



SYAMA PRASAD MOOKERJEE PORT, KOLKATA
(Erstwhile Kolkata Port Trust)

KOLKATA DOCK SYSTEM

MECHANICAL & ELECTRICAL ENGINEERING DEPARTMENT

8, Garden Reach Road, Kolkata – 700 043

TENDER DOCUMENT

for

Work: “Round the clock maintenance of electrical installations of entire NSD including Container Terminal, Subhash Bhavan & other areas for a period of two years.”

Notice Inviting Tender No.: SMP/KDS/Mech/SE-I/ADV/588 Dated 30.08.2021

- | | |
|---|-------------------------------|
| • Site inspection followed by pre-bid meeting | : 06.09.2021 at 12.00 hrs. |
| • Start date of submission of e-tender | : 11.09.2021 from 12.00 hrs. |
| • Closing date for e-Tender | : 27.09.2021 up to 14.30 hrs. |
| • Date of opening of Techno commercial bid | : 28.09.2021 at 14.30 hrs. |

Tender Fee: Rs. 2,950/- (including GST) (Non-Refundable)

Chief Mechanical Engineer

TENDER DOCUMENT
SYAMA PRASAD MOOKERJEE PORT, KOLKATA
(Erstwhile Kolkata Port Trust)
KOLKATA DOCK SYSTEM

E-TENDER FOR “Round the clock maintenance of electrical installations of entire NSD including Container Terminal, Subhash Bhavan & other areas for a period of two years”.

NOTICE INVITING TENDER No.: SMP/KDS/Mech/SE-I/ADV/588 Dated 30.08.2021

TENDER NOTICE

Mechanical & Electrical Engineering Department of Syama Prasad Mookerjee Port, Kolkata (SMP, Kolkata) invites E-Tender under single stage Two part system (i.e. Techno-Commercial Bid and Price Bid) for “**Round the clock maintenance of electrical installations of entire NSD including Container Terminal, Subhash Bhavan & other areas for a period of two years**”.

Bid Document may be downloaded from SMP, Kolkata website <https://smportkolkata.shipping.gov.in/> and <https://kopt.enivida.in/> portal. Corrigenda or clarifications, if any, shall be hosted on the above mentioned websites only.

SCHEDULE OF TENDER (SOT)

TENDER NO.	SMP/KDS/Mech/SE-I/ADV/588 Dated 30.08.2021
MODE OF TENDER	e-Procurement System (Online Part I - Techno-Commercial Bid and Part II - Price Bid through eNIVIDA Portal https://kopt.enivida.in/). The intending bidders are required to submit their offer electronically through e-Tendering Portal. No physical tender is acceptable by Kolkata Dock System.
Estimated value of Tender	Rs. 4, 94, 19,097 /- (Rupees Four Crore Ninety Four Lakh Nineteen Thousand and Ninety Seven Only).
i) Earnest Money Deposit @ 2% of Estimated value of Tender ii) Tender Cost	No EMD is required to be remitted. Instead, a duly filled in Bid Securing Declaration form is to be furnished along with the techno-commercial offer. The intending bidders should submit Tender cost of Rs. 2,950/- including GST @ 18%. “ Tender Cost ” containing Banker’s cheque or Pay Order or Demand Draft from any of the Nationalized/ Scheduled Banks in India having branch in “ Kolkata ” drawn in favour of “ Syama Prasad Mookerjee Port Kolkata ”.
	Tender Fee and Earnest Money or NSIC /DIC Certificate, if applicable, are to be uploaded and must be physically submitted to the Chief Mechanical Engineer, Mechanical and Electrical Engineering Department, Kolkata Port Trust, 8, Garden Reach Road, Kolkata -700 043, before opening of tender document, failing which techno-commercial bid will not be opened.
Security Deposit	3 % of the Billed Value excluding GST.
RailTel Tender Processing Fee	Mode of Payment:- E-payment Only through Debit/Credit Card or Net Banking.

(Non-refundable)	Tender Processing Fee(TPF)- 0.1% of estimate cost (Minimum 750/- and Maximum 7500/-) plus GST Registration Charges: Rs. 2000/- + Applicable GST Per Year
-------------------------	---

Date of NIT available to parties to download	31.08.2021 at 14-00 hrs.
Date and time of site inspection & Pre-Bid meeting	07.09.2021 at 12.00 hrs.
Date of starting of online submission of bid (Techno-Commercial Bid and price Bid) through eNIVIDA Portal	10.09.2021 from 12.00 hrs.
Date of closing of online submission of Bid.	27.09.2021 up to 14.30 hrs.
Date and time of opening of Techno-Commercial Bid	28.09.2021 at 14.30 hrs.
Date and time of opening of Price Bid	To be informed separately by letter or email or telephone.

- Online tenders through eNIVIDA Portal are invited by Syama Prasad Mookerjee Port, Kolkata (Erstwhile Kolkata Port Trust) from GST registered domestic Contractors for executing the work.
- The tender document through eNIVIDA portal is open from 30.08.2021 to 27.09.2021 and can be downloaded from the official website of SMP, Kolkata and through <https://kopt.enivida.in/>.
- The complete tender document can be downloaded from Syama Prasad Mookerjee Port, Kolkata website: <https://smpportkolkata.shipping.gov.in/> [Tender→Mechanical & Elect. Eng. Dept.] and <https://kopt.enivida.in/> portal and bidders are required to submit tender offer through eNIVIDA portal on or before the due date and time of submission. The tenderer shall upload the scanned copy of the DD instruments towards the cost of EMD and bid documents set as proof of payment towards EMD and cost of Bid documents while submitting the tender electronically in the eNIVIDA portal.
- The tender offer shall have to be submitted by the Tenderer only through eNIVIDA portal as explained in the tender document.
- No physical tender is acceptable by Kolkata Dock System.
- Minutes of meeting /Corrigendum / addendum / clarifications, if any, shall be hosted on the <https://smpportkolkata.shipping.gov.in/> and <https://kopt.enivida.in/>.

Note: In the event of any unforeseen closure of work / holiday on any of the above days, the same will be opened / held on the next working day without any further notice.

List of Annexure

Notice Inviting Tender No.: SMP/KDS/Mech/SE-I/ADV/588 Dated 30.08.2021

Instruction to Tenderers	Annexure – A	Page : 5 - 7
Terms and Conditions of Tender	Annexure – B	Page :8 - 12
Special Conditions of Contract	Annexure – C	Page :13 - 28
Scope of Work and Technical Specification	Annexure – D	Page : 29 - 43
Preamble to Bill of Quantity & BOQ	Annexure - E	Page : 44 - 90
Profile of Tenderer, Covering letter & Schedule “O”	Annexure – F	Page : 91 - 97
Affidavit for ESI	Annexure – G	Page : 98
Indemnity Bond for ESI	Annexure – H	Page : 99
Undertaking Format	Annexure - I	Page : 100
Bid Securing Declaration Form	Annexure – J	Page : 101
Checklist for Documents to be Uploaded	Annexure – K	Page : 102
Integrity Pact	Annexure – L	Page : 103-107
Guidelines for Indian agents of foreign suppliers	Annexure – M	Page : 108 -109
General Conditions of Contract, Forms and Agreement	Annexure – N	Page : 110-131

A. Basu
Chief Mechanical Engineer (I/C)
KOLKATA PORT TRUST

INSTRUCTIONS TO TENDERERS

This is an e-procurement event of Syama Prasad Mookerjee Port, Kolkata (Erstwhile Kolkata Port Trust).

The e-procurement service provider is RailTel's eNIVIDA Portal.

You are requested to read the terms & conditions of this tender before submitting your online tender. Tenderers who do not comply with the conditions with documentary proof (wherever required) will not qualify in the Tender for opening of price bid.

1.	<p>Online tenders through RailTel's eNIVIDA Portal are invited by Syama Prasad Mookerjee Port; Kolkata from GST registered domestic Contractors for executing the work.</p> <p>The tender document through RailTel's eNIVIDA Portal is open from 31.08.2020 (14 hours) to 27.09.2021(14.30 hours) and can be downloaded from the official website of SMP, Kolkata and through RailTel's eNIVIDA Portal.</p> <p>The complete tender document can be downloaded from Syama Prasad Mookerjee Port, Kolkata website: https://smportkolkata.shipping.gov.in/ and RailTel's eNIVIDA https://kopt.enivida.in/ and bidders are required to submit tender/ offer through RailTel's eNIVIDA Portal on or before the due date and time of submission. The tenderer shall upload the scanned copy of the DD instruments towards the cost of EMD and bid documents set as proof of payment towards EMD and cost of Bid documents while submitting the tender electronically in the RailTel's eNIVIDA.</p> <p>Bidders are requested to use internet Browsers Firefox version below 50 / Internet Explorer version 8 or above, and Java 8 Update 151 or 161. Further, bidders are requested to go through the following information and instructions available on the eNIVIDA Portal https://kopt.enivida.in/ before responding to this e-tender :</p> <ul style="list-style-type: none"> • Bidders Manual Kit • Help for Contractors • FAQ <p>The tender offer shall have to be submitted by the Tenderer only through RailTel's eNIVIDA Portal as explained in the tender document.</p>
2.	<p>The Techno-commercial Bid and the Price Bid shall have to be submitted online at https://kopt.enivida.in/</p> <p>(A) <u>Part – I (Techno-Commercial Bid)</u>: Would be opened electronically on specified date and time as given in the NIT. Bidder(s) can witness the opening of Techno-commercial Bid electronically.</p> <p>(B) <u>Part – II (Price Bid)</u>: Would be opened electronically of only those bidder(s) whose Part – I Techno-Commercial bid are acceptable to SMP, Kolkata. Such bidder(s) will be intimated the date of opening of Part II (Price Bid) through valid e-mail/telephone/letter. Bidder(s) can witness the opening of Bids electronically.</p> <p>The tenderers are advised to offer their best possible rates. There would generally be no negotiations. Bidders are requested to submit their most competitive prices while submitting the</p>

	price bid.		
3.	All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.		
4.	<p>In case of any clarification, please contact SMP, Kolkata (before the scheduled time of the e-tender).</p> <p>Contact person (SMP, Kolkata):</p> <table border="1"> <tr> <td> 1. Mr. Shoven Mukherjee. Dy. Chief Mechanical Engineer-I Mobile: 9836298678 Email: shoven@kolkataporttrust.gov.in </td><td> 2. Mr. Rakesh Kumar. Superintending Engineer (Elect.)-I Mobile No. 9836298625 Email: rkumar@kolkataporttrust.gov.in </td></tr> </table> <p>Contact person (SMP, Kolkata) during maintenance period:</p> <p>1. Mr. Sanjib Sarkar Superintending Engineer (Elect.)-II Mobile No. 96747 20094 Email: sanjib@kolkataporttrust.gov.in</p>	1. Mr. Shoven Mukherjee. Dy. Chief Mechanical Engineer-I Mobile: 9836298678 Email: shoven@kolkataporttrust.gov.in	2. Mr. Rakesh Kumar. Superintending Engineer (Elect.)-I Mobile No. 9836298625 Email: rkumar@kolkataporttrust.gov.in
1. Mr. Shoven Mukherjee. Dy. Chief Mechanical Engineer-I Mobile: 9836298678 Email: shoven@kolkataporttrust.gov.in	2. Mr. Rakesh Kumar. Superintending Engineer (Elect.)-I Mobile No. 9836298625 Email: rkumar@kolkataporttrust.gov.in		
5.	All notices /corrigendum and correspondence to the bidder(s) shall be sent by email only during the process till finalization of tender by SMP, Kolkata. Hence, the bidders are required to ensure that their corporate email I.D. provided is valid and updated at the stage of registration of vendor with RailTel's eNIVIDA portal (i.e. Service Provider). Bidders are also requested to ensure validity of their DSC (Digital Signature Certificate).		
6.	E-tender cannot be accessed after the due date and time mentioned in NIT.		
7.	<p>(a) MSEs registered with NSIC under Single Point Registration scheme/DIC are exempted from depositing Tender Fee and Earnest Money. But all the NSIC/DIC registered firms are not exempted from depositing Tender Fee and Earnest Money. Only those firms, having documents of such exemption for the entire tendered work (as per the Bill of Quantity) would be exempted. Documentary evidence must be uploaded for claim of such exemption, failing which their tender would be summarily rejected.</p> <p>(b) The process involves Electronic Bidding for submission of Tender Document Fee and EMD, Techno- Commercial Bid as well as Price Bid.</p> <p>(c) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.</p> <p>(d) All electronic bids submitted during the e-tender process shall be legally binding on the bidder. Any bid will be considered as valid bid if it fulfils all the terms and conditions of the Tender Document.</p> <p>(e) It is mandatory that all the bids are submitted with Digital Signature Certificate (DSC) otherwise the same will not be accepted by the system.</p> <p>(f) SMP, Kolkata reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.</p> <p>(g) No deviation of the terms and conditions of the tender document is acceptable. Submission of bid in the e-tender floor by any bidder confirms his acceptance of terms and conditions for the tender.</p> <p>(h) Unit of Measure (UOM) is indicated in the e-tender Floor. Rate to be quoted in Indian Rupee Currency as per UOM indicated in the e-tender floor/tender document.</p>		
8.	The e-tender shall be governed by the terms and conditions mentioned therein.		
9.	No deviation to the technical and commercial terms & conditions are allowed.		
10.	SMP, Kolkata has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reason thereof.		
11.	The bidders must upload all the documents required as per Pre-qualification Criteria and the		

	documents enlisted under Techno-commercial Bid and Price-Bid, failing which the tender shall lead to disqualification. Any other document uploaded, which is not required as per the terms of the NIT, shall not be considered.
12.	The bid will be evaluated based on the filled-in technical and commercial formats uploaded.
13.	The documents uploaded by bidder(s) will be scrutinized. In case any of the information furnished by the bidder is found to be false during scrutiny, EMD of defaulting bidder(s) will be forfeited. Punitive action including suspension and banning of business can also be taken against defaulting bidders.
14	Price bid must be filled-up in EXCEL Sheet through eNIVIDA PORTAL (which is uploaded by SMP, Kolkata).
15	EMD (or Bid Securing Declaration Form, as the case may be) & Tender Fee should reach this office physically before opening of Tender document, failing which techno-commercial bid will not be opened.
16	EMD (or Bid Securing Declaration Form, as the case may be) & Tender Fee details are to be treated as essential documents should upload with the other essential documents.

Terms and Conditions of Tender

Notice Inviting Tender No.: SMP/KDS/Mech/SE-I/ADV/588 Dated 30.08.2021

Pre-qualification Criteria of the Bidders

The intending Tenderers shall satisfy the following conditions with supporting documents:

i) The firms must have average annual financial turnover during the last three years ending 31.03.2021 should be at least Rs. 74,12,865/- (30% of estimated value of one year). Audited Balance Sheets as well as 'Profit & Loss Accounts' for the last three financial years ending 31.03.2021 have to be submitted. In the event of non-availability of Audited Balance Sheets for the financial year ending 31.03.2021, the turn over for that financial year has to be submitted in lieu, duly certified by Chartered Accountant mentioning UDIN (Unique Document Identification Number).

ii) The firms must have either of the following as experience of having successfully completed similar works during last seven years, ending on 31.07.2021:

a) Three similar completed works each costing not less than Rs. 98,83,820/- (40% of the estimated value of one year).

Or

b) Two similar completed works each costing not less than Rs. 1,23,54,775/- (50% of the estimated value of one year).

Or

c) One similar completed works costing not less than Rs. 1,97,67,640/- (80% of the estimated value of one year).

Here "similar works" means "Maintenance & servicing of Electrical Distribution system of buildings/offices/hospitals including electrical substations, outdoor illumination (street/road/yard light) and laying of LT/HT cables." Work experience as a subcontractor or supply contractor shall not be considered as requisite qualification. The Tenderer shall have to upload documents (certified copy), viz. order letter, work completion certificate (from credential issuing authority) or proof of execution etc. to establish his credentials.

OTHER INSTRUCTIONS :

1. **Tender Fee or Valid NSIC/ DIC/ Udyog Adhar Memorandum Certificate and Bid Securing Declaration Form, if applicable, are to be uploaded. Tender Fee or NSIC/ DIC/ Udyog Adhar Memorandum Certificate must be physically submitted to the Chief Mechanical Engineer, Mechanical and Electrical Engineering Department, Kolkata Port Trust, 8, Garden Reach Road, Kolkata -700 043, failing which techno-commercial bid will not be opened. Details of which are as under:**

(a) Demand Draft/Pay Order/ Banker's Cheque from any Scheduled/ Nationalized Bank in original, for **Rs. 2,950/-** (Rupees Two Thousand Nine Hundred and Fifty Only) as cost of Tender Document.

(b) **Bid Securing Declaration Form** in lieu of depositing Earnest Money Deposit.

(c) Valid NSIC Certificate in case of Micro and Small Enterprises (MSEs) registered with NSIC (under single point Registration Scheme) or Valid DIC Certificate or valid Udyog Adhar Memorandum Certificate.

2. In addition to above as mentioned in Sl. No.1, following documents are to be **UPLOADED**:

- (i) Last three years balance sheet and profit & loss account in support of Annual Financial turnover (i.e. **2018-19, 2019-20, 2020-21**), and the same should be audited as per relevant norms wherever required. Certificate issued by concerned Chartered Accountant on or after 01.02.2019 must incorporate UDIN (Unique Document Identification Number). In the event of non-availability of Audited Balance Sheets for the financial year ending 31.03.2021, the turn over for that financial year has to be submitted in lieu, duly certified by Chartered Accountant mentioning UDIN.
- (ii) Self attested documentary evidence of successful completion of similar work as proof of fulfilling the Pre-qualification Criteria of the tender.
- (iii) Copy of self-attested valid GST Registration Certificate.
- (iv) Copy of self-attested ESI registration certificate, **OR** an affidavit before a first class judicial magistrate as per the format given in **Annexure-G** (in case the Tenderer is not covered under ESI Act or exempted from it). The tenderers, if not covered under ESI Act, shall, additionally, indemnify SMP, Kolkata against all damages and accidents to his labourer in a non-judicial stamp paper as per the format given in **Annexure-H**. The contractors should declare and state in the averment in the Affidavit and in the Indemnity Bond that in case such declaration will be found wrong and false, they will be held responsible for all consequences in respect of compliance of **The Employees State Insurance Act 1948**.
- (v) Certified copy of **valid Trade License and Electrical Contractor's License**.
- (vi) Copy of self-attested PAN Card of the firm / company issued from Income Tax Department.
- (vii) Statement to confirm the status of the Tenderer – whether a Partnership Firm, Company or Proprietorship Firm. If demanded by SMP, Kolkata, the tenderer would be bound to furnish necessary documents in support of their statement in this regard.
- (viii) Copy of valid Professional Tax clearance / Up-to-date Profession Tax Payment challans (if applicable) / else document in support of exemption.
- (ix) Details of registration under EPF Act: Intending tenderers shall have to furnish the details of EPF Registration, failing which tender/offer would be liable to be cancelled. Documentary evidences in support of non-applicability of registration under EPF Act shall have to be furnished.
- (x) A separate statement of the tenderer containing full name and office address of the Tenderer, names and designation of the officials of the Tenderer connected with the instant Tender, their land and mobile telephone nos., e-mail id and Fax No. etc. as per enclosed **Proforma(Form-D)**.
- (xi) Declaration of the tenderer in the form of a **COVERING LETTER** with certain undertaking and also that they or their associates have not been banned or delisted by any Govt. or Quasi-Govt. agencies or PSUs in India as per enclosed Proforma.

- (xii) Details of the firm as per ‘**Schedule-O**’ of the tender document.
- (xiii) A declaration has to be furnished by the tenderer stating (undertaking) that the entire tender document, GCC and addenda has fully been read and understood (**Annexure-I**).
- (xiv) A declaration has to be furnished by the tenderer instead of submitting EMD as per the attached format in Annexure-J

N. B.-1: The bidder will have to produce the original documents or any additional document, if asked for, to satisfy the Authorities for clarification of his documents or credibility.

N.B.-2: Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements and necessary action will be taken as per Terms & Conditions of NIT.

3. All the documents as mentioned here-in-before shall have to be UPLOADED or shall have to SUBMITTED, if asked for, failing which the related offer may be liable to be cancelled. The tenderer should clearly understand that no information/indication as to price should be entered in the page of “Bill of Quantities” or elsewhere in the Techno-commercial Bid. Indication of price anywhere in any manner in the Techno-commercial part of the tender would lead to rejection of the offer.
4. Please note that there is no provision to take-out the list of parties downloading the tender document from the website mentioned in NIT. As such bidders are requested to see the website once again before the due date of tender opening to ensure that they have not missed any CORRIGENDUM uploaded against the said tender after downloading the tender document. The responsibility of downloading the related CORRIGENDUM, if any, will be that of downloading parties. **Tenderers may note that non-submission of any of the aforesaid documents/non-fulfillment of any of the aforesaid criteria shall lead to disqualification of their offers.** No alteration shall be made by the Tenderer in the tender and the tender must be in accordance with the specification. Non conformation to this instruction shall be treated as non-responsive & hence may disqualify the tender.
5. Techno-commercial bids will be opened on the schedule date of opening of Techno-commercial bid. Price Bids of only techno-commercially qualified bidders shall be opened on a suitable date, to be intimated beforehand. However, for a single part single envelope tender both the Techno- commercial bids & Price Bids will be opened simultaneously for evaluation.
6. The Trustees reserve the right to accept or reject the tender without assigning any reason whatsoever.
7. The Trustees will not be responsible for any cost or expense incurred by the Tenderer in connection with preparation or submission of the tenders.
8. In case of unscheduled holiday, Strike/Bandh etc. on the scheduled date of Site Inspection, Pre-bid Meeting, submission of bids, opening of Techno-commercial Bids or Price Bids, the same time (as per the schedule) on the next working day will be considered as scheduled time for the purpose of Site Inspection, Pre-bid meeting, submission of bids, opening of Techno-commercial Bids or Price Bids, as the case may be. Here, Trustees’ working day means Monday to Friday in between 9.30 hrs. to 17.30hrs.
9. Should there be any doubt or ambiguity as to the meaning of any portion of the tender document or if any further information is required, the same shall be clarified/amended by SMP, Kolkata in the Site Inspection and Pre-bid meeting. No excuse of ignorance in this regard shall be accepted at a later date after the Pre-bid meeting. In the event of making any important clarification or amendment of terms of the tender, pursuant

to the discussion in the Pre-bid meeting, the same shall be immediately hoisted in SMP, Kolkata's website for information of all concerned and the same shall form a part of the Tender Document. Any offer having deviation from SMP, Kolkata's terms and conditions shall render such offer unacceptable to SMP, Kolkata. No alteration shall be made by the Tenderer in the tender document and the offer must be in accordance with the terms and conditions of the tender. The prospective tenderers may inspect the site prior to the date of Site Inspection and Pre-bid meeting in order to make themselves fully aware of the work, site and scope of work as mentioned in the Bill of Quantity as per tender. For attending the Pre-bid Meeting, the representatives of the tenderers should accompany proper authorizations letters from their respective organizations.

