg/sq.cm.:Supplying & laying 10 Sq. m 1.1 Kv grade 3.5 core PVC armoured ALUMINIUM cable on wall by means of saddles from ICTPN switch to busbars to MCCB, NCCB to starter including all end termination and interconnections etc. complete.</p> <p>Earthing of the whole installation as per I.E. Rule by supplying of earth electronics, swg, GI wire earth bus and all other materials etc. all complete.</p> <p>Supplying, fitting, fixing 40 mm dia wheel valve, gun metal of approved brand and make tested to 21 Kg/sq.cm. as directed by BHEL all copmlete.</p>	EACH	1	0.159649%
TOTAL ALLOCATION				98.9352570%

**VOLUME-III
PRICE SCHEDULE, REV-01**

**SUB-STRUCUTURE FOR FIELD HOSTEL-RESIDENTIAL QUARTERS-SITE OFFICE-COVERED STORE ,HARD SURFACING
AND MISC.CIVIL WORKS AT 2X660MW MAITREE RAMPAL PROJECT,BANGLADESH**

TENDER NO - PSER:SCT:KLN-C1843:17

SCH-4:AMC & OPERATION

SL NO	DESCRIPTION	UNIT	QUANTITY	WEIGHTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL PRICE IN SCH 1
1.0	AMC(Annual Maintenance Contract) of electronic road weigh bridge pitless type, 60Tx100kg with platform size of 16 Mx3 M with necessary supporting structures, with proper digital indicator, recorder, printer, PC with keyboard, display unit (15"), UPS (500VA), accuracy ±0.25% of actual weight, minimum graduation 10kg, maximum weight 60T.	Months	48	0.161299%
2.0	Providing experienced operator for the round the clock operation as & when required(Work hours are set at eight hours a day, 48 hours a week, with a weekly rest day)	Man Month	72	0.658585%
3.0	Overtime charges for operator of Weigh Bridge (OT pay is twice the hourly remuneration as per the item 2.0 of the above.)	Hours	2784	0.244859%
TOTAL ALLOCATION				1.064743%

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Construction of Sub-Structure for Field Hostel, Residential Quarters, Site Office & Covered Store; Hard Surfacing and misc. Civil Works at 2x660 MW Maitree, Rampal, Bangladesh.	
Ref	1.0	Tender no PSER:SCT:KLN-C1843:17.
	2.0	BHEL's NIT, vide reference no PSER:SCT:KLN-C1843:5801 Date: 05-07-2017.
	3.0	BHEL's TCN-01, vide reference PSER:SCT:KLN-C1843:TCN-01, dated 26-07-2017.
	4.0	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized
representative of the bidder)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION DJ-9/1, SECTOR-II, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211691, 23211798, 23211796