10. The quoted rate should be exclusive of GST. The rate quoted in the tender shall hold good and shall be binding on the tenderer notwithstanding any increase in the prices of the materials and labour or in the freights or levy or other charges whatsoever and the tenderers shall not be entitled to claim any increase over the rates quoted by them during the pendency of the contract.
11. **Validity of offer:** The offer shall remain valid for acceptance for a period of 120 days from the date of opening the Techno-commercial Bid. In the event of tenderer withdrawing their tender before the expiry of tender validity period of 120 days from the date of opening of the Techno-commercial Bid, the offer of such tenderer shall be cancelled.
12. The tenderers shall distinctly understand that they will be strictly required to conform to all the terms of the tender and the plea of custom prevailing will not in any case be accepted as an excuse on their part for infringing of any of the conditions and they shall refrain from sending revised or amended quotations, after the closing date and time of the tender.
13. **Evaluation criteria:**
 - a. During evaluation of Price Bid, provided that the bidder have submitted their offer following e-tender stipulations & specifications, the overall lowest offer received shall be considered for acceptance by the Trustees.
 - b. The price offer should be exclusive of GST. GST will be paid extra at applicable rates at the time of supply of goods and services.
14. If excess work is required to be carried out in addition to the quantities stipulated in BOQ, the amount will be paid on par with the quoted offer and as per actual measurement. In case of extra work, the same will be paid as per rate of PWD or CPWD Schedule of Rate/ rates of reputed manufacturer /market rate with justification of rates as the case maybe.
15. The contract document shall be drawn in English language only.
16. The contract shall be governed by all relevant Indian Acts as applicable only within the jurisdiction of High Court of Kolkata, West Bengal, India including the Acts like The Indian Contract Act, The Major Port Trusts Act, The Workmen's Compensation Act, The Minimum Wages Act, The Contract Labour (Regulation & Abolition) Act, The Dock Worker's Act, The Indian Arbitration & Conciliation Act, The Dock Safety Regulations, Act(s) or any other act, law, rule as may be applicable. Payment to the labourers to be made as per the minimum wage rate fixed by Chief Labour Commissioner (Central) and revision from time to time along with EPF /ESI and other statutory benefits, if applicable.

It will be the duty of the contractor to abide by the provisions of the Act, Ordinances, Rules, Regulations, By-laws and procedures as are lawfully necessary in the execution of the works. The contractor will be fully responsible for any delay / damages etc. and keep the Engineer indemnified

against all penalties and liabilities of any kind of noncompliance or infringement of such Acts, Ordinances, Rules, Regulations, By-laws and procedures.

The aforesaid regulations shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a Breach of Contract. It will be obligatory on the part of Contractor to obtain necessary Labour License from the Competent Authority for deploying requisite nos. of labours in the work and submit the Engineer-In-Charge prior to commencement of the work.

The contractor shall also be required to comply regarding 'Workmen Compensation Act, 1923 as amended by Amendment Act No. 65 of 1976, the Personal Injuries (Compensation Insurance) Act, 1963 and any modifications thereof and rules made there under from time to time. The contractor shall take into account all the above said financial liabilities in his quoted rates and nothing extra, whatsoever, shall be payable to him on this account.

15. Temporary Works:

The successful tenderer shall allow for providing labour and materials for the construction and removal of all temporary works, e.g. site office, site store, scaffolding, fencing lighting; watching, tube well and pipe lines etc. required for constructional purpose as well as for drinking water purpose of contractor's men, water supply, vats, platform, etc. as may be necessary for the successful execution, completion and maintenance of works without any extra cost to the Trustees and the rates should be quoted accordingly. No rent shall, however, be charged to the contractor for construction/erection of such temporary sheds and structures.

16. Settlement of Disputes:

If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with or arising out of the contract or the execution of the works, the same shall be dealt as per relevant provisions of the General Conditions of Contract.

17. Port Area Obligations:

The Dock area is a custom bounded area and as such the contractor shall comply with all regulations of the Port and Custom authorities and those that may be imposed from time to time in respect of the transit of all of contractor's plants, vehicles, materials, and staff in the area. Whenever regulations so require, permits shall have to be obtained for such transit of contractor's plants, vehicles, staff and workmen. The contractor shall instruct his staff and workmen to comply with all requirements in this "Restricted Area". The contractor shall suitably fence the area that may be allotted to him inside the "Bounded Area" of the port for stores and other requirements to the full satisfaction of the Port and Security Agencies. The contractor shall, abide by all the regulations and rules of Syama Prasad Mookerjee Port, Kolkata and those that may be issued from time to time without any extra cost to the SMP Kolkata.

18. Execution of Integrity Pact:

If the Tender Inviting Authority felt, the tenderer will have to enter into an Integrity Pact with SMP, Kolkata as per format given at Annexure-L on a Rs. 50/- Non Judicial stamp paper and all blank spaces to be filled up as appropriate in relevant Annexure-Z. Name of Independent External Monitor(s) (IEM) for implementation of Integrity Pact may be obtained from this dept.

Special Conditions of Contract

Notice Inviting Tender No.: SMP/KDS/Mech/SE-I/ADV/588 Dated 30.08.2021

1. The Tenderer shall carefully examine the whole tender document and shall visit and inspect the site on his own, obtain all information, which may be necessary for the purpose of the tender/offer. The Tenderer is advised to acquaint himself with the job involved at the site, laws and by-laws enforced by the Govt. and other statutory bodies. No excuse of ignorance as to site condition and local information will be accepted. All costs/charges/expenses that may be incurred by the Tenderer in connection with the preparation of his tender shall be borne by the Tenderer and SMP, Kolkata accepts no liability in this regard.
2. Disclosure/indication of price in Techno-commercial part of the tender shall be liable to be disqualified.
3. Any quotation received for part supply or of doing a portion of the work with responsibility for carrying out remaining works by the Trustees, will not be considered.
4. No alteration shall be made by the Tenderer in the tender and the tender must be in accordance with the specification. Non-conformation to this instruction shall be treated as non-responsive & hence may disqualify the tender. The rate quoted in the tender shall hold good and shall be binding on the Tenderer. No escalation on the rates (Part-II & Part-III of BOQ items) will be entertained during the contractual period.
5. The contract shall be governed by the Indian Contract Act and all payments due to the Contractor under the Contract shall be made in India in Rupee Currency only. No foreign exchange is payable on this contract.
6. The Contractor shall take adequate insurance cover for persons to be deployed for execution of this contract. The Contractor shall at his own expenses pay compensation for any injury, loss or reinstate and make good to the satisfaction of SMP, Kolkata for loss or damage accrued to any property or rights of SMP, Kolkata whatever, including SMP, Kolkata's agents/ servants/ employees, or any third party arising out of or in any way in connection with the execution or purported execution of the contract and further the contractor shall indemnify SMP, Kolkata against all claims enforceable against SMP, Kolkata (or agents/servants/employees of SMP, Kolkata) or which would be so enforceable against SMP, Kolkata where SMP, Kolkata is a private person, in respect of any such injury (including injury resulting to death), loss or damage to any person whomsoever or property including all claims which may arise under the Workmen's Compensation Act or otherwise.
7. Attention of the tenderer is drawn to **clause no 3.4, 3.5, 3.6 of GCC regarding Earnest Money & Security Deposit** and **clause no.8 of GCC regarding delay/extension of time/LD/ Termination of contract**. However, amount of Security Deposit will be 3% of the billed value instead of stipulated values mentioned in the aforementioned clauses of GCC. A Bid Security Declaration form is to be submitted in the prescribed format instead of EMD.
8. Successful Tenderer shall be in all cases responsible for the execution of the work in accordance with the General Conditions of Contract. Specifications, Drawings if any, and the Bill of Quantities which the tenderer shall be deemed to have examined.

9. SMP, Kolkata reserves the right to disqualify any offer, in case they are satisfied that any bribe/commission, gift or advantage has been given, promised or offered by or on behalf of any of the Tenderers to any officer, employee or representative of SMP, Kolkata or any other person on his or their behalf in relation to the acceptance of this tender.
10. The Tenderer shall disclose the names of their Partners /Directors/ Members in the manner stipulated in this tender document. Any change in the composition of the same during subsequent stage of tender finalization as well as during the period of execution of the contract shall be immediately notified in writing to SMP, Kolkata. In the event of any Tenderer failing to comply with the aforesaid requirement, the tender/ contract, if entered into, may be terminated.
11. At any time, prior to the last date of submission of Tenders, SMP, Kolkata reserves the right to amend and modify the Tender Document. Such amendment shall be hoisted in eNIVIDA Portal as well as in SMP, Kolkata's Portal and SMP, Kolkata would in no way be responsible for any likely ignorance of any prospective Tenderer in this regard. Such amendment/ modification shall form part of the Tender and shall be binding upon all the Tenderers. SMP, Kolkata may, at its discretion, alter any of the major dates like pre-bid meeting, last date of submission and date of opening of the Tender etc. to enable the Tenderer(s) to have reasonable time to submit their offer after taking into consideration such amendment/modification.
12. The Tenderer should note that the plea of custom prevailing will not in any case be admitted as an excuse on their part for infringing any of the conditions of the tender.
13. The Contract shall be governed by all the acts as listed under Clause No. 4.1 of the General Conditions of Contract and also by all other relevant Acts/Laws/ Regulations/By-laws/Statutory Requirements including Dock Safety Regulations as may be in vogue as well as any amendment thereof, if any, in executing the tender and during the pendency of the contract. It will be the sole responsibility of the Contractor to comply with the same.
14. While submitting tender, the Conditions of Tender, the General Conditions of Contract and specifications, drawings etc. shall be read in conjunction with the Bill of Quantities.
15. **Total Round the Clock Maintenance period: Two (2) years from the date of placement of order letter.**
16. The tenderer/s shall not rely merely on the descriptions given on the bill of quantities. The quantities shown on the bill of quantities are approximate only and the actual quantities will be intimated when formal order will be placed. If when preparing the tender documents, the tenderer feels that any essential item has been omitted from the bill of quantities the prices of which cannot be conveniently included under any other item, the tenderer shall request the Engineer to insert a suitable item at the time of Pre-bid meeting. Should the tenderer omit to mention the price of any item in the bill of quantities, the tender may be treated as cancelled.
17. The tenderer/s shall distinctly understand:
 - A. that they will be strictly required to conform to the General Conditions of Contract and Specification as contained in each of its clause.
 - B. Non-acceptance/or non-compliance of any of the above terms and conditions may render the tenders liable to rejection.

Tenderer/s shall also sign every page of the tender documents in token acceptance thereof.

18. **Warranty/Defect Liability Period:** The contractor shall make good at his own expenses of all defects, due to faulty design, materials and workmanship, which may develop under proper use during a period of 12 months from the date of commissioning/handing over of the work. Should any difference of opinion arise on any of the provisions of this clause, the decision of the Engineer shall be final and binding. In default, the Trustees will be at liberty to get the repairs done and reimbursed themselves so far as costs therefore are concerned out of the amount lying with them as Security Deposit so far as that is practicable. If the costs of such repairs exceed the amount of Security Deposit, the Contractor shall pay the balance to the Trustees forthwith on demand. Where the Contractor has submitted Bank Guarantee in lieu of cash Security money, the cost of such repairs will be payable to the Trustees forthwith on demand.
19. **Safety:** The Contractor shall take adequate safety precautions for prevention of accidents at site. The Contractor shall ensure that his employees observe the statutory safety rules and regulations.
20. **Entry Permit:** The Contractor shall be governed by the following provisions for interfacing safety custody and proper use of Dock Permits:
- A. **All** representatives and workers of the contractor shall possess the RFID Dock Permit issued by Dock Permit Office at the recommendation of concerned officer/Engineer on monthly or daily basis, free of cost. A token charge as per applicable present rate per person per occasion will be levied for creation of new IDs in the permit system. A separate receipt indicating the details of the ID along with the amount charged will be issued which may be kept for future reference.
 - B. **The** Contractor shall ensure that any Dock Permit issued to their workmen or representative by the Permit Office are not misused by un-authorized persons for entry into the protected dock area.
 - C. **It** shall amount to breach of rules and regulations regarding entry into the prohibited area by the Contractor in case the Dock Permit issued at their request are found to be misused by any authority/person.
 - D. Contractor and their workmen including driver & helper must use PPE i.e. safety helmet, safety shoe etc. at the time of work inside the dock premises.
 - E. **The** Contractor and their defaulting employees shall be liable for legal action against them for breach of rules regarding entry into the protected area.
21. **Permission from statutory bodies:** The Contractor shall make arrangement from his own cost for obtaining permission and relevant clearance from the statutory bodies such as Municipal Corporation, Electricity Authorities etc. on payment of necessary charges/fees etc. by the bidder.
22. **Drawings:** On completion of all work, the Contractor shall furnish three copies of all “As made” drawings including cable route diagram to the Engineer without any cost.
23. Shock treatment chart, statutory warning signals, insulated mats, fire extinguisher, fire fighting buckets filled with sand etc. are to be provided, if required, inside the installation as per statutory requirement without any cost.
24. **Specifications/ Codes and Standards:** All works under this contract will be executed according to the Trustees’ Specification for works. Whenever the details are not specifically covered in the specifications, relevant provisions in the latest revision and/ or replacements of the Indian Standard Specifications (IS) or any other International Code of Practice/ CPWD specifications will be followed. The Contractor shall have to procure copies of such codes/ standards for ready reference of his own personnel as well as the Engineer or his representative at site at his own cost and without any additional reimbursement.

25. **Testing and commissioning:** Before each test, the Contractor shall obtain permission from the Engineer and all tests shall be conducted in presence of duly authorized representative and the Electrical Inspector wherever it is necessary. Record of each test shall be prepared after the test and this record shall be signed by the Contractor's representative conducting the test. Copies of those records in quadruplicate shall be submitted to the Engineer. A certificate in quadruplicate shall be furnished by the Contractor or countersigned by his certified Supervisor under whose direct supervision the installation has been carried out. The Testing & Commissioning and its related charges are to be borne by the Contractor at his own cost.
26. **Identification mark:** For identification of various equipment letter/figure writing of sizes varying from 12 mm. to 75 mm. with enamel paint of approved shade /standard ferules are to be carried out at the expenses of the contractor as per directive of Engineer.
27. The tenderer must produce evidence with his tender that he had experience and fully capable of carrying out work of this class and magnitude and by way of proof shall submit along with his tender under '**Schedule-O**' a list of important works of a similar nature successfully carried out by him giving the dates of commencement and completion of such works and full particulars of his business organization.
28. **Cleaning during execution and after completion:**
Any damage done to the structures during execution of work should be made good by the contractor at his own cost. On completion of works, the contractor shall reinstate and make good at his own expense any property or land which might have been disturbed and/or damaged by his works. He should also clean the site as required during execution and fully clear the site after completion of all the works.
- The contractor shall forward any usable material found during the course of maintenance at the work site or its vicinity to SMP, Kolkata store/yard, by obtaining prior permission of SMP, Kolkata official present at site & dispose of the debris beyond the port area all at his own expenses by his own transport and labour and clean out all part of the work and leave everything clean and tidy to the entire satisfaction of the Engineer.
29. **Protection of existing service:**
The contractor must pay full attention to the fact that the existing service facilities for SMP, Kolkata are not disturbed at any time due to storing of materials and rubbish and take every precaution to keep the entrance passage clear if the same are being used by the labourer. The contractor shall be held liable for all damages and inference to the existing service/structures caused by him in execution of works. Should any damage be done to the existing service/structures in general, the contractor shall make good the same and any further work considered necessary by the Engineer's representative without any delay otherwise the cost of such repairing shall be recovered from his running account bill for which Engineer's decision shall be final & binding.
30. **Safety Measures:**
The contractor shall adhere to safe construction practice, guard against hazardous and unsafe working conditions and follow all safety precautions for prevention of injury or accidents and safeguarding life and property. The contractor shall comply with relevant provisions of Dock Workers (Safety, Health and Welfare) Act – 1986 and Dock Workers (Safety, Health and Welfare) Regulation, 1990 and Safety Officer of the Trustees or Safety Inspectors shall be afforded all facilities for inspection of the works, tools, plant, machineries, equipment etc. wherever so required. The contractor shall further

comply with any instruction issued by the Engineer, Trustees' Safety Officer, Safety Inspector in regards to safety which may relate to temporary, enabling or permanent works, working of tools, plants, machineries, equipment, means of access or any other aspect.

The contractor shall provide all necessary first aid measures, rescue and lifesaving equipment to be available in proper condition. The contractor shall provide **PPE's (Personal Protective Equipment)** such as, helmet, safety shoe etc. to all workers and shall also provide job specific PPE's e.g. safety belts for working at heights; protective face and eye shield, goggles, hand gloves for welding / gas cutting works; protective foot wear and gloves for hot works; facemasks, gloves and overalls for painting works, mixing and handling materials etc., as directed by the Engineer.

All safety rules shall be strictly followed while working on live electrical systems or installations as stipulated in the relevant safety codes. Use of hoisting machines and tackles including their attachments, construction tools, machineries and equipment shall comply with the relevant safety codes. Before allowing workers in sewers, manholes, any duct or covered channel etc, the manhole covers shall have to be kept open and ventilated at least one hour in advance and necessary safety torches / lamps should be inserted first before allowing entry to the worker. Suitable hand gloves and other safety gear is to be provided by the successful contractor to the worker during handling / removing of slushes / sludge etc. without any extra cost. The contractor shall adopt all the above safety measures at his own cost.

The successful bidder shall also ensure that:

- (i) No damage is caused to plants and vegetation unless the same is required for execution of the project proper.
- (ii) The work shall not pollute any source of water / land / air surrounding the work site so as to affect adversely the quality or appearance thereof or cause injury or death to animal and plant life.
- (iii) His office & labour hutment etc. shall be maintained in a clean and hygienic condition throughout the period of their use and different effluents of the labour hutment shall have to be disposed of suitably.

31. Forwarding of Materials:

All dismantled unserviceable materials are to be disposed of beyond the office compound and in conformity with the Municipality/Corporation Rule at the contractor's own cost. The contractor shall have to arrange transport for forwarding the saleable/ unusable/ defective/ usable materials that may be found during the process of execution of the work to the Trustees sales yard or any other site/ Godown including labour, transportations, loading, unloading all complete as per the direction of the Engineer.

- 32. SMP, Kolkata will issue necessary permits/ photo permits free of costs for all the personnel of the contractor or his sub-contractor who will be involved in the tendered work. On closure of the contract, all these permits shall have to be returned before finalization of the pending bills/dues.
- 33. The Contractor shall arrange all necessary tools, tackles, equipment, measuring & testing equipment etc. required for commissioning of the work & maintenance work thereafter at no extra cost to Kolkata Port Trust.
- 34. The contractor shall start the work on "As-is-where-is" basis of the electrical installations.

35. The Contractor shall arrange the services, if any, required from indigenous/ foreign companies at no extra cost to SMP, Kolkata.
36. SMP, Kolkata will provide general security of the entire working area. SMP, Kolkata is covered by **ISPS (International Ship and Port Facilities Security)** code. The contractor shall have to arrange for security of their materials, stock etc., if considered necessary and related coverage at his cost.
37. The stores/equipment/plant/machineries shall strictly conform to the tender specifications and shall be capable of satisfactorily performing the duties intended for in the specification.
38. Electricity will be provided free of cost from nearest available source for carrying out the works, if necessary. Water and Toilet facility, as available within the premises, shall be extended to the Contractor's men free of cost.
39. The contractor or his employees shall not use the premises allotted to him for any purpose other than for carrying out the work allotted as per the contract and shall not act in any manner as to cause any nuisance or annoyance to SMP, Kolkata or the participants /visitors at the port. **The firm/contractor shall not allow or permit employees to participate in any trade union activities, organization in and around the premises of SMP, Kolkata.**
40. The contractor shall have to arrange at his own cost for all necessary insurance coverage for men and materials to be used this contract.
41. SMP, Kolkata and the contractor will nominate a number of officers with their contact numbers indicating the chain of command at the field level that will operate within the terms of the contract to ensure minimum interruption, smooth functioning and optimum utilization of the electrical installations and the related distribution system.
42. The contractor shall conform to all the formalities as laid down in the Contract Labour (Regulation and Abolition) Act, 1970 and rules framed there under in vogue and subsequent amendments, if any, while executing the contractual works.
43. The Contractor shall supply, bound into suitable folder two sets of operating and maintenance & fault finding manual for use by the Engineer with three sets of complete general lay out, assembly drawings and illustrated spare parts catalogue for the stores/ plant/equipment/item.
44. Contractor shall have to arrange security for their equipment/office/stores etc. at their own cost and responsibility.
45. All equipment covered under this tender must be available from indigenous sources and the tenderer/s shall confirm that spares will be available freely at least for a period of 5 years from the date of commissioning. No foreign exchange will be made available.
46. The tenderer/s shall submit Manufacturers Test Certificates for all the bought-out items envisaged in the equipment.
47. A Contract Agreement shall have to be executed by the contractor at his expense within 30 days from the date of issuance of Order letter by successful tenderer on a Non-judicial Stamp-paper of at least Rs. 60/- as per format enclosed with the General Conditions of Contract. All correspondence

between the contractor and SMP, Kolkata and all documents to be submitted from the date of opening of tender up to the issuance of work order should form part of the Contract Agreement.

48. For erection, if applicable, of the stores/ plant/ equipment/ machineries/ item, all connected work including grouting bolts, Base frame and Bed plate etc. shall be provided by tenderer. During erection all tools and tackles are to be provided by Tenderer. Tenderer should guard all equipment, etc. at site by his own men at his own cost. However, only space for keeping the materials for execution of the work may be provided by SMP, Kolkata on free of cost basis.
49. The contract shall be drawn up in English language only.
50. The firm /contractor shall at all times, during the continuance of agreement, obey and observe all direction and instruction given by the Engineer or his authorized officials.
51. The contract may be terminated at one month's notice by SMP, Kolkata if any one of the stipulated conditions agreed upon by the selected bidder is not met to the satisfaction of SMP, Kolkata. Further, the contract shall stand terminated automatically after completion of the work.
52. The responsibility in respect of the antecedents/Credentials of the persons engaged by the contractor rest with the contractor.
53. Operation and maintenance of all electrical installation in accordance with Manufacture's specification, instruction Manuals, IE Rules and other relevant rules are to be carried out.
54. The staff provided by the contractor to SMP, Kolkata are in case found to be indulging in any undesirable or unfair activities in the premises of SMP, Kolkata, the contractor will solely be responsible for all the consequences apart from the liberty of SMP, Kolkata office to lodge complaints before appropriate authorities.
55. The tenderer/s shall afford all facilities to the Engineer at their own arrangement for inspection and demonstration of the equipment, quoted for.
56. The tenderer shall along with the tender submit the detailed description of the equipment quoted for and enumerate the aspect of operation and maintenance facilities and shall enclose necessary literature.
57. The equipment shall be supplied and delivered at the specified site by the contractor at his own cost.
58. Payments to the contract labour are to be paid by the contractor as per minimum rates of wages **fixed by Central Government** which are revised from time-to-time. Further, the contractor has to submit documentary evidence in support of the payments made to the labour engaged in the work along with subsequent running account bill.
59. In respect of P.F. contribution recovered from the labour and remitted to the P.F. Commissioner, documentary evidence in support of the same is to be submitted along with individual PF Nos. by the contractor during subsequent running account bill, failing which the bill will not be processed.
60. The contractor shall comply with the provisions of all the Acts, Laws, any Regulation or By- Laws of any Local or other Statutory Authority applicable in relation to the execution of the subject works, such as but not limited to:

- a) Minimum Wages Act, 1948 (Amended),
- b) Employees Liabilities Act, 1938.
- c) Industrial Dispute Act, 1938 and 1940.
- d) The Contractor Labour (Regulation & Abolition) Act, 1970 or Statutory amendments and modification thereof, any other laws relating thereto and Rules made there under from time to time. It will be the duty of the contractor to abide by the provisions of the Act.
- e) Workmen Compensation Act, 1923 as amended by Amendment Act No. 65 of 1976,
- f) The Personal Injuries (Compensation Insurance) Act, 1963 and any modifications thereof and rules made there under from time to time. The contractor shall take into account all the above said financial liabilities in his quoted rates and nothing extra, whatsoever, shall be payable to him on this account,
- g) EPF & MP Act 1952 and as amended from time to time.

61. All payments like refund of Earnest Money, Security Deposit and all bills of contractors' will be paid through ECS. For this purpose, following details are to be furnished by the tenderer:

- i. Name of the bank :
- ii. Name of the Branch with Code No.:
- iii. Bank account no. :
- iv. Type of account : Saving/Current/Cash Credit
- v. MICR No :
- vi. IFSC Code :

The account shall have to be with a bank within the ECS zone prescribed by the RBI.

- 62. The tenderer/s have to fill in the Technical Data. The successful tenderer shall have to supply materials and execute the work as per Technical Data offered by them.
- 63. All materials are to be supplied progressively as required at site subject to prior approval of Engineer or his representative.
- 64. During course of examination of Techno-commercial Bid, the bidders if asked for shall furnish any or additional documents for the purpose of evaluation of his/their bids. The price part of bid of those bidders who qualifies in the techno-commercial part as per qualifying criteria of the NIT shall be considered for price evaluation as per terms of tender document.

65. Priority of Contract Documents:

The several documents forming the Contract are to be taken as mutually explanatory to one another, but in case of ambiguity or discrepancies, the same shall be explained and adjudicated by the Engineer of the Contract (EoC), who shall thereupon issue to the Contractor instructions thereon which will be final and binding on the Contractor. Unless otherwise provided in the Contract, if the stipulations in the various documents forming a part of the Contract are found to be in variation in any respect then, unless a different intention appears, the provision(s) of one will override others (but only to the extent these are at variance) in order of precedence as given in the list below i.e. a particular item in the list will take precedence over all those placed lower down the list:

The following documents of the Contract Agreement will be in the following sequence:

- a) Letter of Intent (LoI) / Work Order

- b) Special Conditions of Contract
- c) Scope of work and Terms of Payment
- d) Bill of Quantities
- e) Instructions to the Tenderer
- f) General Conditions of Contract
- g) Any other document(s) forming part of the Contract.

66. The contract may be terminated at any time by SMP Kolkata, as per termination clause of GCC. Further, the contract shall stand terminated automatically on expiry AMC period of two year.
67. The responsibility in respect of the antecedents / Credentials of the persons engaged by the contractor rest with the contractor.
68. Operation and Maintenance of all electrical installation in accordance with Manufacture's specification, instruction Manuals, IE Rules and other relevant rules.
69. The staff provided by the contractor to SMP, Kolkata are in case found to be indulging in any undesirable or unfair activities in the premises of SMP Kolkata, the contractor will solely be responsible for all the consequences apart from the liberty of SMP, Kolkata office to lodge complaints before appropriate authorities.
70. Syama Prasad Mookerjee Port, Kolkata is not in a position to extend telephone facility to the contractor. The contractor personnel have to maintain a mobile phone at site. The cost of instruments and Monthly rental/call charges are to be borne by the Contractor.
71. All excisable goods for which supply rate has to be quoted, the contractor shall buy such items from the manufacturer or first stage dealer or second stage dealer and obtain Invoice of such items on a/c 'Syama Prasad Mookerjee Port, Kolkata (**Erstwhile KOLKATA PORT TRUST**)' for the 'subject work'. Payment of all such items will be made on production of proper documents. Contractor, however, will be paid for supply items at his quoted rate and not on the basis of actual invoice value of the manufacturer or first stage dealer or second stage dealer. Any purchase for supply items from other sources, not specified will not be allowed for payment purpose.
72. Any new electrical installation work like wiring, cabling, power DBs, Cable jointing, Light fixing etc. if required are to be done on emergency basis during the tenure of the AMC using separate men power. The payment of such items (if any) will be made as per rate quoted by the firm under head Part – III of BOQ on submission of bills after joint measurement.
73. **Custodian Certificate:** After delivery at site the supplied materials are to be verified by SMP, Kolkata Officials and the custodian certificate is to be issued by the Contractor in this regard for consumption of such materials in the instant work.
74. **Termination of contract and Risk Purchase Clause:** Will be applicable as per **clause No. 8** of SMP, Kolkata's General Conditions of Contract.
75. **Special / Additional Security** may be arranged by the contractor at the site at no extra cost to SMP, Kolkata over and above the General Security provided within SMP, Kolkata premises by Port Security Authority.

76. In case of any dispute, question or difference either during the execution of the work or any other time as to any matter or thing connected with or arising out of this Contract, the decision of the Engineer, SMP, Kolkata, thereon shall be final and binding upon all parties.
77. **Good Conduct:** If a bidder has had previous history of “**defined misconduct**” (such as banning from/ by any government sector, premature termination of a contract solely on bidder’s fault, criminal case pending against the company or its owner/ current director filed by a government entity etc.), his offer is liable to be ignored.
78. Whenever instances of submission of fraudulent/misleading document(s) are detected by the Port Authorities, appropriate penal action will be unleashed. It must be realised that submission of fraudulent/forged document(s) to a Government department is not only a Civil/contractual offence, but might attract Criminal Culpability under Indian Penal Code. Competent Authority will take Range of punitive actions as per guidelines in case of detection of such fraud/forgery/deliberate misrepresentation of documents during the bidding process or afterwards.
79. **Preference to Make in India:** The policy of the Govt. of India to encourage “Make in India” and promote manufacturing and production of goods and services in India as per the “Public Procurement (Preference to Make in India), Order 2017- Revision regarding”, circulated by the Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Govt. of India vide Order No. P-45021/2/2017-PP (BE-II) dated 04.06.2020; subsequently revised vide Order No. P-45021/2/2017-PP (BE-II) dated 16.09.2020 will be applicable for this tender.
80. **Bidder from a country sharing land border with India:** Any bidder from a country which shares land border with India will be eligible to bid as per the OM No. F6/18/2019-PPD dated 23.07.2020 circulated by the Department of Expenditure (Public Procurement Division), Ministry of Finance, Govt. of India.
81. **Import from Prior Reference countries:** Attention is invited to the provision contained in Ministry of Power, Govt. of India’s Order no. 25-11/06/2018-PG dated 02.07.2020 which reads that “Any import of equipment/components/parts from “prior reference” countries as specified or by persons owned by controlled by or subject to the jurisdiction or the directions of these prior reference countries will require prior permission of the Govt. of India.” It is hereby clarified that for the purpose of aforesaid stipulation, “prior reference” country means a country which shares a land border with India. Attention is further invited to Ministry of Power, Govt. of India’s Order no. 25-4/1/2019-PG-Part (1) dated 02.07.2020 wherein it is clarified that “Notwithstanding above, it is further clarified that the restrictions related to “prior reference” countries will not apply in the following cases:
- A. The bidders/imports from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development of projects. Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken are given in the website of Ministry of External affairs.
 - B. Bona fide procurements made through GeM without knowing the country of bidder till the date fixed by GeM for the purpose.
 - C. Bona fide small procurements, made without knowing the country of bidder and
 - D. In projects which receive international funding with the approval of the Department of Economic Affairs (DEA), Ministry of Finance, the procurement guidelines applicable to the project shall normally be followed.”

82. TERMS OF PAYMENT:

- i. Payment shall be made on monthly basis. Bill is to be complete in all respects having proper certification of the work carried out during the billing period.
- ii. Monthly bills raised for the concerned month shall have the detail break-up of service charges for Part-I jobs, spare cost of items under Part-II & Part-III jobs.
- iii. Work under Part-II & Part-III is to be carried out as per instructions of SMP, Kolkata officials. Payment for the same work will be made on actual basis.
- iv. Regarding repair/replacement of any item, old unserviceable materials generated for the concerned month must be returned to the concerned SMP, Kolkata official/ personnel under prior arrangement failing which the bill for the concerned month will not be processed.
- v. All payments like refund of earnest money, security deposit and all bills of contractors will be paid through **ECS** (Electronic Clearing System). For this purpose the following details are to be uploaded by the contractors prior to techno-commercial bid:-
 - a) Name of the Bank
 - b) Name of the branch with Code No.
 - c) Bank Account No.
 - d) IFSC / MICR code
 - e) Type of Account: Savings / Current / Cash Credit. [strikeout whichever is applicable]
- vi. The account shall have to be with a bank within the ECS Zone prescribed by the RBI. The monthly bills of the contractor will be processed for payment after deduction of all statutory taxes and duties and also the security deposit as per clause no. 3.4, 3.5 & 3.6 of the 'General Conditions of Contract' Forms and Agreement. However, amount of security deposit will be 3 % of the billed value instead of stipulated value mentioned in the aforementioned clauses of GCC. GST as applicable will be paid as per prevailing rates.
- vii. Payments to the labourers involved in the works are to be paid by the contractor as per "Minimum rates of wages" fixed by Central Government which are revised from time-to-time including related EPF & ESI and other statutory benefits, as applicable.
- viii. Payment to Supervisor for the entire tenure of the contract will be the fixed monthly remuneration of Rs. 27,600/- or the minimum rates of wages of highly skilled labour fixed by Ministry of Labour & Employment, Govt. of India for 26 days of working per month, whichever is higher plus all applicable statutory benefits like EPF etc.

83. Taxes & Duties: The rate quoted by the tenderer should be considered to complete the work in all respect and should be exclusive of GST. GST will be paid extra at applicable rates at the time of supply of goods and services.

Relevant GST Clause:

- I. Supplier/Service Provider to confirm that the GST amount charged in Invoice is declared in its returns and payment of taxes is also made.
- II. The supplier/service Provider agrees to comply with all applicable GST Laws, including GST acts, rules, regulations, procedures, circulars and interaction there under applicable in India from time to time and to ensure that such compliance is done within the time prescribed under such laws. Supplier/Service Provider should ensure accurate transaction details, as required by GST Laws are timely uploaded in GSTN. In case there is any mismatch between the uploaded in GSTN by supplier/service provider and details available with SMP, Kolkata, then payment to supplier/service provider to the extent of GST relating to the invoice/s under mismatch may be retained from due payment till such time SMP, Kolkata is not sure that accurate tax amount is finally reflected in the GSTN to SMP, Kolkata's account and is finally available to the SMP, Kolkata in terms of GST Laws and that the credit of GST taken by SMP, Kolkata is not required to be reversed at a later date along with applicable interest.
- III. SMP, Kolkata has the right to recover mandatory loss including interest and penalty suffered by it due to any non-compliance of tax law by the supplier/service provider. Any loss of input tax credit to SMP, Kolkata for the fault of supplier shall be recovered by SMP, Kolkata by way of adjustment inconsideration payable.
- IV. Supplementary invoices/debit note/credit note for price revision to enable SMP, Kolkata to claim tax benefit on the same shall be issued by you for a particular year before September of the succeeding financial year.
- V. The purchase order/work order shall be void, if at any point of time you are found to be a blacklisted dealer as per GSTN rating system and further no payment shall be entertained.

84. SAFETY MEASURES:

The contractor shall adhere to safe construction practice, guard against hazardous and unsafe working conditions and follow all safety precautions for prevention of injury or accidents and safeguarding life and property. The contractor shall comply with relevant provisions of Dock Workers (Safety, Health and Welfare) Act – 1986 and Dock Workers (Safety, Health and Welfare) Regulation – 1990 and Safety Officer of the Trustees or Safety Inspectors shall be afforded all facilities for inspection of the works, tools, plant, machineries, equipments etc. wherever so required. The contractor shall further comply with any instruction issued by the Engineer, Trustees' Safety Officer, Safety Inspector in regards to safety which may relate to temporary, enabling or permanent works, working of tools, plants, machineries, equipments, means of access or any other aspect.

The contractor shall provide all necessary first aid measures, rescue and life saving equipment to be available in proper condition.

The contractor shall provide PPE's (**Personal Protective Equipments**) such as, helmet, safety shoe etc. to all workers and shall also provide job specific PPE's e.g. safety belts for working at heights; protective face and eye shield, goggles, hand gloves for welding / gas cutting works; protective foot wear and gloves for hot works; facemasks, gloves and overalls for painting works, mixing and handling materials etc , as directed by the Engineer.

All safety rules shall be strictly followed while working on live electrical systems or installations as stipulated in the relevant safety codes.

Use of hoisting machines and tackles including their attachments, construction tools, machineries and equipments shall comply to the relevant safety codes.

Before allowing workers in sewers, manholes, any duct or covered channel etc, the manhole covers shall have to be kept open and ventilated at least one hour in advance and necessary safety torches / lamps should be inserted first before allowing entry to the worker. Suitable hand gloves and other safety gear will be provided to the worker during handling / removing of slushes / sludge etc. without any extra cost. The contractor shall adopt all the above safety measures at his own cost.

The successful bidder shall also ensure that –

- (i) No damage is caused to plants and vegetations unless the same is required for execution of the project proper.
- (ii) The work shall not pollute any source of water / land / air surrounding the work site so as to affect adversely the quality or appearance thereof or cause injury or death to animal and plant life.
- (iii) His office & labour hutment etc. shall be maintained in a clean and hygienic condition throughout the period of their use and different effluents of the labour hutment shall have to be disposed off suitably.

85. CONTRACT LABOUR LAWS:

The contractor shall be required to comply with the Minimum Wages Acts, 1948, Employees Liability Act, 1938, Industrial Disputes Act, 1947, and The Contract Labour (Regulation and Abolition) Act, 1970, or statutory amendments and the modifications thereof, any other laws relating thereto and the rules made there under from time to time.

- (a) Payment to the labourers to be made as per the minimum wage rate fixed by Chief Labour Commissioner, Govt. of India and revision from time to time along with EPF / ESI and other statutory benefits, as applicable.
- (b) It will be the duty of the contractor to abide by the provisions of the Act, Ordinances, Rules, Regulations, By-laws and Procedures as are lawfully necessary in the execution of the works. The contractor will be fully responsible for any delay /damage etc. and keep the Engineer indemnified against all penalties and liabilities of any kind for non-compliance or infringement of such Acts, Ordinances, Rules, Regulations, Bye-laws and Procedures.
- (c) The contractor shall indemnify the Syama Prasad Mookerjee Port, Kolkata against payment to be made under or for the observance of the laws aforesaid without prejudice to his right to claim indemnity from his sub-contractor. The aforesaid regulations shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a Breach of Contract. It will be obligatory on the part of Contractor to obtain necessary Labour Licence from the Competent Authority for deploying requisite Nos. of labours in the work and submit to the Engineer-In-Charge prior to commencement of the work.
- (d) The contractor shall also be required to comply regarding 'Workmen Compensation Act, 1923 as amended by Amendment Act No. 65 of 1976'. In addition to the above, the personal Injuries (Compensation Insurance) Act, 1963 and any modifications thereof and rules made there under from time to time. The contractor shall take into account all the above said financial liabilities in his quoted rates and nothing extra, whatsoever, shall be payable to him on this account.

- (e) The contractor shall indicate maximum number of workmen to be engaged on any day for execution of the work in the appropriate place in the **ABSTRACT FORM OF TENDER** & he shall have to obtain a regular / permanent license as per sec 12(1) of the Contract Labour Act. Further, whenever a contract work has commenced or completed, the contractor has to intimate the same to the Assistant Labour Commissioner (Central) /Labour Enforcement Officer (Central) in Form IV-A, within 15 days of such commencement or completion.
- (f) The contractor has to arrange for displaying the name of the Regional Labour Commissioner (Central), Asst. Labour Commissioner (Central) & Labour Enforcement Officer (Central) at his worksite (s). The contractor shall inform the Principal Employer the date, time & venue of disbursement to be made by him to his workers.
- (g) The successful bidder shall also be required to put up a notice at the site of work mentioning the date, time & venue of disbursement to be made by him to his workers and he or his authorized representative shall have to be present during period of disbursement.
- (h) **Escalation /de-escalation clause:** Syama Prasad Mookerjee Port, Kolkata will reimburse the proportionate escalated / de-escalated minimum rates of wages to the contractor including ESI / EPF and Administration Charges on differential amount due to change in minimum wage rate keeping aside other components like his profit, overhead charges, etc. Such escalation is only applicable for Part-I of BOQ of the tender for the nos. of labourers certified to be present during any period within the pendency of the contract in the following formula:
- Escalation Amount for any period** = (Rate at which the particular category of labourers has been paid during the period – the prevailing rate for the particular category of labourers as on the date of opening of Techno-commercial Bid) x nos. of labourers of that particular category certified to be present during the period. Similarly, if the rate at which the particular category of labourers has been paid during the period is lesser due to reduced minimum wages than the prevailing rate for the particular category of labourers as on the date of placement of order letter, the resulting amount as calculated in the above formula shall be deducted from the contractor's bill.
- (i) **Bonus payment :** The Contractor shall comply to the Employees' Bonus Rules & to pay Bonus once a year to his workmen accordingly, for which no extra payment shall be made to the Contractor.

86. DETAILED SCRUTINY OF E-TENDERERS:

Documents are to be uploaded:

- i.** GST Registration certificate.
- ii.** Valid Trade License.
- iii.** Valid Professional Tax Clearance Certificate / Up to date tax payment challan (if applicable) /else document in support of exemption.
- iv.** Proof of possession of valid Employees' Provident Fund (EPF) Account or Documentary evidences in support of non-applicability of registration under EPF Act shall have to be furnished.
- v.** Proof of being registered with Employees' State Insurance Corporation (ESIC) / Affidavit and Indemnity Bond.
- vi.** Details of the firm as per '**Schedule-O**' (in Volume-I) of the tender document.
- vii.** Credentials in the form of copies of Letters of Award of Works along with corresponding **Completion Certificates** from owners/credential issuing authority to justify that the intending bidder satisfies the earlier mentioned pre-qualification criteria.
- viii.** Copies of balance sheet and Profit and Loss account / Trading account for the last 3 (three) financial years (i.e. 2018-19, 2019-20 & 2020-21) and the same should be audited as per relevant norms wherever required. In the event of non-availability of Audited Balance Sheets for the financial year ending 31.03.2021, the turn over for that financial year has to be submitted in lieu, duly certified by Chartered Accountant mentioning UDIN.
- ix.** Addendum / Corrigendum / Notice / Extension Notice issued and drawings (if any) duly signed by the Bidder under office seal.
- x.** Cost of Tender documents / NSIC Registration certificate or DIC Certificate.
- xi.** Certified copies of PAN Card.
- xii.** Valid Electrical Contractor License.
- xiii.** Proforma (**Form-D**).
- xiv.** Covering Letter.
- xv.** Statement to confirm the status of the Tenderer – whether a Partnership Firm, Company or Proprietorship Firm. If demanded by SMP, Kolkata, the tenderer would be bound to furnish necessary documents in support of their statement in this regard.
- xvi.** A declaration has to be furnished by the tenderer stating (undertaking) that the entire tender document, GCC and addenda has fully been read and understood (Annexure-I).
- xvii.** Bid Security Declaration form (Annexure-J)
- xviii.** Checklist of Documents to be uploaded (Annexure-K)

The bidder will have to produce the original documents or any additional documents, if asked for, to satisfy the Authorities.

During techno-commercial evaluation of tender, an offer shall be considered non-responsive in case of non-submission of the following ‘Essential’ documents or non-fulfillment of following criteria:

- i. It is not accompanied by requisite tender paper cost/tender fee,
- ii. It is not accompanied by valid NSIC/DIC/ Udyog Adhar Memorandum certificate as an exemption from depositing earnest money/bid securing declaration form & tender paper cost/tender fee,
- iii. It does not meet the pre-qualification criteria as stipulated in the NIT.

In addition to the above, a bidder may be disqualified if:

1. The bidder submits conditional offer / impose own terms and conditions / does not accept tender conditions completely / offer or tender if submitted with any deviation from the tender terms & conditions.
2. The validity of the offer is less than tender stipulation.
3. All the documents required as per NIT are not uploaded or not submitted, even after asked for.
4. The bidder provides misleading or false information in the statements and documents submitted.
5. Record of unsatisfactory performance during the last seven years, such as abandoning of work or rescinding of contract for which the reasons are attributable to the non-performance of the contractor or inordinate delays in completion or financial bankruptcy etc.

The decision of SMP, Kolkata in this regard shall be final and binding on the Bidder.

87. All other terms and conditions excepting those mentioned separately shall be governed by SMP, Kolkata's General Condition of Contract.

SCOPE OF WORK

Notice Inviting Tender No.: SMP/KDS/Mech/SE-I/ADV/588 Dated 30.08.2021

Work: Round the clock maintenance of electrical installations of entire NSD including Container Terminal, Subhash Bhavan & other areas for a period of two years

- (A) The Scope of work includes round the clock maintenance, operation, repair & servicing of indoor & outdoor illumination of Netaji Subhas Dock (NSD) including Container Terminal, Subhash Bhavan & other areas which includes all tower lights, yard lights, street lights, lights situated inside & outside the various sheds and buildings, gate lights, pole lights, angle fitting lights, Signage Boards etc. lying under the jurisdiction of Executive Engineer, NSD (EE-NSD) to ensure minimum interruption and smooth functioning of lights and luminaries. It also includes continuous attending against verbal/written complaints made by Executive Engineer, NSD or his representative with the works related to maintenance of the lights, light fittings, and any other switches/ MCBs/ MCCBs/OCBs/ACBs/VCBs, timer units and feeding cables (including cable laying, termination and jointing) at switch rooms/pillar boxes and other related switches for tower lights, yard lights at sheds, buildings, gates etc. for maintenance of the above illumination.
- (B) The work includes preventive check-up and routine maintenance of power lines, fuses, MCCBs, MCBs, OCBs/ACBs/VCBs, switches / sockets, LT/HT Panels, earth continuity conductors. It also includes operation and maintenance of Winch Assemblies, carriage assemblies, motors & Pulleys, periodical maintenance & lubrication of steel wire-rope assemblies and power supply arrangement of high mast towers.
- (C) The work includes preventive check-up and routine maintenance of power line, fuses, MCCBs, MCBs, switches / sockets, earth continuity conductor. It also includes operation and maintenance of Winch Assemblies, carriage assemblies, motors & Pulleys, periodical maintenance & lubrication of steel wire-rope assemblies and power supply arrangement of high mast towers. The work includes day-to-day switching on & off street, pole, tower, Generator, high mast lights, Mobile lighting Tower. Repairing, rectifying, re-fixing and commissioning of light fittings on tower, poles. That includes inside & outside shed luminaries comprising 70W/ 150W/ 250W/ 400W HPSV/LED luminaries, duly replacing the required spares, such as lamps, igniters, condensers, ballasts, drivers, LED chip, etc. The work also includes cleaning the reflector, acrylic cover, replacement of gasket etc., as required. Fixing, connecting and commissioning of ICDP/ ICTPN switches/ MCBs/ MCCBs of various capacities as and when required. The Scope includes fault identification & complete rectification and re-commissioning of the same. The work also includes routine, preventive & breakdown maintenance of DG Mounted Self Generating Mobile Lighting Towers (SGMLTs) including its LED luminaries. The SGMLT needs to be refuelled time to time during operation & shifted by towing with the Pick-Up Truck as and when required and as instructed by Engineer in Charge.
- (D) The scope includes round the clock maintenance, repair & servicing of all electrical installations/ points including electrical distribution system of different Sheds, yards, Lock & Dry Docks, all Offices and buildings, Substations, switch rooms, Pump & Machineries operating rooms (Outer & Inner Winch Operating rooms), Impounding Pump Operating rooms, Main Pump Operating room, workshops, all Reefer Parks, Custom buildings, Quarter complex at Nimak Mahal Road and Subhas Nagar, Ramnagar CISF camp, Libyan CISF Camp, Loco Shop, Hydraulic Model Centre, GCD Yard, Truck Terminal at Sonai, GCD Extn.

(Behind Subhas Bhavan), Dhobitalao, Bhutghat, existing Truck Terminal behind ITC & added areas, Container Scanner site, HSD building, Subhas Bhawan, Fire fighting pumps and vat pumps, Surinam Jetty, all dock gates, CFS building, CFS shed, CT Adm. Building, crews quarters, Water Treatment Plant, all fresh water pumps, etc. to ensure minimum interruption, smooth function of HT & LT network.

- (E) Maintenance of all the High Mast Towers, Lattice towers, Light poles and area lighting of entire NSD including Container Terminal and allied areas. Repair of Pillar Boxes and their foundations.
 - (F) Maintenance of all the electrical installations of 3 Ton Diesel Electric cranes & 3 Ton Japan Crane, all drainage and submersible pumps, Main De-watering Pump, Impounding Pump, all motors and their starters/controllers with their electrical panels, capstans, Caisson Pump motors, their starters and Cables, etc. Maintenance of Power supply to Penstocks and its power distribution panels. Installation of energy meters as and when required.
 - (G) The work includes preventive check-up and routine maintenance of electrical installations like Transformers, HT & LT Switch Gears, HT & LT Panels, Cables and terminations, protective devices, different measuring instruments, control circuit devices, etc.
 - (H) Assistance in transport of diesel barrels along with loading and unloading from truck for Diesel Generator Set. Assistance in disposal of unserviceable electrical items.
 - (I) Repair, maintenance and operation of LT Circuit breakers, HT circuit breakers, Starters. Repair and maintenance of Transformers, Pillar Boxes, Panels, Control panels, submersible Cables, Trailing cables, armoured and un-armoured cables, Electrical surface wiring and concealed wiring.
 - (J) The Contractor has to submit weekly or monthly status reports as and when required by the engineer in charge or his representative for example- Illumination Report, status report on Indoor and outdoor functioning and non-functioning lights etc.
 - (K) For BOQ items of Part-III if Engineer in charge or his representative instructs the contractor to deploy separate additional Highly Skilled and Semi-Skilled personnel other than the personnel on duty, the contractor has to supply separate additional sufficient High Skilled, Semi-Skilled personnel for satisfactory execution of the work. The labour cost is included in the Part-III items. No extra payment in terms of Labour Charges for addition of labour will be made for Part-III items.
 - (L) Supervision and upkeep of any material as per instruction of Section In-Charge or his representative.
 - (M) Mobilization of men and materials within the jurisdiction of EE-NSD and as per the instruction of Section In-Charge or his representative is within the scope of the contract, for which no additional payment will be made.
 - (N) Cleaning & upkeep of substations, switch-rooms etc.
 - (O) All new electrical project works, under the jurisdiction of EE-NSD, will come under the scope of this contract after their Defect Liability Period gets over.
- Furthermore, there are Eight (including one upcoming substation) major Sub-stations viz. (i) Rotary Converter (RC) Sub-station (ii) Impounding Sub-station (iii) Lybian Sub-station and (iv) No. 4 Sub-

station (v) Island Substation (vi) Hydraulic Model Substation, (vii) D-Berth Substation and (viii) New Upcoming Substation for Reefer Park behind Libyan Tea Warehouse in NSD area along with several other switch rooms, pump rooms etc. Tentative list of major equipment under above sub-stations and other areas are furnished below:

Sl. No.	Name of Sub- station	No. of H.T. OCB 6KV	No. of H. T. VCB 6KV	No. of L.T. OCB 500/400V	No. of L.T. ACB 415V	No. of H.T. Panel	No. of L.T. Panel	No. of Transformer	Capacitor Bank/ APFC Panel	Remarks
1.	Lybian	4Nos.	-	-	14 Nos.	1	1	2x630 KVA, 6/0.4KV	2No. APFC panel	-
2.	No. 4	-	13	6nos. 500V, 14nos. 400V	-	1Nos.	3Nos.	625KVA, 6/0.5KV- 3Nos. 6/0.22K V- 1Nos. 6/0.4KV- 2No.	5No.	1.HT Bus coupler 2. Battery Charging Unit
3.	Impounding	2Nos.	-	8Nos.	10Nos	-	4Nos.	400KVA, 6/0.4 KV : 2 Nos.	-	Starter for pumps
4.	Island Substation	3Nos	-	4Nos.	9Nos	1No.	2Nos.	600KVA, 6/0.415 KV, 1 Nos		Includin g Island Switch room
5.	Main Pump	-	-	3Nos.	-	-	1Nos.	-	-	2 nos. liquid starter
6.	R.C. Substation	4Nos.	-	9Nos.	10Nos	1No.	5Nos.	1x400KVA, 6/0.4 KV 2x600KV A, 6/0.4 KV	2Nos. Bank	
7.	Hydraulic Model Substation	1No.	-	6Nos.	-	-	2Nos.	1x400KVA, 6/0.4 KV	1	
8.	LOCO	-	-	2Nos.	-	-	2Nos.	-	-	
9.	2 NSD Shed	-	-	1No.	-	-	1No.	1x70KVA, 500/110 V	-	
10.	D-Berth	4 Nos.	-	26 Nos.	-	1	2	3x500KVA, 6/0.4KV	2 Set	
11	New Libyan Tea Warehouse Substation*	-	3 Nos.	-	17 Nos.	1	1	2x500KVA, 6/0.4KV	1	

* The New Libyan Tea Warehouse Substation will come under the scope of the said Annual Maintenance contract after its Defect Liability Period gets over.

The work include visual preventive check-up and routine maintenance of electrical installation like Transformers, HT & LT Switch Gears, Cable end terminations, HT & LT Panels, protective devices, different measuring instruments, capacitors banks etc.

Yearly Report of the IR Test of the Transformers, HT & LT Switch Gears associate with cables are to be submitted to the concerned Officer and necessary rectification to be done immediately, if any, fault is noticed as per instruction of Executive Engineer, NSD or his representative.

H.T. & L.T. Panel including Breakers : To ensure trouble free operation including checking of oil, fixed and moving contacts of OCB, cable termination, metering, different type of coils, HRC fuse, selector switches etc. Check for proper tightness of Nut Bolts in-cubicle to avoid overheating and burning. Carrying out filtration, testing of acidity and di-electric strength of oil annually preferably during winter. Top-up of insulating oil in HT & LT Switch Gears are to be maintained at the desired level.

Cleaning, petrol washing, servicing, overhauling, minor repairing of over current/earth fault/earth leakage IDMTL relay including lubricating of moving parts, gear, spring etc. polishing of moving / fixed contact. Checking the isolating contacts and other current carrying parts. Checking the tightness of all current carrying parts, particularly the Bus Bars inside the Panels and cleaning of insulator surfaces are to be carried-out at regular interval. All measuring equipment should be checked and necessary rectification is to be done in case any fault is noticed without any delay.

Transformer : Checking of cable termination, oil level, breather, leakage of oil etc. and refilling of oil, if necessary, to maintain minimum oil level of transformer.

Yearly Test Report of the Transformer Oil Acidity, Viscosity and break-down voltage done from an appropriate authority to be submitted to the concerned officer and necessary rectification to be done immediately, if any, fault is noticed as per instruction of Executive Engineer (NSD) or his representative. Routine filtration of Transformer oil of all Transformers under contract are to be carried out once in every year in consultation with Executive Engineer (NSD). Colour of the silica gel should be checked and if necessary, it is to be changed by new one. All bushings, jointings, cable terminals should be checked and necessary rectification is to be done in case any fault is noticed without any delay.

A Preventive Maintenance Schedule for all electrical installations is to be prepared and approved from appropriate authority of SMP, Kolkata by the party. The party should maintain this schedule throughout the year. All the equipments, accessories and installations are to be maintained periodically for satisfactory and smooth functioning of system. Log book each for sub-stations and illumination system is to be prepared as per direction of the Executive Engineer (NSD) or his authorized representative.

Log sheet duly filled-up shall have to be submitted daily to the controlling officer or his authorized representative. All breakdown / trouble with necessary rectification shall have to be recorded in the log sheet as well as in the log book with date and time, which should be placed before Executive Engineer (NSD) or his authorized representative.

Work is to be carried out in case of replacement of oil in transformer :

Draining out of transformer oil and storage of the same into containers, opening of top cover of the transformer, cleaning of sludge, dirt from core winding, cleaning of transformer housing, checking of tightness of connection, replacement of top cover gasket (HT and LT side), refilling of the old transformer oil after dielectric test of insulating oil, replacement of conservator oil level gasket and putting the transformer in service condition etc. after IR test in presence of Executive Engineer (NSD) or his authorized representative.

Distribution Panel: Cleaning of inside compartment, checking of fixed & moving contacts of OCB, checking of tightness of Bus-bar, checking of tightness of incoming & outgoing cable termination and internal connection, checking of meters, checking of protective and operating circuits.

Station lighting: Proper maintenance of station lighting system consisting of fans, lights, distribution board, different rating of main switches etc.

Cables: Attending of faults and timely restoration. Proper maintenance of different types and size of cables, cable terminations boxes, cable trays, clamps etc. of the entire cable route.

Note : (i) Repairing of the Motor & Exciter is beyond the scope of this contract.

(ii) New installation work is to be executed through Part – II & III of BOQ of this contract.

Man Power:

The contractor has to deploy necessary manpower which shall comprise one no. Supervisor for each shift, having Diploma in Electrical Engineering with Electrical Supervisory Certificate of Competency issued by Directorate of Electricity, Govt of West Bengal or any other state Govt or having National Certificate of Competency. 5 number of Highly- skilled electricians (preferably ITI) having workman certificate and 5 no. of Semi-skilled personnel for morning and evening shift and 2 number of Highly skilled electricians (preferably ITI) having workman certificate and 3 no. of Semi-skilled personnel for night shift on all days.

Name of the shift	Duration
First	06.00 hrs. to 14.00 hrs.
Second	14.00 hrs. to 22.00 hrs.
Third	22.00 hrs. to 06-00 hrs.
General	08.00 hrs. to 16-00 hrs.

For work listed under Part-III of the BOQ, the contractor has to provide extra labour (other than the personnel working in the present shifts) for executing these works.

Details of Manpower deployment in shifts including general shift on all days is given in the table given below (Man power allocation may be rearranged as per the discretion of Section in Charge or his representative):

Shift	Highly skilled	Semi skilled	Supervisor
General	1	1	2
Morning	5	5	-
Evening	5	5	-
Night	3	3	-
Total Man power per day	14	14	2

Required numbers of relievers are to be made available to compensate for leave/sickness, Roster Off, etc. Shortage in manning at any point of time is not acceptable.

But, the deployment of man power shall have to be increased depending upon the prevailing emergency situation without claiming any extra cost.

The contractor may follow the timings of port operational shifts or can maintain their own timings but the same must cover the whole day round-the-clock. The contractor must intimate and take permission of the officials of SMP, Kolkata in writing about the timings of three shifts or amendments thereof to be followed by his workmen. The deployed man power should be capable to cater to any requirement in all three operational shifts round-the-clock on all days of the week irrespective of holidays etc.

Following list of Persons along with their qualification & experience will be required

Sr. No.	Designation	Qualification	Experience
i.	Supervisor	1. Diploma in Electrical Engineering with Electrical Supervisory Certificate of Competency issued by Directorate of Electricity, Govt of West Bengal or any other state Govt. or having National Certificate of Competency 2. Requisite license in relevant parts (HT<) issued / endorsed by Licensing board Govt. Of West Bengal or any other state Govt.	Minimum five year working experience in the relevant field.
ii.	Highly Skilled Electrician	Requisite license in relevant parts (HT<) issued/ endorsed by Licensing board Govt. Of West Bengal or any other state Govt.	Minimum Two year Working experience in the relevant field.
iii.	Semi-skilled labour	Stout body & good physique	Minimum Two year Working experience in the relevant field.

Records: The Contractor shall keep and maintain the records of day-to-day maintenance activities, i.e. materials consumption, works carried out, attendance of workman and submission of the same to, Executive Engineer (NSD). The Contractor shall also keep and maintain the Daily report on operation of Electrical installation specially the no. of lamps glowing in street/pole/tower/ Yards/ Gates as per area wise and also on sub-station equipment shall have to be submitted by the contractor to Executive Engineer (NSD) in a specified format by 11.00 A.M next day.

The contractor shall have to follow the schedules of maintenance as will be framed jointly by Engineers of the SMP, Kolkata and contractor.

The contractor shall have to maintain a site store with necessary stock/materials with a view to timely attending the fault in any electrical installations so that down time of the concerned portion of the electrical distribution system can be kept to the minimum.

In case of breakdown leading to interruption of power supply within the jurisdiction of work, immediate action shall be taken from contractor's end and stop gap or temporary arrangements for resumption of power and functioning of the system is to be made as early as practicable. A qualified supervisor shall be present at the work spot. This arrangement will however be allowed only for a week within which period, the original installation/system has to be restored & re-commissioned.

During the course of execution of the maintenance contract, in the event of necessity of any addition /alteration or additional work beyond the scope of work, the same shall have to be carried out by the contractor as per agreed terms & conditions.

All Dock Safety Regulations in vogue and as amended from time to time shall be applicable to the contractual work. The contractor has to maintain the illumination level in a manner so as to satisfy the requirement as mentioned in clause 16 (2) of the Dock Workers (Safety, Health and Welfare) Regulations, 1990 which is (.....The general illumination, in areas on the Dock where Dock Workers have to pass shall be at least 10 lux and at places where Dock Workers are employed, the illumination shall be at least 25 lux without prejudice to the provision of any additional illumination needed at particular places.)

Penalties:

(a) Non availability of minimum strength of man power shall attract a penalty as per the table furnished below:

SI No	Level of workmen	Penalty /man/shift
1	Supervisor	Rs 1250/-
2	Skilled Electrician	1.25 times the prevailing minimum wages rate of Central Govt.
3	Semi skilled labour	

(b) Non-functioning of tower-light & street-light luminaries, AC point, ICDP/ICTPN/Sheet metal TPN/ Sheet metal DP/ fuse/MCB/Switchgear beyond two days from the date of lodging complaint by SMP, Kolkata official shall attract a penalty of Rs. 150 per luminaire per day. Non-functioning of office light/fan/ plug /call bell beyond three days from the date of lodging complaint by SMP, Kolkata official shall attract a penalty of Rs. 25/- per point per day.

(c) For Sub Station equipment:

(i) Identification & rectification of fault for substation equipments such as fault in Circuit breakers, HT & LT Panels, cables termination, LT cables, Straight through joints, Capacitor Banks etc. are to be done within 24 hrs.

(ii) Identification of fault for in transformers, HT/LT Cables etc. are to be done within 24 hrs.

If work is not done as per above schedule [(i) & (ii)] then a penalty @ rate of Rs. 1000/- per day shall be imposed on contractor for each location separately and will be deducted from the AMC amount due to the contractor.

If contractor is not able to rectify the fault as mentioned in (ii) as stated above within maximum 3 days of time, penalty @ Rs 1000/day will be imposed from 4th day onwards from the date of identification of fault. In case it is not possible due to valid reasons (major fault, replacement of spare parts not readily available etc.), which is to be acceptable to competent authority, then the same must be rectified within 10 days from the date of breakdown. Non-acceptance of reasons for delay by competent authority/non- rectification of faults within aforesaid 10 days will attract penalty @ Rs 1000/day for each day of delay from 11th day onwards. In exceptional circumstances if applied in writing, competent authority may allow extension of such period as is considered reasonable.

The entrusted contractor has to maintain a log book for daily work in each shift and an attendance register and have to get it countersigned by the SMP, Kolkata officials present at the office of Executive Engineer (NSD).

The contractor shall keep and maintain the records of day to day maintenance activities i.e. materials consumption, work carried out, attendance of workmen and submit the same to Executive Engineer (NSD).

TOOLS, TACKLES and CONSUMABLES:

- A)** Required tools and tackles proposed to be used for execution of work mentioned in the tender including safety accessories are to be provided by the firm at his cost.
- B)** The Contractor shall make available the various tools and tackles that are required for operation and maintenance of the system/equipment.
- C)** The following are the minimum tools and tackles that are required to be made available at site all the time:
 - a. Tools:**
 - i. Trolley Ladder of suitable height for maintenance of Street Light Poles, Self-Supporting Aluminium/ Wooden Ladder.
 - ii. Tool Kit consisting of Screw Driver Set, Nose Pliers, and Cutting Pliers, Test lamp, Tester, Screw Driver, Adjustable Spanner, Hacksaw and Frames.
 - iii. Hammer, Chisel, Pipe Wrench.
 - iv. Digital clamp-on multi-meter.
 - v. Megger (for both LT & HT).
 - vi. Crimping tools.
 - vii. Portable Welding M/c.
 - viii. Tarpaulin Tent Set.
 - ix. Electrical Portable Drilling Machine (including Bits).
 - x. Set of Spanners (Ring and Open).
 - xi. Crow bar and Axe.
 - xii. Double end spanner, Box spanner.
 - xiii. High Voltage testing arrangements.
 - xiv. Emergency Light.
 - xv. Vacuum cleaner.
 - xvi. Earth Resistance Megger.
 - xvii. Painting Brush.
 - b. Consumables:** Consumables like Insulating Tape, wire brushes, test lamps, jute etc., as per the requirement is under the contractor's scope.

Provision of Safety gears:

The Contractor shall at his own cost, provide safety gears, i.e., Helmet, insulating Gloves for Electrical Works, cotton gloves, safety shoes, rainy wears, reflective jacket, Soap, Sanitizer, Gloves, Masks to his staff. The Contractor shall provide first aid box for his staff as per the direction of Engineer-in-charge. The work shall be carried out as per Indian Electricity Act, 2003, Central Electricity Authority (Measures relating to safety & electricity supply) Regulation, 2010 with latest revised IS code of Practice and relevant portion of National Building Code particularly with respect to fire safety and also code of practice for fire safety of buildings (general): Electrical Installations IS: 1646:1997 and code of practice for earthing IS 3043:1987 and Dock safety rule & regulation.

TECHNICAL SPECIFICATIONS

Technical Specification for Cable Work:

a. 3 Core, 11 KV (E) grade, Cross Linked Polyethylene (XLPE) HT Cable:

- (i) The cables should be generally compliance with IS 7098 (Part-2) / 1985 or latest amendment, if any.
- (ii) Conductor: Stranded Aluminium comply to IS : 8130 - 1984 or latest amendment, if any.
- (iii) Colour coded.
- (iv) Voltage Grade : 11KV(E),
- (v) Insulation : XLPE ,
- (vi) Screening: Metallic with extruded semiconductor.
- (vii) Inner Sheathed: Extruded PVC.
- (viii) Armour: Galvanized Steel Strips.
- (ix) Outer Sheathed: Extruded PVC.

The cables should be supplied with returnable drum.

b. 3.5 Core, 1.1 KV grade, Cross Linked Polyethylene (XLPE) LT Cable:

- i. The cables should be generally compliance with IS 7098 (Part-1) / 1988 or latest amendment, if any.
- ii. Conductor: Stranded Aluminium comply to IS : 8130-1984 or latest amendment, if any.
- iii. Colour coded.
- iv. Voltage Grade : 1.1KV.
- v. Insulation : XLPE.
- vi. Inner Sheathed : Extruded PVC.
- vii. Armour : Galvanized Steel Strips.
- viii. Outer Sheathed : Extruded PVC.

± 5% variation will be allowed as per practice. It shall be ensured that before dispatch, both ends of the cables are properly sealed to prevent ingress of moisture in the insulation.

Direction of arrow must be marked on the cable drum.

All HV cable glands shall be connected to the earth with 2 Nos. 38.6 mm copper or or equivalent Laying of Cable.

Laying of Cable

Laying Underground:-

Cable shall be laid generally in accordance with IS: 1255-1983. The average depth of trench for laying cable shall be as below:-

- i) Directly on ground - 0.75 m.
- ii) At road crossing - 1.00 m.

The trenches shall be excavated in reasonably straight line, and where there is a change in direction suitable curvature shall be provided with 12D radius where D is the diameter of the cable. Where gradients and changes in depth are unavoidable, this shall be gradual, except where otherwise directed by the Engineer. The cable shall be laid on a cushion of sand, protected with bricks placed on both sides (along the length of the cable) and top (across the length of the cable). After laying of the cable, the duct shall have to be filled up by sand. Where cables run in parallel, separate ducts as stated shall have to be provided. G.I. pipe shall have to be used where cable pass through walls, roads, drains, culverts, railway line etc.

GI pipe also shall be used if depth of cable trench is less than 750mm and further excavation is not possible due to obstruction of existing material, which will be paid in actual. For one run of cable one GI pipe is to be considered. In other word two or more run of cable will not pass through one pipe.

The cable trench shall be filled back with riddled soil obtained from excavation. This shall be done in layer and compacted. Cable route marker shall have to be provided at a maximum distance of 50m.

Laying on wall or structure:

Where cable shall be laid on wall or structure, the cable shall be laid by using MS Clamp of adequate strength and size. The maximum distance between clamps shall not be more than 400mm. The cable shall run as straight as possible. There shall be GI pipe protection of 1 meter from each floor level during vertical run. When the cable shall pass through wall/floor etc pipe protection shall have to be given. Wherever cable shall be required to be laid inside the building, the cable shall be laid on perforated GI Tray of adequate size and mechanical strength. The tray shall be rigidly fixed on wall in a proper manner at suitable height using MS angle. The cable shall be fixed on tray using MS clamp of proper size and thickness at a distance should not be more than 300mm. In case cable pass from one building to another building; GI protection pipe of adequate size is to be provided with proper fixing. Neatness must be maintained.

Laying in catenary: The cable will be laid in catenary using 4 SWG GI stay wire and suitable insulator. Care must be taken to avoid unnecessary sag. Termination of cable shall have to be made by using suitable compression cable gland and sockets by crimping to the size of the cable.

Laying Under hard standing: Cable should be laid through suitable size of GI/HDPE Pipe at an average depth of 300mm after cutting Concrete pavement etc. including mending good damages to original finish.

Termination & Finishing:

All XLPE HT Cables 11KV(E) Grade shall be terminated at the equipment with the help of Heat Shrinkable End Termination Kit (Indoor type). All HV cable glands shall be connected to the earth with 2 Nos. 38.6 mm copper or equivalent G.I. conductors.

All XLPE LT Cables 1.1 KV Grade shall be terminated at the equipment by means of double compression type Nickel plated Brass Cable Glands.

All cable entries should be through bottom only. The cables should be entered through Glands inside the electrical equipments.

Power Cables, wherever colour coding is not available, should be identified with Red, Yellow & Blue PVC tapes for the purpose of identification.

Where copper to aluminum connections are made necessary bi-metallic washers should be used.

In case of termination of cables at the bottom of a panel over a cable trench, having no access from the bottom, close fit hole should be drilled on the bottom plate for all the cables in one line, then bottom plate should be split in two parts along the center lines of holes. After installation of bottom plate and cables, it should be sealed with cold setting compound. Cables should be clamped either with copper or G.I. Strip over the open armouring to connect it to the earth bus.

Cable Leads should be terminated at the equipment terminals, by means of crimped type solderless Aluminum connector. Crimping should be done by hand crimping / hydraulically operated tool and conducting jelly should be applied on the conductor. Insulation of the leads

should be removed immediately before the crimping. Conductor surface should be cleaned and should not be left opened.

This scope includes supply of all materials including Complete Termination Kits with Lugs and all accessories and necessary clamping arrangement (for HT Cable) for bottom entry at the Panel / Transformers.

Necessary modification for termination and cable entry of cable at Transformer end is to be carried out by the successful tenderer.

Cable Jointing Kits: Suitable Heat Shrinkable type Straight through Cable jointing Kits as mentioned in the BOQ.

MCB: MCB with a short circuit breaking capacity of 10 kA, 'C' Series, conforming to IS/IEC 60898-1 of approved make are to be provided on demand or as per BOQ. It should have precise hammer action with auxiliary switch and shunt trip accessories. The switching mechanism must be independent, manual and trip free. It must have at least 15 plate arc chute for effective arc quenching. It should be of low power consumption, cost effective and energy saving.

MCCB:

a)	Rated normal current	:	As per BOQ.
b)	Impulse Voltage	:	8 kV
c)	Rated Operational Voltage	:	415 V AC
d)	Insulation voltage	:	750 V AC
e)	Rated Frequency	:	50 Hz.
f)	Particulars of Specifications to be complied with	:	IS/IEC: 60947 – 2(2003) or latest amendment.
g)	Type of mechanism	:	Double Break Type or as per BOQ.
h)	Number of poles	:	As per BOQ.
i)	Rated short-circuit breaking current for 1 second.	:	As per BOQ.
j)	Rated service short-circuit breaking capacity (Ics)	=	Rated breaking capacity (Icu)=100%

Industrial sockets

4 pin, Industrial socket of 32A having provision of 3 phase and earth. Panel mounting sockets-inclined having IP protection 44, similar to Legrand make catalogue no 057618. The same should be installed on demand in reefer park pillar box.

Rewinding, Overhauling, Painting & Reinstallation of Ceiling Fans:

Existing Ceiling fans shall be removed from the site and each one shall be tested and inspected before overhauling. Bearing of the fans, if required, are to be changed. Rewinding of the fans, if required, is to be carried out. In other word all the Fans, after overhauling, repairing and painting should work satisfactorily. Successful Tenderer should arrange for supply & installation of substitute spare fans during the period of overhauling of existing fans, if required. After overhauling, all fans shall be reinstalled along with approved make stepped electronic fan regulator. These works are to be carried out on demand and after instruction of SMP, Kolkata officials. Locking of split pins are to be checked time to time & replaced, if necessary.

LED luminaries:

- Integral Type 60/150/200W/300W/ 400W/ any other BoQ wattage LED light luminaries. (Supporting Document – Luminaire Manufacturing Data Sheet).
- Housing: Made of pressure die cast Aluminium (LM6/ADC12/LM24) having sufficient area with fins /heat sink for heat dissipation. (Supporting Document – Luminaire Manufacturing Data Sheet).
- Cover Type: Heat Resistant Toughened Clear Glass or UV Stabilized Polycarbonate Cover. (Supporting Document – Luminaire Manufacturing Data Sheet).
- It should have wide operating voltage range preferably from 120V to 270V . (Supporting Document – Luminaire Manufacturing Data Sheet).
- The Luminaire should be minimum IP66 Complaint. (Supporting Document – Luminaire Manufacturing Data Sheet).
- Luminaries system efficacy ≥ 110 lumen/ watt. (Supporting Document -LM – 79 Report from NABL accredited LAB)
- Luminaire Chip efficacy ≥ 130 Lumen /Watt. (Supporting Document -LM – 80 Report from NABL accredited LAB)
- LED used should be of SMD (Surface Mounted Device) type.
- Beam angle of 60 Degrees.
- THD < 10%
- Power Factor ≥ 0.95 .
- Rated Minimum life span of LEDs (L70B50) used in the Luminary shall be greater than 50,000 Hrs. at the soldering point temperature of 105 C & at the luminary driving current. (Supporting Document -TM-21 life projection calculation along with LM80 for all three ambient temperatures of 55, 85, 105 Deg. C as per applicable standard shall be submitted to substantiate that the life of LED Chip (L70B50) shall be more than 50000 burning hours.)
- Secondary Lens/Optics: Luminaries should have secondary optical lens of type PMMA (Poly-Methyl Methacrylate Acrylic)/Borosilicate glass/Polycarbonate. Also, the lens shall have maximum temperature withstand capacity of 120 Deg. C. (Supporting Document -LED manufacture datasheet and type test report certificate from NABL Accredited lab).
- Colour temperature of the proposed white colour LED shall be 5700K (i.e., 5665K +/- 355K, as per ANSI standard C78.377A). (Supporting Document-LED manufacture datasheet & LM 79 report from NABL accredited Lab).
- Colour Rendering Index (CRI): Greater than or equal to 70. (Supporting Document -LED manufacture datasheet, LM 79 Report from NABL accredited Lab).
- Surge Protection: Minimum 4 kV is to be used in series with every driver with failsafe (i.e., without leading to fire hazard) and extra Min 10 kV Surge Protection device, external to the driver circuit, but within the same housing needs to be used. Failed status of surge devices should be clearly visible through flag/indication. (Supporting Document – LED Luminaire datasheet.)
- LED Manufacturer should have separate valid BIS registration number for both luminaries and driver. Driver should have the registration of BIS of the OEM of driver manufacturer. (Supporting Document –Separate BIS Registration Certificate for Luminaries and Driver)

- Driver should be fully potted driver for better heat dissipation and should be vibration proof for driver circuit component to increase longevity.
- Luminaries should be provided with mounting bracket (GI or Stainless Steel). (Supporting Document - LED Luminaire manufacturer datasheet).
- Ambient temperature to be considered: 35+ degrees centigrade.
- Humidity to be considered: 10% to 90% RH.
- Model and make of LED Flood Light Luminaire. (Supporting Document – LED Luminaire manufacturer Data Sheet).
- The Driver should be IP 66 Complaint.
- IK \geq 07.

HDPE Pipe

Pressure Rating – Minimum (SDR-6, PN-32), 110 mm inner Diameter.

If HDPE/GI pipe is included in the item of laying of cable in the BOQ, the same has to be supplied during laying of cable. BOQ item exclusively for supply of HDPE/GI pipe will not be operated in this case.

High Mast Tower Trailing Cable

The cable shall be of 1100 Volts grade, EPR insulated and PCP sheathed to get flexibility and endurance as per IS: 9968 (Part-1)-1988. Size of the cable shall be minimum 5 core x 4.0 sq. mm. stranded Copper conductor.

Ampere Electrical Insulation Tape

0.15mm x 18mm x 20 Meters PVC Insulated Tape.

Main Switch

3 Pole with Neutral Link Main Switch.

Note:

Other Items specifically not mentioned in the T.S. shall be as per BOQ. Any other item required for installation but specifically not mentioned either in the BOQ or the T.S. like requisite length of MS Pipes, clamps and accessories shall be deemed to be included in the rates for installation of the items for which these items are intended. Tenderers are advised to build up the installation prices accordingly. Any claim in this regard on the plea that the item is not specifically mentioned shall not be entertained.

Cleaning of site:

On completion of works, the contractor shall reinstate and make good at his own expense any property or land which might have been disturbed and/or damaged by his works. Contractor should also clean the site as required during execution and fully clear the site after completion of all the works. Any holes/drillings/openings/damages made on the wall/roof for drawing of cables/installation of equipment shall be made good by the tenderer at his own cost.

List of Preferred Makes

Note:

- Any other make except the mentioned List of Preferred Makes for any equipment/material may be accepted subject to such items shall comply all the technical specifications /requirements mentioned in the tender documents.
- Request for consideration of such additional make of items shall be supported with certificate from any Central Govt Organisations, Public Sector Units, and PWDs regarding satisfactory working / performance of those items during the last three years (minimum) prior to the starting date of submission of e-tender.
- If any additional make for any item is proposed, the same shall be indicated in the column mentioned below and it should be duly signed and uploaded along with the techno-commercial bid

Sl no	Item	Make	Additional make of items, if any
1	LEDs, Drivers, Fittings, & Accessories.	Philips/ Bajaj/ Havells/Crompton /Wipro	
2	HPSV Lamps/ Ballast/ fittings and Accessories.	Philips/ Bajaj/Crompton/ Havells/ Wipro	
3	Fan Capacitor	Bajaj/ Crompton/Havells/Usha/ Universal	
4	MCB/Switch	L&T/ Havells/ Legrand/ Siemens	
5	Contactors	L&T/C & S/ Schneider	
6	Tumbler switches/Piano type switches/Socket/ Ceiling Rose /Holder/Bakelite kitkat fuse unit.	Anchor/Ellora/Precision/Rider	
7	Copper wire	KDK/Finox/Havells/National/ Polycab	
8	Cable	Cable Corporation of India Ltd. / Plaza / Fort Gloster / NICCO / RPG Cable / Universal Cables Limited (UNISTAR) / INCAB / Gloster / CRYSTAL	
9	Cable Jointing Kits	Raychem/ 3M.	
10	Battery	Exide/Luminous/AMARA Raja	
11	IDMTL Over Current with earth fault protection Relay/ IDMTL Over Current Relay.	Alstom/ABB/L&T/Schneider /Simens	
12	Under Voltage Relay	Alstom/ABB/L&T/ Schneider/Simens	
13	Ammeter/Voltmeter/Power Factor meter.	L&T/A.E/C & S/Schneider/ABB/Simens	
14	C.T.	Kappa/A. E	

15	Selector Switch for Ammeter/Voltmeter	L&T/C & S/Schneider	
16	ON-OFF Selector Switch	L&T/C & S/Schneider	
17	DOL Starter.	L&T/C & S/Schneider	
18	START/ STOP Push Button for remote operation	L&T/ Havells /C & S/Schneider	
19	Transformer Oil	Sobita/Power Oil/ TRANSOL/Adreol/ Transpower	
20	Industrial Sockets	Hager/L&T/Legrand/Havells/ Mennekes/C & S	
21	Capacitor	Bajaj/ Crompton/Havells/Usha/ System Control	
22	MCCB, MCB, Switch, Contactor, Timer	L&T/ Legrand/ Siemens /Schneider/ABB	
23	Ceiling Fan, Exhaust Fan, Wall mounting Fan/Pedestal Fan	Havells/USHA/ORIENT/Crompton Greaves/ Polar	
24	Wire Rope	Bharat/Usha Martin	

• If at any stage it is found that the item offered with make other than the preferred make mentioned as above is not acceptable due to non-fulfillment of the afore-stated criteria or otherwise, the bidder is bound to supply items of preferred make with no additional cost.

PREAMBLE TO THE BILL OF QUANTITIES

Notice Inviting Tender No.: SMP/KDS/Mech/SE-I/ADV/588 Dated 30.08.2021

1. The Bill of Quantities must be read with the General Conditions of Contract, the Special Conditions of Contract and the Particular Specifications of Work and the Bidder is deemed to have examined the above documents and to have thoroughly familiarise himself with the total scope of work and its mode of execution.
2. The quantities given in the Bill of Quantities are approximate only and are given to provide a common basis for tendering. Payment will be made according to the quantities of each item of work actually carried out at the accepted rates as per Order Letter. The measurements of each item of work shall be measured jointly by the Engineer or his Representative.
3. General direction and description of work or materials given elsewhere in the contract documents are not necessarily repeated in the description of items in the Bill of Quantities.
4. The prices and rates entered by the Contractor in the Bill of Quantities shall be deemed to cover the complete and finished work, inter-alia, all costs and expenses which may be required for successful completion of the works together with all risks, liabilities, contingencies, insurance, octroi, royalties, taxes and obligations imposed or implied by the Contractor.
5. Where separate items such as mobilisation, demobilisation, temporary works etc., have not been provided in the Bill of Quantities for works required under the Contract, then the cost of such works shall be deemed to have been included in the prices and rates of other items.
6. Without affecting the generality of the foregoing provisions, the prices entered in the Bill of Quantities by the Contractor shall include inter-alia, all costs and expenses involved in or arising out the followings:-
 - a. The provision, storage, transport, handling, use distribution and maintenance of all materials, plans, equipment machineries and tools including all costs, charges dues demurrages or other outlays involved in the transportation.
 - b. The provision and maintenance of all his staff and labours and their payments, accommodation, transport, taxes and other requirements.
 - c. Setting out including measurement and supervision.
 - d. The provision, storage, transport, use handling, distribution and maintenance of consumable stores, fuel.
 - e. All First Aid, Welfare and safety requirements.
 - f. Damage caused to the works, plants, materials and consumables stores caused by weather.
 - g. Licence, fees and other charges for compliance of Government Acts and Rules that are in force and applicable.
7. The Contractor should be held responsible for the safe custody of materials, machineries etc. at site procured by him or issued to him by the Trustees.
8. This being a **percentage rate tender**, the Bidder shall quote his rates as percentage **above / below / at par** with the estimated amount put to tender on line based on his own analysis.

The Tender Price thus established would be taken for comparative evaluation of E-Tenderers.

PRICE BID / Bill of Quantity (BOQ)

Name of the work: Round the clock maintenance of electrical installations of entire NSD including Container Terminal, Subhash Bhavan & other areas for a period of two years

Part-I: Labour Charge for Maintenance

Sl. No.	Description of Item	No. of Months	Rate/Month (Rs.)	Total Value (Rs.)
1	Round the clock maintenance, operation, repair & servicing of indoor & outdoor illumination of Netaji Subhas Dock & allied areas which includes all tower lights, yard lights, street lights, lights situated inside & outside the various sheds / buildings, gate lights, pole lights, angle fitting lights etc. lying under the jurisdiction of EE, NSD to ensure minimum interruption, smooth functioning of lights and luminaries. It includes continuous attending against verbal/written complaint made by EE, NSD or his representative with the works related to maintenance of the lights, light fittings, and any other switches/ MCBs/ MCCBs, timer units and feeding cables (including cable laying, termination and jointing) and other related switches for tower lights, yard light at sheds, buildings, gates etc. for maintenance of the above illumination. The scope also include day to day switching on & off street, pole, tower, high mast lights, repairing, rectifying, refixing and commissioning of light fittings on tower, poles etc., inside & outside shed luminaries comprising 70W/ 150W/ 250W/ 400W HPSV lamps, duly replacing the required spares, such as lamps, ignitors, condensers, ballasts etc. including cleaning the reflector, acrylic cover, replacement of gasket etc., as required and fixing, connection and commissioning of ICDP/ ICTPN switches/ MCB's/ MCCB's of various capacities as and when required & actual fault identification & complete rectification and re-commissioning of the same. Furthermore, it includes round the clock maintenance, repair & servicing of all electrical installation/ points including electrical distribution system of different Sheds, yards, Lock & Dry Docks, Offices, Substations, Pump & Machineries operating rooms(Outer & Inner Winch Operating rooms), Impounding Pump Operating rooms, Main Pump Operating room, workshops, 3 NSD Refer Park and Switch rooms of entire Netaji Subhas Dock excluding jurisdiction of Container Terminal, Qtrs. Complex at Nimak Mahal, Subhas Nagar CISF camp, Ramnagar CISF camp, Lybian CISF Camp, Loco Shop, Hydraulic Model Center, GCD Yard, Truck Terminal at Sonai, GCD Extn. (behind Subhas Bhavan), Dhobitala, Bhutghat, existing Truck Terminal behind ITC & added area, and Surinam Jetty to ensure minimum interruption, smooth function of HT & LT network. It includes continuous attending against verbal/written requisition made by the concerned officials with the works related to Preventive & Breakdown	24	9,35,690.00	2,24,56,560.00

maintenance of HT OCB, Main HT panels, DB's, SubDBs, underground/ surface laid armoured/ unarmoured cables including excavation of earth for locating cable fault & jointing etc. & also visual preventive check-up and routine maintenance of power line, fuses, MCCBs/MCBS, point wiring, switch boards, switches/sockets, fan, lights, regulators, earth continuity conductor, cleaning these installation, checking for any abnormality and rectification & day to day switching on/off yard /substations/pump room lights.

Round the clock operation, maintenance, repair and servicing of all electrical installations including the electrical distribution system of the areas of Container Terminal covering 4 ,5,6,7 & 8 NSD, Basra Yard to ensure minimum interruption, smooth functioning of the electrical system at Container Terminal. It includes continuous attending against the verbal/written complaint made by SMP, Kolkata officials/staffs with the works related to maintenance of power line, fuses, MCCBs ,MCBS, point wiring, switch boards, switches/sockets, call bells, fan, lights, regulators, earth continuity conductor, starter switch for AC, Main LT panels, DB's, SubDBs, underground/ surface laid armoured/unarmoured cables, motor starters etc. of the electrical installations located at Container Terminal Administrative Building, Chhaya Kunj near 7 NSD, Container Frait Station (CFS) Building, Container Parking Yard (CPY), Old Reefer Park, Canteen No. 7A, Terminal Workshop, Ground floor of Port Fire and Customs Building, Fuel Pump Station Building at NSD, Gates No. 4, 5, 6, 7 & 8 of NS Docks, OCTS Computer Centre and its booths at different location. The scope also includes day to day switching on & off high mast and lattice tower lights, other street and pole lights situated at at4, 5,6,7&8 NSD, Yards , Parking yard behind 7 & 8 NSD, Basra Yard, Lighting towers of 4 NSD & 5 NSD berths and Basra Line, Truck Terminal near 8 NSD gate etc and complete repairing, rectifying, refixing and commissioning of light fittings, luminaries comprising 150 w/ 250W/400 w HPSV lamps, duly replacing the required spares, such as lamps, ignitors, condensers, ballasts etc. including cleaning the reflector, acrylic cover, replacement of gasket etc., as required and fixing, connection and commissioning of ICDP/ICTP switches/ MCB's/ MCCB's of various capacities as and when required & actual fault identification & complete rectification and re commissioning of the same. Furthermore, it includes round the clock maintenance, repair & servicing of all electrical installation/switchgears of D-Berth substation including HT Panel, LT Panel, OCB, MCCBs, cables, transformers to ensure minimum interruption, smooth function of HT & LT network and entire Electrical installation of Subhash Bhaban, SMP, Kolkata.

Total Charge=

2,24,56,560.00

Part-II: Cost of Spares & Materials

Sl No.	Material Description	Total Qty	Unit	Unit Rate (Rs.)	Amount (Rs.)
1	Supply of 100A TP with Neutral Link Main Switch with sheet steel enclosure.	1	Nos.	14508.00	14508.00
2	Supply of 125A, 415V, TPN on load front operated Changeover switch with sheet steel enclosure.	1	Nos.	12548.00	12548.00
3	Supply of 200A, 415V, TPN SFU with sheet steel enclosure incl. S & F 3 nos. DIN type HRC fuse as per rating.	1	Nos.	13083.00	13083.00
4	Supply of 4 Pole MCB of Breaking capacity 10kA & C characteristics.				
	i) 6-32 A	40	Nos.	1515.00	60600.00
	ii) 40A	20	Nos.	2005.00	40100.00
	iii) 63A	40	Nos.	2106.00	84240.00
	iv) 100A	5	Nos.	8956.00	44780.00
5	Supply, delivery of 63 A ,TP with neutral link Main Switch with sheet steel enclosure.	1	Nos.	6022.00	6022.00
6	Supply, delivery of 32 A TP with Neutral Link Main Switch with sheet steel enclosure.	1	Nos.	2751.00	2751.00
7	Supply of 240/415 V 3 Pole MCB of Breaking capacity 10kA & C characteristics.				
	i) 63A	20	Nos.	1772.00	35440.00
	ii) 40 A	10	Nos.	1705.00	17050.00
	iii) 6-32A	40	Nos.	1137.00	45480.00
8	Supply of 415V Four Pole MCCB of Breaking capacity 25kA/35kA with fixed/variable thermal and fixed magnetic setting.				
	i) 63 A	4	Nos.	8377.00	33508.00
	ii) 100 A	6	Nos.	8642.00	51852.00
	iii) 160 A	2	Nos.	13738.00	27476.00
	iv) 200 A	5	Nos.	17358.00	86790.00

	v) 250 A	3	Nos.	21206.00	63618.00
	vi) 315 A	2	Nos.	23946.00	47892.00
	vii) 400 A	3	Nos.	23946.00	71838.00
	viii) 630 A	1	Nos.	30633.00	30633.00
9	Supply of 415V Three Pole MCCB of Breaking capacity 25kA/35kA with fixed thermal and fixed magnetic setting.				
	i) 63A	5	Nos.	7379.00	36895.00
	ii) 100 A	4	Nos.	7379.00	29516.00
	iii) 200 A	2	Nos.	12958.00	25916.00
	iv) 250 A	1	Nos.	16255.00	16255.00
	v) 315 A	1	Nos.	19495.00	19495.00
10	Supply of Four pole MCB SS enclosure with IP-20/30 protection, powder coated incl. provision for earthing attachment.	6	Nos.	562.00	3372.00
11	Supply of MCB enclosure of outdoor type on wall with IP65/55 Protection incl. provision for earthing attachment.	6	Nos.	562.00	3372.00
12	Supply of MCB SS enclosure with IP-20/30 protection, powder coated provision for two pole MCB, having provision for earthing attachment.	6	Nos.	562.00	3372.00
13	Supply of MCCB SS enclosure with IP- 20/30 protection, powder coated provision for housing Four pole (4P) MCCB, having provision for earthing attachment.	4	Nos.	7353.00	29412.00
14	Supply of Four pole (4P) MCCB SS enclosure with IP65/55 Protection, having provision for earthing attachment.	4	Nos.	7353.00	29412.00
15	Supply of 240V/415V SP MCB of Breaking capacity 10kA & C:-				
	i) 6-32 A	100	Nos.	220.00	22000.00
	ii) 40 A	3	Nos.	548.00	1644.00
	iii) 63 A	1	Nos.	602.00	602.00
16	Supply of 240/415 V DP MCB of Breaking capacity 10kA & C characteristics :-			0.00	0.00
	i) 6-32 A	40	Nos.	1010.00	40400.00

	ii) 63A	2	Nos.	1258.00	2516.00
17	Supply of pre-wired double-door SPN MCB Distribution Board with IP-42/43 protection Inter connected with suitable size of Copper wire and neutral link & having provision for earthing attachment.				
	i) 2+8 way	5	Nos.	1597.00	7985.00
	ii) 2+12 way	4	Nos.	1975.00	7900.00
18	Supply of pre-wired double door Horizontal TPN MCB Distribution board with IP-42/43 protection, incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment.				
	i) 4 ways per phase.	5	Nos.	2846.00	14230.00
	ii) 6 ways per phase.	4	Nos.	3459.00	13836.00
19	Supply of pre-wired double door Vertical TPN MCB Distribution board for MCCB incomer up to 100A with IP-42/43 protection, incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment				
	i) 4 way	2	Nos.	8924.00	17848.00
20	Supply of 4 Way TPN outdoor types pre-wired DB horizontal / vertical enclosures with IP-65/66 protection, incl. provision for earthing attachment.	4	Nos.	11600.00	46400.00
21	Supply of 2+8 way SPN outdoor type pre-wired DB horizontal / vertical enclosure with IP-65/66 protection, incl. provision for earthing attachment.	3	Nos.	6658.00	19974.00
22	Supply of sheet metal (16 SWG) Iron Clad Bus bar chambers of 4 bars incl. earthing attachment and painting as required.				
	i) 415 V, 100/125 A	1	Nos.	12527.00	12527.00
	ii) 415 V, 200 A	1	Nos.	14655.00	14655.00
23	Supply of 240 V AC superior type Ding-Dong Call Bell on HW board incl. S&F HW board	10	Nos.	206.00	2060.00
24	Supply of 240VAC CALL-BELL [musical type] with all necessary materials connection on HW board incl. S&F HW board.	6	Nos.	392.00	2352.00
25	Supply & Fixing of EI danger board on wall 20 cm x 30 cm (8"x12")	20	Nos.	172.00	3440.00
26	Supply & Fixing angular batten holder (on 75mm dia PVC round block / round Bakelite) on wall/ceiling.	80	Nos.	46.00	3680.00
27	Supply of 15A Tumbler switch	20	Nos.	183.00	3660.00

28	Supply of 5A 3 pin Socket Base (Tumbler) flush type	50	Nos.	92.00	4600.00
29	Supply of 15A 3 pin Socket Base (Tumbler) flush type	40	Nos.	183.00	7320.00
30	Supply of 5A 3/5 pin Piano flush type Socket Base	80	Nos.	67.00	5360.00
31	Supply of 15A 3 pin Top	20	Nos.	101.00	2020.00
32	Supply of Five in One 5/15A Combined switch-Fuse-Socket(5/15A)-Indicator unit along with PVC Box	20	Nos.	227.00	4540.00
33	Supply of 6 A Piano Switch	200	Nos.	21.00	4200.00
34	Supply of 5 A Tumbler Switch	40	Nos.	92.00	3680.00
35	Supply of 15A - 5 pin Piano flush type Socket Base	80	Nos.	93.00	7440.00
36	Supply of 5A 3 pin Top	40	Nos.	59.00	2360.00
37	Supply of 15A Piano type Switch	80	Nos.	93.00	7440.00
38	Supply and delivery of LT Straight through compound Jointing KIT with ferrule of suitable size.				
	i) 3 ½ / 4 core 10-16 Sq.mm cable	2	Nos.	2461.00	4922.00
	ii) 3½ / 4 core 25-35 Sq.mm cable	2	Nos.	3011.00	6022.00
	iii) 3½ core 50 Sq.mm cable	2	Nos.	3601.00	7202.00
	iv) 3½ 70 sq.mm cable	2	Nos.	3700.00	7400.00
	v) 3½ core 95 sq.mm cable	1	Nos.	4232.00	4232.00
	vi) 3½ core 120 sq.mm cable	2	Nos.	5156.00	10312.00
	vii) 3½ core 185 sq.mm cable	2	Nos.	5924.00	11848.00
	viii) 3½ core 240 sq.mm cable	2	Nos.	7458.00	14916.00
	ix) 3½ core 300 sq.mm cable	2	Nos.	8933.00	17866.00
	x) 4 Core 6 Sq.mm cable	1	Nos.	5156.00	5156.00
	xi) 3½ core 150 sq.mm cable	2	Nos.	5233.00	10466.00
39	Supply and delivery of LT Straight through heat Shrinkable jointing kit with ferrule of suitable size.				

	i) 3 ½ / 4 core 10-16 Sq.mm cable	8	Nos.	2399.00	19192.00
	ii) 3½ / 4 core 25-35 Sq.mm cable	20	Nos.	2907.00	58140.00
	iii) 3½ core 50 Sq.mm cable	14	Nos.	2907.00	40698.00
	iv) 3½ 70 sq.mm cable	14	Nos.	3852.00	53928.00
	v) 3½ core 95 sq.mm cable	2	Nos.	3852.00	7704.00
	vi) 3½ core 120 sq.mm cable	4	Nos.	5233.00	20932.00
	vii) 3½ core 185 sq.mm cable	4	Nos.	7994.00	31976.00
	viii) 3½ core 240 sq.mm cable	10	Nos.	7994.00	79940.00
	ix) 3½ core 300 sq.mm cable	6	Nos.	5233.00	31398.00
	x) 3½ core 150 sq.mm cable	7	Nos.	2399.00	16793.00
	xi) 2 Core 6 Sq.mm cable	2	Nos.	2399.00	4798.00
	xii) 2 Core 10 Sq.mm cable	2	Nos.	2399.00	4798.00
	xiii) 3 Core 400 Sq.mm cable	1	Nos.	10067.00	10067.00
40	Supply of medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing materials as required				
	i) 125 mm diameter	100	Meter	1425.00	142500.00
	ii) 80 mm diameter	100	Meter	618.00	61800.00
	iii) 150 mm diameter	100	Meter	1622.00	162200.00
41	Supply & delivery of 3C, 120sq.mm. 11KV E Grade XLPE Insulated Armoured Aluminium m Conductor Cable.	200	Meter	1283.00	256600.00
42	Supply & delivery of 3 C, 400 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable for Main Pump.	200	Meter	2226.00	445200.00
43	Supply & delivery of 3.5C, 300 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	300	Meter	1909.00	572700.00
44	Supply & delivery of 3.5C, 150 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	400	Meter	984.00	393600.00
45	Supply & delivery of 3.5C, 240 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	300	Meter	1587.00	476100.00

46	Supply & delivery of 3.5C, 185 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	300	Meter	1240.00	372000.00
47	Supply & delivery of 3.5C, 95 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	200	Meter	678.00	135600.00
48	Supply & delivery of 3.5C, 70 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	300	Meter	541.00	162300.00
49	Supply & delivery of 3.5C, 50 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	400	Meter	612.00	244800.00
50	Supply & delivery of 3.5C, 35 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	400	Meter	310.00	124000.00
51	Supply & delivery of 4C, 25 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	300	Meter	249.00	74700.00
52	Supply & delivery of 4c, 16 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	300	Meter	205.00	61500.00
53	Supply & delivery of 4c 10 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	200	Meter	173.00	34600.00
54	Supply & delivery of 4c 6 sq.mm 1.1 KV Grade XLPE Insulated, Armoured Aluminium conductor cable.	200	Meter	147.00	29400.00
55	Supply & delivery of Single core unsheathed 1.1 KV grade PVC insulated 'FR' copper conductor of area 0.75 sq mm.	200	Meter	13.00	2600.00
56	Supply & delivery of Single core unsheathed 1.1 KV grade PVC insulated 'FR' copper conductor of area 1.5 sq mm.	800	Meter	25.00	20000.00
57	Supply & delivery of Single core unsheathed 1.1 KV grade PVC insulated 'FR' copper conductor of area 2.5 sq mm.	800	Meter	40.00	32000.00
58	Supply & delivery of Single core unsheathed 1.1 KV grade PVC insulated 'FR' copper conductor of area 4 sq mm.	200	Meter	62.00	12400.00
59	Supply & delivery of Single core unsheathed 1.1 KV grade PVC insulated 'FR' copper conductor of area 6 sq mm.	200	Meter	93.00	18600.00
60	Supply & delivery of 3core , 6 Sq.mm PVC insulated FR copper wire of 1.1Kv grade Cable (Un-armoured)	200	Meter	306.00	61200.00
61	Supply & delivery of 4core, 6 Sq.mm PVC insulated FR copper wire of 1.1Kv grade Cable (Un-armoured).	300	Meter	401.00	120300.00
62	Supply & delivery of 3core, 4 Sq.mm PVC insulated FR copper wire of 1.1Kv grade Cable (Un-armoured).	200	Meter	205.00	41000.00
63	Supply & delivery of 4core, 4 Sq.mm PVC insulated FR copper wire of 1.1Kv grade Cable (Un-armoured).	200	Meter	269.00	53800.00
64	Supply & delivery of 3core, 2.5 Sq.mm PVC insulated FR copper wire of 1.1Kv grade Cable (Un-armoured).	200	Meter	134.00	26800.00

65	Supply & delivery of 4core , 2.5sqmm PVC insulated FR copper wire of 1.1Kv grade Cable (Un-armoured)	200	Meter	175.00	35000.00
66	Supply & delivery of 28/0.0076 Twisted twin core flexible P.V.C. insulated copper wire of 1100V Grade.	100	Meter	44.00	4400.00
67	Supply and fixing PVC switch board of dimension:-			0.00	0.00
	i) 100 mm x 100 mm x 65 mm	40	Nos.	61.00	2440.00
	ii) 150 mm x 100 mm x 65 mm	150	Nos.	94.00	14100.00
	iii) 200 mm x 150 mm x 65 mm	150	Nos.	121.00	18150.00
	iv) 240 mm x 200 mm x 65 mm	150	Nos.	170.00	25500.00
	v) 240 mm x 240 mm x 65 mm	150	Nos.	259.00	38850.00
	vi) 300 mm x 200 mm x 65 mm	150	Nos.	259.00	38850.00
	vii) 415 mm x 200 mm x 65 mm	30	Nos.	400.00	12000.00
68	Supply & delivery of Timer Unit (Contact rating-16A/250V AC)	50	Nos.	1636.00	81800.00
69	Supply & delivery of 63A, 240V AC Contactor for timer unit(Contact rating-16A/250V AC)	20	Nos.	4759.00	95180.00
70	Supply & delivery of 40A, 240 V AC Contactor for timer	20	Nos.	3220.00	64400.00
72	Supply & delivery of 32A Industrial Plug Socket (3P + 1E) for Refer Pillar Box of make Mennekes.	80	Nos.	1722.00	137760.00
73	Supply & delivery of 3C, 1.5 sq. mm. 1.1kV graded un-armoured 'FR' Copper wire.	200	Meter	73.00	14600.00
74	Supply and delivery of Heat Sink End Termination Kit for 3 c, 120 sq. mm 11KV Grade, XLPE/PILC insulated armoured, aluminium conductor Cable.	6	SET	17079.00	102474.00
75	Supply and delivery of Straight through cable Transition Jointing kits for 3 c, 120 sq. mm 11KV Grade, XLPE-PILC insulated armoured, aluminium Conductor cable.	4	SET	32220.00	128880.00
76	Straight through cable Jointing kits for 3 c, 120 sq. mm 11KV Grade, XLPE/PILC insulated armoured, aluminium conductor cable.	3	SET	30000.00	90000.00
77	Supply and delivery of Heat Sink Straight through cable Transition Jointing kits for 3 c, 400 sq. Mm 1.1KV Grade, XLPE-PILC insulated armoured, and aluminium conductor cable.	2	SET	47212.00	94424.00
78	Supply and delivery of Transformer Oil.	1000	Litres.	137.00	137000.00
79	Supply and delivery of Silica Gel.	6	Kgs.	1875.00	11250.00
80	Supply, delivery of Breather for Transformer.	2	Nos.	1875.00	3750.00

81	Supply, delivery of LED indication Lamps for control panels.	80	Nos.	30.00	2400.00
82	Supply, delivery of Numerical type OCEF relay (110V DC-5A) Type-IRI-PRO-V4-3I-EI-W1 (make-C&S).	1	Nos.	29172.00	29172.00
83	Supply, delivery of Digital Ammeter (96 MM SQ).	1	Nos.	1144.00	1144.00
84	Supply, delivery of Digital Voltmeter (110 VAC ,Class -10,Range-0-8KV,6.6KV/110V)	1	Nos.	1144.00	1144.00
85	Supply, delivery of 1 × 200W LED flood light fittings complete in all respect.	20	Nos.	14000.00	280000.00
86	Supply, delivery of Contacts for Contactor Units for ML-6(Make L & T) Starter (ML-6S) for Impounding Pump.	1	SET	715.00	715.00
87	Supply, delivery of Contacts for Contactor Units for ML-4 (Make L & T) Starter (ML-6S) for Impounding Pump.	1	SET	715.00	715.00
88	Supply, delivery of Coil for Contactor Units for ML-6 (Make L & T) Starter (ML-6S) for Impounding Pump.	1	SET	2071.00	2071.00
89	Supply, delivery of Coil for Contactor Units for ML-4 (Make L & T) Starter (ML-6S) for Impounding Pump.	1	SET	2071.00	2071.00
90	Supply, delivery of Bimetallic Overload Unit for (ML-6S) Star Delta motor starter for Impounding Pump.	1	Nos.	2477.00	2477.00
91	Supply, delivery of Timer Unit suitable for (ML-6S) Star Delta motor starter for Impounding Pump.	1	SET	2477.00	2477.00
92	Supply, delivery of Push Button suitable for (ML-6S) Star Delta motor starter for Impounding Pump.	3	Nos.	500.00	1500.00
93	Supply, delivery of Delta Contactor Unit for ML-6(Make L & T) Starter (ML-6S) for Impounding Pump.	1	Nos.	2860.00	2860.00
94	Supply, delivery of Star Contactor Unit for ML-4 (Make L & T) Starter (ML-6S) for Impounding Pump.	1	Nos.	2860.00	2860.00
95	Supply, delivery of 300W, LED floodlight luminaries with secondary optics made in pressure die cast housing and heat sink in Aluminium extrusion with IP66.	5	Nos.	18000.00	90000.00
96	Supply of Driver unit for 300W Eveready LED flood light as per sample.	6	Nos.	2688.00	16128.00
97	Supply, delivery of HT C.T. 6.6 KV --/5A. Primary current as per sample	1	Nos.	4000.00	4000.00
98	Supply, delivery of LT C.T.500 V , 150/5A as per sample	1	Nos.	503.00	503.00
99	Supply, delivery of LT C.T.500 V , 250/5A as per sample	1	Nos.	538.00	538.00
100	Supply, delivery of LT C.T.500 V , 300/5A as per sample	1	Nos.	658.00	658.00
101	Supply, delivery of LT C.T.500 V,400/5A as per sample	1	Nos.	686.00	686.00

102	Supply, delivery of LT C.T. 500 V , 500/5A as per sample	1	Nos.	801.00	801.00
103	Supply, delivery of LT C.T. 500 V , 600/5A as per sample	1	Nos.	915.00	915.00
104	Supply, delivery of LT C.T.500 V,600/2.5A as per sample	1	Nos.	1373.00	1373.00
105	Supply, delivery of LT C.T. 500 V , 800/5A as per sample	1	Nos.	4004.00	4004.00
106	Supply, delivery of LT C.T. 500 V,2000/5A as per sample	1	Nos.	4004.00	4004.00
107	Supply, delivery and installation of LT C.T. 500 V, 1200/5A as per sample.	1	Nos.	1127.00	1127.00
108	Supply, delivery of Ammeter Selector Switch as per sample.	10	Nos.	395.00	3950.00
109	Supply, delivery of Voltmeter Selector Switch as per sample.	10	Nos.	446.00	4460.00
110	Supply, delivery of Wattmeter, as per sample.	1	Nos.	3970.00	3970.00
111	Supply, delivery of Power Factor Meter as per sample.	1	Nos.	5114.00	5114.00
112	Supply, delivery of Ammeter 0-40A as per sample.	1	Nos.	789.00	789.00
113	Supply, delivery of Ammeter 0-100A as per sample.	1	Nos.	789.00	789.00
114	Supply, delivery of Ammeter 0-60A as per sample.	1	Nos.	789.00	789.00
115	Supply, delivery of Ammeter 0-150A as per sample.	1	Nos.	1567.00	1567.00
116	Supply, delivery of Ammeter 0-80A as per sample.	1	Nos.	789.00	789.00
117	Supply, delivery of Ammeter 0-90A as per sample.	1	Nos.	789.00	789.00
118	Supply, delivery of Ammeter 0-300A as per sample.	1	Nos.	1567.00	1567.00
119	Supply, delivery of Ammeter 0-200A as per sample.	1	Nos.	1567.00	1567.00
120	Supply, delivery of Ammeter 0-240A as per sample.	1	Nos.	1567.00	1567.00
121	Supply, delivery of Ammeter 0-400A as per sample.	1	Nos.	1567.00	1567.00
122	Supply, delivery of Ammeter 0-500A as per sample.	1	Nos.	1567.00	1567.00
123	Supply, delivery of Ammeter 0-600A as per sample.	1	Nos.	1567.00	1567.00
124	Supply, delivery of Ammeter 0-800A as per sample.	1	Nos.	1613.00	1613.00

125	Supply, delivery of Ammeter 0-1200A as per sample.	1	Nos.	2517.00	2517.00
126	Supply, delivery of Ammeter 0-2500A as per sample.	1	Nos.	4576.00	4576.00
127	Supply, delivery of Voltmeter, 500V as per sample.	1	Nos.	1567.00	1567.00
128	Supply, delivery of Voltmeter, 600V as per sample.	1	Nos.	1567.00	1567.00
129	Supply, delivery of Voltmeter, 700V as per sample.	1	Nos.	1613.00	1613.00
130	Supply, delivery of Voltmeter, 7000V as per sample.	1	Nos.	2288.00	2288.00
131	Supply, delivery of Digital Multifunction meter 110VAC, CL-0.5s, Model-ELITE445 6.6 KV/110V (5A) Make-secure suitable for 'ANDREW Yule' VCB.	1	Nos.	3500.00	3500.00
132	Supply, delivery of Integral type Street Light luminaries of 150 W LED Luminaries complete in all respect.	30	Nos.	12000.00	360000.00
133	Supply, delivery of 1X 400W LED Integral Type Luminaries complete in all respect.	20	Nos.	24000.00	480000.00
134	Supply & delivery of 11 Metres Long GI Steel tubular Pole of type 410 SP 30 as per IS: 2713 or amended latest [2.7mt (D-114.3mm / Thickness- 3.65mm)- 2.7mts (D 139.7/Thickness4.5mm)-5.6Mts (D-165.1/Thickness-5.4mm)].	10	Nos.	28600.00	286000.00
135	Supply & delivery of 9 meter high GI Steel tubular Pole of type 410 SP 30 with double arm bracket fitted suitable for installing two no. of integral type luminaries. The Pole should be fitted with CI loop in loop out box in sheet steel lockable enclosure at suitable height and with base plate and cap as per latest IS Spec.	10	Nos.	20000.00	200000.00
136	Supply & delivery of 400W HPSV SON T Lamp	500	Nos.	400.00	200000.00
137	Supply & delivery of 250W HPSV SON T Lamp	100	Nos.	350.00	35000.00
138	Supply & delivery of 150W HPSV SON T Lamp	23	Nos.	778.00	17894.00
139	Supply & delivery of 70W HPSV SON T Lamp	10	Nos.	549.00	5490.00
140	Supply & delivery of Ballast for 400W HPSV	500	Nos.	3500.00	1750000.00
141	Supply & delivery of Ballast for 250W HPSV Lamp	50	Nos.	3146.00	157300.00
142	Supply & delivery of Ballast for 150W HPSV	13	Nos.	2059.00	26767.00
143	Supply & delivery of Ballast for 70W HPSV Lamp	10	Nos.	1373.00	13730.00
144	Supply & delivery of Igniters' for 70W, 150W,250W & 400 W	350	Nos.	629.00	220150.00
145	Supply & delivery of Porcelain holder for 150W, 250W, 400W SON T HPSV lamp.	300	Nos.	315.00	94500.00

146	Supply & delivery of 42 μ farad Condenser.	200	Nos.	469.00	93800.00
147	Supply & delivery of 33 μ farad Condenser.	80	Nos.	400.00	32000.00
148	Supply & delivery of Gear Oil (SAE 140 or equiv).	40	Litres.	309.00	12360.00
149	Supply & delivery of Grease for wire rope.	40	Kgs.	572.00	22880.00
150	Supply & delivery of 5C 4 sq mm 1100 V Graded stranded copper conductor 1100 V Grade flexible Cable for H M Tower.	300	Meter	317.00	95100.00
151	Supply & delivery of Stainless Steel Wire Rope for 25 meter High Mast having the following specification :- Material: Stainless Steel, Non Corrodible AISI 316 Grade, Diameter: 6 mm, Length: 56 Meters (without any intermediate joint) Lay: RHO, Core: Same material of the wire rope, Construction: 7 x 19, Factor of Safety: not less than 5, End connection; one end fitted with copper talurit & other fitted with thimble secured on rope by compressed Splices. Wire rope shall be in accordance with IS3459: 2004 with its latest amendment, if Any.	10	Nos.	22880.00	228800.00
152	Supply of a fabricated GI lantern carriage shall be supplied for mounting of luminaries arm assemblies. The lantern carriage shall be made of specially designed 32 NB GI tubes having a two-piece construction. The flanges shall be jointed at site by stainless steel bolts and nuts. Inner side of the lantern carriage shall be provided with a separate guide ring with rubber padding to protect the mast surface while raising and lowering of the lantern carriage	1	Nos.	34320.00	34320.00
153	a. Supply of Double drum Double Gear & Pinion Winch set assembly of 25 meter High Mast as per dimensions mentioned below:- Gear:- Thickness- 32.5mm. OD-175.5mm, ID-70mm, No. of teeth – 53Nos., Teeth height -2.75mm. Drum:- Height- 175mm, Length-153.5mm, No. of Winch teeth- 17Nos., Suitable for shaft Dia.-25mm. Pinion:- Suitable for shaft Dia.-25mm. No. of teeth:-7Nos. Length-83.5mm. Dia.-52mm. b. Material of construction shall be EN-19 or Higher.	2	Nos.	40040.00	80080.00
154	Supply of Double gear/pinion set of existing double drum winch assembly as per sample for 25 Meter high Mast	8	Nos.	22880.00	183040.00
155	Supply, delivery of 30A 3 pin industrial socket with top for 25 Meter High mast.	6	Nos.	5148.00	30888.00

156	Supply and delivery of Feeder Pillar Box for High mast tower of suitable dimension to be supplied with the following components: i) 63 Amps TPN MCB – 1 No. ii) 45 Amps TP Contactor – 1 No. iii) 9 Amps. TP Contactor (AC - 3 duty) – 2 Nos. iv) Double Dial/Single Dial Time Switch (with rechargeable battery backup) for the automatic control of luminaries– 1 No. v) Bypass Switch – 1 No. vi) 6A Control MCB - 1 No. vii) Glass Fuse of appropriate capacity - 1 No. viii) Toggle switch - 1 No. ix) Push Button - 2 Nos. The Feeder Pillar Boxes shall be suitable for IP – 55 Protection. 2 Nos. full threaded GI Bolts (M 10 x 40 mm) along with G.I. Nuts & Washers are to be provided on two sides of the Feeder Pillar Box as Earth Stud. Two Nos. Danger Boards are to be provided on the Front Door and Back Door of the Feeder Pillar Box.	4	Nos.	45760.00	183040.00
157	Supply ,delivery of dust, weather proof, IP66 protected Double Door 4 way Distribution Board at the platforms of each lattice tower having 10kA, C-Characteristics, 32A TP MCB as incomer and 12 No's of 10kA, C-Characteristics, of 10A SP MCB as outgoings include Inner connection with copper wire & neutral link and provision for earthing arrangement.	8	Nos.	7377.00	59016.00
158	Repairing of mechanical coupler present on the shaft of the 1.5HP Induction Motor for driving the gears of winch via chain for a 25 meter high mast.	1	Nos.	1500.00	1500.00
159	Supply and delivery of Weather proof (IP-65) Junction Box made of cast aluminium to install on carriage assembly from which the inter-connections to the Aviation Obstruction Luminaries, Flood Light Fittings and associated Driver Units, fixed on the carriage shall be made.	4	Nos.	9495.00	37980.00
160	Supply and delivery of Weather proof (IP-65) control gear box made of cast aluminium to install on carriage assembly from which the inter-connections are made to the Flood Light Fittings and associated Driver Units, fixed on the carriage shall be made.	4	Nos.	9495.00	37980.00
161	Supply, delivery of one no suitable LED Aviation obstruction light (including lamp of red colour and other accessories) of suitable design and reputed make on top high mast tower.	1	Nos.	5034.00	5034.00
162	Supply, delivery of Push Button for raising and lowering the carriage of HMT.	2	Nos.	100.00	200.00
163	Supply, delivery of 400 sq.mm Heavy duty copper socket.	3	Nos.	853.00	2559.00
164	Supply, delivery of Cu Heavy duty Ring lug for 6-16 Sq.mm PVC copper Wire.	20	Nos.	14.00	280.00
165	Supply, delivery of Cu Heavy duty Ring lug for 25 Sq.mm PVC copper Wire.	20	Nos.	22.00	440.00
166	Supply, delivery of Cu Heavy duty Ring lug for 35 Sq.mm PVC copper Wire.	20	Nos.	29.00	580.00

167	Supply, delivery of Cu Heavy duty Ring lug for 50 Sq.mm PVC copper Wire.	3	Nos.	48.00	144.00
168	Supply, delivery of Bottle socket for 6-16 Sq.mm Aluminium conductor	300	Nos.	16.00	4800.00
169	Supply, delivery of Bottle socket for 50 Sq.mm Aluminium conductor	300	Nos.	27.00	8100.00
170	Supply, delivery of Bottle socket for 25/35 Sq.mm Aluminium conductor	400	Nos.	24.00	9600.00
171	Supply, delivery of Bottle socket for 70 Sq.mm Aluminium conductor	40	Nos.	41.00	1640.00
172	Supply, delivery of 6-16 Sq.mm Aluminium Ferule	36	Nos.	3.00	108.00
173	Supply, delivery of 25/35 Sq.mm Aluminium Ferule	36	Nos.	5.00	180.00
174	Supply, delivery of 50/70 Sq. mm Aluminium Ferule	36	Nos.	13.00	468.00
175	Supply, delivery of 150 Sq .mm Aluminium Ferule	36	Nos.	26.00	936.00
176	Supply, delivery of 120 Sq .mm Aluminium Ferule	36	Nos.	19.00	684.00
177	Supply, delivery of 185 Sq. mm Aluminium Ferule	12	Nos.	34.00	408.00
178	Supply, delivery of 240 Sq .mm Aluminium Ferule	24	Nos.	54.00	1296.00
179	Supply, delivery of 300 Sq.mm Aluminium Ferule	12	Nos.	80.00	960.00
180	Supply, delivery of 400 Sq.mm Aluminium Ferule	6	Nos.	120.00	720.00
181	Supply, delivery of Cu-AL Bi-Metallic socket for 6-16 Sq.mm Aluminium conductors.	6	Nos.	6.00	36.00
182	Supply, delivery of Cu-AL Bi-Metallic sockets for 25/35 Sq.mm Aluminium conductors.	6	Nos.	8.00	48.00
183	Supply, delivery of Cu-AL Bi-Metallic sockets for 50 Sq.mm Aluminium conductors.	6	Nos.	14.00	84.00
184	Supply, delivery of Cu-AL Bi-Metallic sockets for 70 Sq.mm Aluminium conductors.	6	Nos.	22.00	132.00
185	Supply, delivery of Cu-AL Bi-Metallic sockets for 120 Sq.mm Aluminium conductors.	6	Nos.	33.00	198.00
186	Supply, delivery of Cu-AL Bi-Metallic ferrule for 2.5-6 sq.mm	8	Nos.	220.00	1760.00
187	Supply, delivery of IPR -1 microprocessor over current release of Havell's Titania ACB series of 1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	15340.00	15340.00
188	Supply, delivery of IPR -1 microprocessor over current release of Havell's Titania ACB series as per sample.	1	Nos.	16251.00	16251.00

189	Supply ,delivery of spring charging motor suitable for Havell's Titania ACB of rating 630A or 1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample.	1	Nos.	10000.00	10000.00
190	Supply ,delivery of shunt Trip Coil/closing coil for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample.	1	Nos.	2780.00	2780.00
191	Supply, delivery of under voltage release for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample	1	Nos.	3764.00	3764.00
192	Supply ,delivery of spring charge indication switch for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample.	1	Nos.	2128.00	2128.00
193	Supply ,delivery of ON/OFF push button cover for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample.	1	Nos.	2128.00	2128.00
194	Supply ,delivery of Trip Indication switch for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample.	1	Nos.	606.00	606.00
195	Supply, delivery of Terminal studs for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample.	1	Nos.	2231.00	2231.00
196	Supply of EPR [Ethylene Propylene Rubber] Self -amalgamating HT tape. Colour: Black Width: 38 mm, Length: 9 m per roll.	11	Roll	383.00	4213.00
197	Markin Cloth of width 40 inches.	1500	Meter	30.00	45000.00
198	Bakelite Fuse Holder , 63 A.	3	Nos.	418.00	1254.00
199	Bakelite Fuse Holder , 32 A.	3	Nos.	257.00	771.00
200	Porcelain Fuse Base & Carrier , 63 A.	3	Nos.	515.00	1545.00
201	Porcelain Fuse Base & Carrier , 100 A.	3	Nos.	292.00	876.00
202	Electrical and Electronic Contact Cleaner (CFC free) (350 ml per container).	700	ml	3.00	2100.00
203	Supply ,delivery and fixing of Hot Dip Galvanized Loop-in-loop-out box [with minimum coating thickness of 85 micron] should have suitable terminal arrangement for connecting 2/3 cables of size 16 mm ² / 25 mm ² , 01 no. 6 A SPNMCB and earth strip / earth wire.	40	Nos.	1087.00	43480.00
204	Supply of 20 mm diameter, 1.85 m long GI spike.	60	Nos.	515.00	30900.00

205	Supply and delivery of Hot Dip Galvanized octagonal street light pole [with inbuilt terminal box for cable connection], made of Structural Steel (3 mm thick) of grade S355 [as per European Standard EN 10025], along with base plate, arm bracket & foundation bolts etc.				
	i) 11m high octagonal street light pole with single arm (1500 mm)	5	Nos.	45760.00	228800.00
	ii) 11m high octagonal street light pole with double arm (1500 mm)	5	Nos.	48048.00	240240.00
206	Supplying and laying of HDPE pipe [along with all accessories like socket, bend, couplers etc.] ISI marked, conforming to IS 14930 .Nominal Size -120.	200	Meter	240.00	48000.00
207	Supply and delivery of CRCA sheet of thickness 3 mm.	10	sq.mt.	2288.00	22880.00
208	Bakelite laminated sheet of thickness 20 mm.	40	sq.foot	700.00	28000.00
209	Supply and delivery of 400A TPN, 415 V, Junction Box [approx. size 800 mm X 400 mm X 200 mm], made of 2 mm thick CRC Sheet Steel, duly painted (with Siemens Gray powder coating paint finish, including provision for earthing attachment.	1	Nos.	6864.00	6864.00
210	Supply and delivery of 200A TPN,415V, Junction Box [approx. size 600 mm X 300 mm X 100 mm], made of 2 mm thick CRC Sheet Steel, duly painted (with Siemens Gray powder coating paint finish, including provision for earthing attachment.	1	Nos.	5720.00	5720.00
211	Supply and delivery of Stationary storage type (vertical, wall – mounted type) electric water heater [Geyser], ISI marked, having BEE (Bureau of Energy Efficiency) star rating - 5. Wattage: 2000 W Rated Voltage: 230 V (nominal), 50 Hz, AC singly phase. Each Geyser is to be provided with all standard accessories, including stainless steel wire braided connector set (02 no., 18” length). Capacity: 10 litres (approx).	2	Nos.	6864.00	13728.00
212	Supply and delivery of Stationary storage type (vertical, wall – mounted type) electric water heater [Geyser], ISI marked, having BEE (Bureau of Energy Efficiency) star rating - 5. Wattage: 2000 W Rated Voltage: 230 V (nominal), 50 Hz, AC singly phase. Each Geyser is to be provided with all standard accessories, including stainless steel wire braided connector set (02 no., 18” length). Capacity: 15 litres (approx).	2	Nos.	8942.00	17884.00
213	Supply and delivery of Rubberized Cork Sheet 3 mm thick.	20	sq.mt.	1144.00	22880.00
214	Supply and delivery of Rubberized Cork Sheet 6 mm thick	20	sq.mt.	1716.00	34320.00
215	Supply, delivery of Delta connected Capacitor bank of capacity 10 KVAR.	5	Nos.	4793.00	23965.00
216	Supply, delivery of Delta connected Capacitor bank of capacity 25 KVAR.	5	Nos.	9821.00	49105.00

217	Supply, delivery of Thermo-magnetic Release Type - DN1 for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	17625.00	17625.00
218	Supply, delivery of shunt release coil for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	2860.00	2860.00
219	Supply, delivery of under voltage release for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	4141.00	4141.00
220	Supply, delivery of Spring charging Motor for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	24384.00	24384.00
221	Supply, delivery of Terminal contacts and stud for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	9152.00	9152.00
222	Supply, delivery of Fixed contact for LT Oil Circuit Breaker as per sample.	1	Nos.	4000.00	4000.00
223	Supply, delivery of Moving contact for LT Oil Circuit Breaker Ltd as per sample.	1	Nos.	4000.00	4000.00
224	Supply and delivery of Blanking plate for MCB DB.	80	Nos.	23.00	1840.00
225	Supply and delivery of DPMCB sheet steel enclosure.	20	Nos.	340.00	6800.00
226	Supply and delivery of 63A, Porcelain kit Kat fuse complete with Top & base.	20	Nos.	469.00	9380.00
227	Supply and delivery of 32A, Porcelain kit Kat fuse complete with Top & base.	20	Nos.	292.00	5840.00
228	Supply and delivery of 20A Kit Kat complete with Base & Top.	12	Nos.	235.00	2820.00
229	Supply and delivery, fixing of MCB channel (each length 1 Meter).	80	Nos.	92.00	7360.00
230	Supply and delivery of 63A, 415 V HRC fuse	6	Nos.	341.00	2046.00
231	Supply and delivery of (2+8) way SPN MCBDB with SS enclosure of rating 240V, 6-10A/way .MCBDB should be complete in all respect with incoming as 16A DP MCB and outgoing MCBs.	6	Nos.	4537.00	27222.00
232	Supply and delivery of PVC junction Box suitable for 16 sq. mm 4C Cable.	5	Nos.	114.00	570.00
233	Supply and delivery of 4 way Cable Junction Box suitable for 4(3.5) C 35 Sq. mm. Cable.	5	Nos.	2288.00	11440.00
234	Supply and delivery of 25A TP MCB "c" Curve 10KA for AC	10	Nos.	1167.00	11670.00
235	Supply and delivery of Box type bell push	16	Nos.	49.00	784.00
236	Supply and delivery of 60 Watt Outdoor Street Light type LED Fitting having IP66 enclosure suitable to install at wall with GI angular Pipe.	30	Nos.	6864.00	205920.00
237	Supply and delivery of 12W LED lamp.	300	Nos.	286.00	85800.00
238	Supply and delivery of 0.5W LED lamp.	25	Nos.	114.00	2850.00
239	Supply and delivery of 9W LED lamp.	40	Nos.	137.00	5480.00

240	Supply and delivery of 23W LED Lamp.	250	Nos.	366.00	91500.00
241	Supply and delivery of PVC/Polycarbonate Batten Holder.	200	Nos.	46.00	9200.00
242	Supply, delivery of Single LED light Fittings complete with all accessories of 20 W (for LED).	250	Nos.	561.00	140250.00
243	Supply, delivery of Twin LED light Fittings complete with all accessories (20W x 2).	200	Nos.	2025.00	405000.00
244	Supply, delivery of 18W LED Batten type 2 ft. Long fittings	20	Nos.	180.00	3600.00
245	Supply, delivery of 20W LED 4ft Batten Light with necessary fixing accessories	700	Nos.	230.00	161000.00
246	Supply, delivery of P.P. Lamp Holder or 5/8 Lamp holder (Copper).	100	Nos.	46.00	4600.00
247	Supply and delivery of 1200 mm sweep Ceiling Fan, suitable for 230V AC, 50Hz supply system, complete with capacitor, canopy & all accessories and should have BEE (Bureau of Energy Efficiency) star rating – 5.	200	Nos.	2746.00	549200.00
248	Supply and delivery of 20W Retrofit LED Tube light.	700	Nos.	285.00	199500.00
249	Supply and delivery of Wall mounting fan of 400mm sweep.	50	Nos.	3306.00	165300.00
250	Supply and delivery of socket type fan regulator (step type) on existing PVC Switch board by screw, after making housing for regulator, by cutting top cover and making necessary connections, as required.	150	Nos.	283.00	42450.00
251	Supply and delivery of 600 mm sweep Exhaust Fan [non-metallic blade] suitable for 230V AC, 50Hz supply system, complete with all accessories and louver [gravity shutter system].	2	Nos.	9152.00	18304.00
252	Supply and delivery of 300 mm sweep Exhaust Fan [non-metallic blade] suitable for 230V AC, 50Hz supply system, complete with all accessories and louver [gravity shutter system].	10	Nos.	3386.00	33860.00
253	Supply and delivery of 200 mm sweep Exhaust Fan [non-metallic blade] suitable for 230V AC, 50Hz supply system, complete with all accessories and louver [gravity shutter system].	10	Nos.	1888.00	18880.00
254	Supply and delivery of Electronic Step regulator	250	Nos.	251.00	62750.00
255	Supply and delivery of Fan capacitor of 250V 2.5μF	300	Nos.	57.00	17100.00
256	Supply and delivery of Holder for 28W T5 tube light	100	Nos.	57.00	5700.00
257	Supply and delivery of Holder for 40W tube light	60	Nos.	57.00	3420.00
258	Supply and delivery of Starter for 40W Tube Light	80	Nos.	57.00	4560.00
259	Supply and delivery of Electronic Choke for 28W T5	40	Nos.	383.00	15320.00

260	Supply and delivery of Copper choke for 40 W/36W Tube Light	40	Nos.	312.00	12480.00
261	Supply and delivery of LED PL-L (4P) Lamp of minimum 9 W	20	Nos.	137.00	2740.00
262	Supply and delivery of Holder for PL-L lamp of 18W	10	Nos.	46.00	460.00
263	Supply of perforated GI cable tray reducer with perforation not more than 17.5% suspended from ceiling with two nos. suspenders & 25x25x3mm angle iron for supporting the reducer incl. S&F GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. Al painting of MS support. 300x50x1.25mm (18SWG)	100	Each	2288.00	228800.00
264	Supply of S & F Lightning conductor Air-terminals made of 15 mm diameter 1500 mm long GI pipe (ISI Medium) having five prongs of 4 SWG GI (Hot Dip) wire at top with 85 mm diameter 6 mm thick GI base plate at bottom incl. necessary holes etc. duly grouted on the parapet etc. in CC mortar (4:2:1)	4	Nos.	686.00	2744.00
265	Supply and fixing of Cable end box (16SWG) for 400A LT circuit breaker.	4	Nos.	3947.00	15788.00
266	Supply and delivery of single phase preventer for DOL/Star delta motor starter as per sample.	10	Nos.	500.00	5000.00
267	Supply and delivery of High speed pedestal fan of 400mm sweep.	20	Nos.	3844.00	76880.00
268	Supply and delivery of recessed mounted type round LED fitting of wattage-18-24 Watt, Colour Temperature -6500 K.	30	Nos.	2974.00	89220.00
269	Supply and delivery of recessed mounted type Square LED fitting of wattage-18-24 Watt, Colour Temperature -6500 K, Dimension- 1 ft×1ft.	40	Nos.	2974.00	118960.00
270	Supply and delivery of recessed mounted type SPOT LED light fitting of wattage-5-7 Watt, Colour Temperature -6500 K, Dimension –Any.	10	Nos.	1773.00	17730.00
271	Supply and delivery of surface mounted type SPOT LED light fitting with flexible head of wattage-5-7 Watt, Colour Temperature -6500 K, Dimension –Any.	10	Nos.	1773.00	17730.00
272	Supply and delivery of Bus Bar support insulator as per sample.	6	Nos.	17.00	102.00
273	Supply of IDMTL Over current & Earth fault relay with high set as per sample.	1	Nos.	10500.00	10500.00
274	Supply of Spout suitable for 6.6KV, 400A Biecco Lawrie make OCB as per sample.	1	Nos.	6864.00	6864.00
275	Supply of Spout suitable for 6.6KV, 1200A Biecco Lawrie make OCB as per sample.	1	Nos.	16016.00	16016.00
276	Supply of Fixed contact assembly of Biecco Lawrie make 6.6KV, 1200 A HT OCB as per sample.	1	Nos.	18304.00	18304.00
277	Supply of Fixed contact assembly of Biecco Lawrie make 6.6KV, 400 A HT OCB as per sample.	1	Nos.	6864.00	6864.00

278	Supply of Moving contact assembly of Biecco Lawrie make 6.6KV, 1200 A HT OCB as per sample.	1	Nos.	18304.00	18304.00
279	Supply of Moving contact assembly of Biecco Lawrie make 6.6KV, 400 A HT OCB as per sample.	1	Nos.	6864.00	6864.00
280	Supply of Fixed contact assembly suitable for 440V, 800A GEC make OCB as per sample.	1	Nos.	6864.00	6864.00
281	Supply of Fixed contact assembly suitable for 440V, 400A GEC make OCB as per sample.	1	Nos.	6864.00	6864.00
282	Supply of Moving contact assembly suitable for 440V, 800A GEC make OCB as per sample.	1	Nos.	6864.00	6864.00
283	Supply of Moving contact suitable for 440V, 400A GEC make OCB as per sample.	1	Nos.	6864.00	6864.00
284	Supply of Tufnell Board suitable for 440V, 400A, LT OCB as per sample.	6	Nos.	3432.00	20592.00
285	Supply of Tufnell Board suitable for 440V, 800A, LT OCB as per sample.	2	Nos.	3432.00	6864.00
286	Supply of Brass threaded stud with nut and washer suitable for 440V 400A OCB as per sample.	10	Nos.	3432.00	34320.00
287	Supply of Brass threaded stud with nut and washer suitable for 440V 800A OCB as per sample.	10	Nos.	3432.00	34320.00
288	Supply of No Volt coil suitable for 440V, 400A / 800A, GEC make OCB as per sample.	2	Nos.	3432.00	6864.00
289	Supply of Clutch, Spring & Latch Mechanism suitable for 440V, 400A / 800 A OCB as per sample.	1	Nos.	2179.00	2179.00
290	Supply and delivery of MP4 LSIG microprocessor based protection unit for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	24294.00	24294.00
291	Supply and delivery of shunt Trip Device unit for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	3004.00	3004.00
292	Supply and delivery of Under Voltage Device unit for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	4793.00	4793.00
293	Supply and delivery of closing coil Device unit for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	3181.00	3181.00
294	Supply and delivery of Motor operator unit for automatic spring charging for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	14629.00	14629.00
295	Supply and delivery of rear terminal (horizontal or vertical) for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	3995.00	3995.00
296	Supply and delivery of control button for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	3004.00	3004.00
297	Supply of 1000A AL Bus bar connecting Oil Circuit Breaker/ACB/MCCB to the Panel bus bar as per sample.	1	Nos.	6864.00	6864.00

298	Supply of 800A AL Bus bar connecting Oil Circuit Breaker/ACB/MCCB to the Panel bus bar as per sample.	1	Nos.	6864.00	6864.00
299	Supply of Digital Power Factor Meter	1	Nos.	5114.00	5114.00
300	Supply of 10-60A Single phase static Energy Meter 230-240V	10	Nos.	4359.00	43590.00
301	Supply of 5- 30A Single Phase Static Energy Meter,230-240V	10	Nos.	2623.00	26230.00
302	Supply of Three Phase Whole Current Tri vector Energy Meter of 20-100 A current rating.	10	Nos.	7339.00	73390.00
303	Supply of Three Phase Whole Current Tri vector Energy Meter of 5-30 current rating.	4	Nos.	3882.00	15528.00
304	Supply of Three Phase LT CT Energy Meter (2000 to 400/5A) Primary Current for CT should be SET as per requirement.	10	Nos.	2288.00	22880.00
305	Supply of over current relay suitable for 440V, 400A / 800A, GEC make OCB as per sample.	1	Nos.	16251.00	16251.00
306	Supply of earth fault relay suitable for 440V, 400A / 800A, GEC make OCB as per sample.	1	Nos.	4576.00	4576.00
307	Supply of Capacitor Bank of Capacity-17.5 KVar, Delta Connected, 400V, f-50 Hz.	1	Nos.	8380.00	8380.00
308	Supply and delivery of Direct-on-Line Motor Starter in Sheet-Steel Enclosure for 25 HP motor (Rating AC-3 Duty, 415V, 50Hz, 3-Ph). Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1. Sheet steel enclosures with IP 54 protection or above with overload and SPP.	4	Nos.	15976.00	63904.00
309	Supply and delivery of Thermal Overload Relay (28-42 A setting range) as per sample.	2	Nos.	4061.00	8122.00
310	Supply and delivery of Minilec VSP3 Single phase preventer.	4	Nos.	915.00	3660.00
311	Supply and delivery of Thermal Overload Relay (20-32 A setting range) as per sample.	2	Nos.	4061.00	8122.00
312	Supply and delivery of DOL (3-PH) STARTER - 20HP/15KW, 415V COIL, AND 20-33A RELAY. Confirms to IS/IEC 60947-4-1 as per sample. Sheet steel enclosures with IP 54 protection or above with overload relay and SPP.	2	Nos.	9341.00	18682.00
313	Supply and delivery of Contactor 32A, AC 3 Duty with coil voltage 415V. Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1 as per sample.	1	Nos.	3215.00	3215.00
314	Supply and delivery of Direct-on-Line Motor Starter in Sheet-Steel Enclosure for 2 HP motor (Rating AC-3 Duty, 415V, 50Hz, 3-Ph). Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1. Sheet steel enclosures with IP 54 protection or above with overload relay and SPP.	1	Nos.	3787.00	3787.00

315	Supply and delivery of Direct-on-Line Motor Starter in Sheet-Steel Enclosure for 5 HP motor (Rating AC-3 Duty, 415V, 50Hz, 3-Ph). Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1. Sheet steel enclosures with IP 54 protection or above with overload relay and SPP.	1	Nos.	5789.00	5789.00
316	Supply and delivery of Direct-on-Line Motor Starter in Sheet-Steel Enclosure for 10 HP motor (Rating AC-3 Duty, 415V, 50Hz, 3-Ph). Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1. Sheet steel enclosures with IP 54 protection or above with overload relay and SPP.	1	Nos.	9341.00	9341.00
317	Supply and delivery of VPG D1 Minilec Phase failure relay with low water level guard for dry run protection.	1	Nos.	1040.00	1040.00
318	Supply and delivery of Bimetallic Thermal Overload Relay for 2 HP DOL Motor starters as per sample.	1	Nos.	1459.00	1459.00
319	Supply and delivery of Bimetallic Thermal Overload Relay (24-40A) with links suitable for 40 HP FASD Motor starters as per sample.	1	Nos.	2585.00	2585.00
320	Supply and delivery of Contactor 65A AC-3 Duty, 415V, 50Hz, 3-Ph for 40 HP FASD Motor starters as per sample.	1	Nos.	8420.00	8420.00
321	Supply and delivery of Timer for 40 HP FASD Motor starters as per sample.	1	Nos.	1636.00	1636.00
322	Supply and delivery of Oil immersed Contactor for 7.5 HP D.O.L Oil immersed submersible pump controller as per sample.	1	Nos.	8031.00	8031.00
323	Supply and delivery of Thermal overload relay (9-15A) with links for 7.5 HP D.O.L Oil immersed submersible pump controller as per sample.	1	Nos.	423.00	423.00
324	Supply and delivery of Bimetallic Thermal Overload Relay with links having Max fuse rating of 35A for D.O.L Oil immersed submersible pump controller as per sample.	1	Nos.	1459.00	1459.00
325	Supply and delivery of Thermal overload relay (6-10A) with links for 5 HP D.O.L Oil immersed submersible pump controller as per sample.	1	Nos.	418.00	418.00
326	Supply and delivery of Oil immersed Contactor Type for 5 HP D.O.L Oil immersed submersible pump controller as per sample.	1	Nos.	8031.00	8031.00
327	Supply and delivery of 40 HP Oil immersed star delta motor starter.	2	Nos.	8031.00	16062.00
328	Supply of Motor Terminal block as per sample.	6	Nos.	681.00	4086.00
329	Supply of 3 P Copper Stud for providing shore power supply (200 A rating) with nuts, Bolts and suitable size of washers as per sample.	6	Nos.	686.00	4116.00
330	Supply of 3 Pole Copper Stud for providing shore power supply (400A rating) with nuts, Bolts and suitable size of washers as per sample.	3	Nos.	1373.00	4119.00

331	Supply and delivery of flat three core copper PVC insulated industrial grade cable for submersible use, 1.1 kV as per IS: 694. There should be excellent flexibility of cable. Should give excellent protection against water and against ingress of small solid foreign bodies.				
	· i) 3C 4 Sq.mm Cu Flexible Flat cable submersible types.	40	Meter	431.00	17240.00
	· ii) 3C 6 Sq.mm Cu Flexible Flat cable submersible types.	40	Meter	619.00	24760.00
	· iii) 3C 10 Sq.mm Cu Flexible Flat cable submersible types.	40	Meter	993.00	39720.00
332	· Supply of Copper Jaw contact suitable for 440V 800A GEC make OCB as per sample.	1	Nos.	4004.00	4004.00
333	· Supply of Copper Jaw contact suitable for 440V 400A GEC make OCB as per sample.	1	Nos.	4004.00	4004.00
334	· Supply of Copper Ring Type Cable Lugs of following dimension.			0.00	0.00
	· I) 4 Sq.mm	23	Nos.	7.00	161.00
	· Ii) 6 Sq. mm	23	Nos.	7.00	161.00
	· Iii) 10 Sq.mm	23	Nos.	9.00	207.00
	· Iv) 16 Sq.mm	23	Nos.	12.00	276.00
	· v) 25 Sq.mm	23	Nos.	21.00	483.00
	· vi) 50 Sq.mm	23	Nos.	30.00	690.00
	· vii) 120 Sq.mm	7	Nos.	97.00	679.00
	· vii) 150 Sq.mm	7	Nos.	138.00	966.00
335	· Supply of AL Cable Lugs of following dimension.				
	· i) 10 Sq.mm	6	Nos.	3.00	18.00
	· ii) 16 Sq.mm	6	Nos.	4.00	24.00
	· iii) 25 Sq.mm	6	Nos.	6.00	36.00
	· iv)35 Sq .mm	6	Nos.	7.00	42.00
	· v) 50 Sq.mm	6	Nos.	10.00	60.00
	· vi) 120 Sq.mm	6	Nos.	24.00	144.00

	· vii) 150 Sq.mm	6	Nos.	31.00	186.00
	· ix) 185 Sq.mm	6	Nos.	39.00	234.00
	· x) 240 Sq.mm	6	Nos.	66.00	396.00
	· xi) 300 Sq.mm	6	Nos.	94.00	564.00
	· xii) 400 Sq.mm	3	Nos.	135.00	405.00
336	· Supply and delivery of Metal Halide Lamp of 400 W.	20	Nos.	1373.00	27460.00
337	· Supply of 4 inch Iron hinges for pillar box.	60	Nos.	7.00	420.00
338	· Supply of 4 or 3 inch Male Female hinges for pillar box.	100	Nos.	14.00	1400.00
339	· Supply of 3 inch Iron hinge for HMT feeder pillar box.	40	Nos.	7.00	280.00
340	· Supply & Delivery of LED driver for 400W Crompton Greaves LED floodlight Product Ref: LFLPI-400-CDL/60-M.	15	Nos.	4118.00	61770.00
341	Supply & Delivery of 200W LED Chip for single side of 400W Crompton Greaves LED floodlight Product Ref: LFLPI-400-CDL/60-M as per sample.	10	Nos.	4118.00	41180.00
342	· Supply & Delivery of LED driver for 415 W Wipro LED floodlight.	15	Nos.	4118.00	61770.00
343	Supply & Delivery of LED chip for single side of 415W Wipro LED floodlight as per sample.	15	Nos.	4118.00	61770.00
344	· Supply & Delivery of Flexible Trailing cable(For 3 Ton Crane at Dry Dock) having the following specification:- 5 Core cable consisting of 4× 25 Sq.mm (354× .3 mm) power cables and 1× 16 Sq.mm (226× 0.3 mm) earth core conductor composed of annealed tinned copper wires. Power core E.P.R insulated of standard colours ,and insulated earth core laid up, inner-sheathed with rubber or N.B.R P.V.C taped with proofed cotton tape, annealed tinned copper wire braided (Collectively) and finally H.D –N.B.R or H.D.N.B.R-P.V.C over all 1100V grade overall diameter 45 mm (Max) generally conforming to IS:9968-Part I.	100	Meter	1200.00	120000.00
345	Supply and delivery of 240 Sq.mm Single core P.V.C insulated un-armoured copper cable 1.1KV grade. (I.S specification no. 1554 Part-I & II) for Main Pump at Dry Dock.	50	Meter	3331.00	166550.00
346	Supply and delivery of hard drawn copper silver tipped moving contact for controller of 3 ton diesel electric crane at Dry dock as per sample.	3	Nos.	18304.00	54912.00

347	Supply and delivery of Super enamelled copper wire of dimensions:-				
	I) 16 S.W.G	2	Kgs	728.00	1456.00
	Ii) 17 S.W.G	2	Kgs	729.00	1458.00
	Iii) 18 S.W.G	2	Kgs	730.00	1460.00
	Iv) 20 S.W.G	2	Kgs	731.00	1462.00
	V) 34 S.W.G	2	Kgs	761.00	1522.00
	Vi) 35 S.W.G	2	Kgs	763.00	1526.00
348	Supply and delivery of Wooden board 12'' × 10'' (Teak)	20	Nos.	92.00	1840.00
349	Supply and delivery of G.I Bolts and Nuts (Full thread) ½''×1/4''.	30	Nos.	2.00	60.00
350	Supply and delivery of Full thread Bolts and Nuts MS. Hex. Head. 4''×1/2''.	15	Nos.	7.00	105.00
351	Supply and delivery of Full thread Bolts and Nuts MS. Hex. Head. 3''×1/2''.	15	Nos.	7.00	105.00
352	Supply and delivery of Full thread Bolts and Nuts MS. Hex. Head. 2''×1/2''.	15	Nos.	5.00	75.00
353	Supply of iron washers 8 mm (5/16'')	2	Kgs	137.00	274.00
354	Supply of iron washers 10 mm (3/8'')	2	Kgs	137.00	274.00
355	Supply and delivery of Full thread Bolts and Nuts MS. Hex. Head. 3''×5/8''.	15	Nos.	9.00	135.00
356	Supply and delivery of Full thread Bolts and Nuts MS. Hex. Head. 4''×5/8''.	15	Nos.	9.00	135.00
357	Supply and delivery of 63A TPN insulated Terminal Block.	1	Nos.	286.00	286.00
358	Supply and delivery of 32 A TPN insulated Terminal Block.	1	Nos.	172.00	172.00
359	Supply and delivery of Oil immersed Copper fixed contact of contactor for 40 HP Oil immersed star delta starter as per sample.	1	Nos.	8031.00	8031.00
360	Supply and delivery of Oil immersed Copper moving contact of contactor for 40 HP Oil immersed star delta starter as per sample.	1	Nos.	8031.00	8031.00
361	Supply and delivery of hard drawn copper silver tipped fixed contact for controller of 3 ton diesel electric crane at Dry dock as per sample.	1	Nos.	500.00	500.00
362	Supply and delivery of hard drawn copper sparking contact for main pump at Dry dock as per sample.	3	Nos.	4000.00	12000.00

363	Supply and delivery of hard drawn copper fixed contact for main pump at Dry dock as per sample.	3	Nos.	4000.00	12000.00
364	Supply and delivery of 100 A HRC fuse, 500VAC, 120KA, , conforms to IE 60269-2 as per sample.	1	Nos.	383.00	383.00
365	Supply and delivery of 63 A HRC fuse; 500VAC conforms to IE 60269-2 as per sample.	1	Nos.	383.00	383.00
366	Supply and delivery of 20A, 550V, IS 9224, fuse holder with fuse as per sample.	1	Nos.	217.00	217.00
367	Supply and delivery of 3 Ton crane main contactor of 3-Pole with AC coil, AC-3 Duty -205A, AC-1 Duty-220A with auxiliary contact as per sample .Conforms to IEC 60947.	1	Nos.	37752.00	37752.00
368	Supply and delivery of contacts for 3 Ton crane main motor contactor of 3-Pole as per sample. Conforms to IEC 60947.	1	Nos.	6607.00	6607.00
369	Supply and delivery of NO/NC Auxiliary contacts for 3 Ton crane motor contactor of 3 Pole series, AC-3 Duty -85A, AC-1 Duty- 100A as per sample .Conforms to IEC 60947.	1	Nos.	4000.00	4000.00
370	Supply and delivery of 3 Ton crane motor contactor of 3 Pole series with AC coil, AC-3 Duty - 85A, AC-1 Duty- 100A with auxiliary contact as per sample. Conforms to IEC 60947.	1	Nos.	4000.00	4000.00
371	Supply and delivery of 20-32 A Thermal Overload Relays, IS 13947, IEC 947, Ui 1000V, as per sample for 3 Ton crane.	1	Nos.	4061.00	4061.00
372	Supply and delivery of solid state overload relay, rated for 8-12.5 amps conforms to IS 13947,IEC 947 Ui 690V as per sample for 3 Ton crane.	1	Nos.	4061.00	4061.00
373	Supply and delivery of Bi-metallic overload relay, rated for 70-95 A amps conforms to IS 13947,IEC 947 as per sample for 3 Ton crane.	1	Nos.	6864.00	6864.00
374	Supply and delivery of Auxiliary Contact as per sample. The auxiliary Contact is a snap on front mount auxiliary contact block with 1NC contact for 3 Ton crane. Conforms to IEC 60947-5-1	1	Nos.	1624.00	1624.00
375	Supply and delivery of 1 NC push button with actuator, AC 12 10A, AC 15 6A, 230V, Ui=660V conforms to IEC 60947-5-1, as per sample for 3 Ton crane.	1	Nos.	1716.00	1716.00
376	Supply and delivery of 1 NO push button with actuator, AC 12 10A, AC 15 6A, 230V, Ui=660V conforms to IEC 60947-5-1, as per sample for 3 Ton crane.	1	Nos.	1716.00	1716.00
377	Supply and delivery of Push plunger type mini limit switch, IS 13947, and IP 67 as per sample for 3 ton crane.	1	Nos.	686.00	686.00
378	Supply and delivery of Hoisting motor limit switch as per sample for 3 ton crane.	1	Nos.	686.00	686.00
379	Supply and delivery of Bushing Suitable for LT OCB as per sample.	1	Nos.	9152.00	9152.00
380	Supply and delivery of Spout suitable for 6.6KV HT OCB as per sample.	1	Nos.	9152.00	9152.00

381	Supply and delivery of Tufnell Board suitable for LT OCB as per sample.	1	Nos.	3432.00	3432.00
382	Supply and delivery of fixed contact suitable for LT OCB as per sample.	1	Nos.	18304.00	18304.00
383	Supply and delivery of moving contact suitable for LT OCB as per sample.	1	Nos.	18304.00	18304.00
384	Supply and delivery of Clutch & Spring, Latch Mechanism for LT OCB as per sample.	1	Nos.	2179.00	2179.00
385	Supply and delivery of moving contact suitable for 6.6KV HT OCB as per sample.	1	Nos.	18304.00	18304.00
386	Supply and delivery of fixed contact suitable for 6.6KV HT OCB as per sample.	1	Nos.	18304.00	18304.00
387	Supply and delivery of Clutch & Spring, Latch Mechanism for HT OCB as per sample.	1	Nos.	2179.00	2179.00
388	Supply and delivery of Moving arching contact for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker as per sample.	1	Nos.	16202.00	16202.00
389	Supply and delivery of Fixed arching contact for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker as per sample.	1	Nos.	16202.00	16202.00
390	Supply and delivery of Jaw contact Assy. 800/1000A for L & T Make ACB (CN-CS 800) 50KA as per sample.	1	Nos.	6864.00	6864.00
391	Supply and delivery of 800-1600 C/H, 630-3200 S1 & 3200/4000 H/H0/H1 (Moving Arcing Contact) for L & T Make ACB as per sample.	1	Nos.	3432.00	3432.00
392	Supply and delivery of 800-1600 C, 1600 S1 (Fixed Arcing Contact) for L & T Make ACB (CN-CS 800) 50KA as per sample.	1	Nos.	3432.00	3432.00
393	Supply, delivery of Moving Arcing Contact for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample.	1	Nos.	4576.00	4576.00
394	Supply, delivery of Fixed Arcing Contact for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification as per sample.	1	Nos.	4576.00	4576.00
395	Supply, delivery of L&T, 3 Pole, 800A, 50 KA, CN-CS E RANGE ACB.	1	Nos.	138562.00	138562.00
396	Supply and Delivery of Havell's Titania ACB of rating 630A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	141077.00	141077.00
397	Supply and Delivery of Havell's Titania ACB of rating 1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	148356.00	148356.00
398	Supply, delivery of Microcontroller Based Intelligent Power Factor Controller – IPFC 11003 of Havell's.	1	Nos.	22880.00	22880.00
399	Supply, delivery of pump proportional valve controller with supply voltage =11-30 Volt D.C. for capstan as per sample.	1	Nos.	6864.00	6864.00

400	Supply and Delivery of 400A MCCB Bus Bar Box with suitable size cable end box for termination of 240Sqmm/300 Sq.mm cables. The Dimensions of the Bus bar and interconnecting bus links between MCCB and Bus bar should be rated not less than 400A capacity.	1	Nos.	51480.00	51480.00
401	Supply, delivery of Transformer Rectifier unit .Input Voltage: 415 V (A.C), 50 Hz, Output voltage= 24V, Current= 5 A (D.C) as per sample.	1	Nos.	10000.00	10000.00
402	Supply, delivery of Auto Transformer starter unit complete in all respect, H.P 50, Amp: 72-90 Amp, 400/440V, 50 Hz for capstan.	1	Nos.	16016.00	16016.00
403	Supply, delivery of Manual controller unit for capstan as per sample.	1	Nos.	12012.00	12012.00
404	Supply, delivery of overload relay unit (72-90A) for capstan for 50 HP motor as per sample.	1	Nos.	9152.00	9152.00
405	Supply, delivery of Transformer rectifier fuse for capstan as per sample.	1	Nos.	3432.00	3432.00
406	Supplies, delivery of start / stop push button for capstan as per sample.	1	Nos.	96.00	96.00
407	Supply, delivery of No-volt coil auto transformer starter unit for capstan as per sample.	1	Nos.	1716.00	1716.00
408	Supply of pre-wired double door Power Distribution board with IP-42/43 protection, incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment. Incomer: 250A FP MCCB, Outgoing: 1 No. 32 A TP MCB, 2 Nos. 100A MCB, 1 No. 63A TP MCB.	1	Nos.	63143.00	63143.00
409	Supply of pre-wired double door Power Distribution board with IP-42/43 protection, incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment, Incomer: 100A FP MCB, Outgoing: 3 Nos. 32 A TP MCB and 1 No. 63A MCB.	1	Nos.	6130.00	6130.00
410	Supply minimum 40 Watt LED Decorative Post top for 360° indirect light with IP 65 protection of die-cast housing and clear frosted PC diffuser and spun aluminium reflector with necessary fixing arrangement. Operating voltage range 140- 300 V; PF ≥ 0.95 and ingress protection IP65. Minimum system luminous efficacy 90 Lumen/Watt with 5700K.	1	Nos.	14872.00	14872.00
411	Supply and delivery of 1.1 KV grade 2 cores, 10 sq.mm. XLPE insulated armoured aluminium cable comply to IS: 7908(Part-1)/1988 or latest amendment if any.	100	Meter	124.00	12400.00
412	Supply and delivery at site (16-22) watt decorative light set with lamp.	2	Nos.	2288.00	4576.00
413	Supply and delivery of Oil temperature gauge for transformer.	1	Nos.	13728.00	13728.00
414	Supply and delivery of LT bushing for transformer as per sample.	3	Nos.	3432.00	10296.00

415	Supply and delivery of HT bushing 6.6 KV grade for transformer as per sample.	1	Nos.	17160.00	17160.00
416	Supply and delivery 100 A insulated TPN Terminal Block.	1	Nos.	1830.00	1830.00
417	Supply and delivery of Heavy Duty Switch disconnecter Fuse Max current rating of 160A for 3 Ton Diesel Electric crane as per sample.	1	Nos.	13888.00	13888.00
418	Supply and delivery of buchholz relay as per sample.	1	Nos.	15000.00	15000.00
419	Supply and delivery of Winding Temperature Indicator as per sample.	1	Nos.	13728.00	13728.00
420	Supply and delivery of roller copper Contacts for 3 Ton Japan Crane (3 Ton ELL Wharf crane) Travelling, Slewing, Hoisting, and Luffing controller unit as per sample.	1	Nos.	1500.00	1500.00
421	Supply and delivery of Semi Circle copper Contacts for 3 Ton Japan Crane (3 Ton ELL Wharf crane) for Travelling, Slewing, Hoisting, and Luffing controller unit as per sample.	1	Nos.	1500.00	1500.00
422	Supply and delivery of Copper Single Core Cables PVC insulated for voltage grade: 1100V.				
	i) 16 Sq.mm	20	Meter	214.00	4280.00
	ii) 25 Sq.mm	20	Meter	335.00	6700.00
	iii) 35 Sq.mm	20	Meter	464.00	9280.00
	iv) 50 Sq.mm	20	Meter	660.00	13200.00
	v) 70 Sq.mm	20	Meter	960.00	19200.00
	vi) 95 Sq.mm	10	Meter	1270.00	12700.00
	vii) 120 Sq.mm	10	Meter	1666.00	16660.00
	viii) 150 Sq.mm	10	Meter	2082.00	20820.00
423	Supply and delivery of RCD Relay with variable time Delay settings and fault current level setting for Earth fault protection of Generator/CESC feed for Subhas Bhawan Panel board.	1	Nos.	6600.00	6600.00
424	Supply and delivery of 200A Automatic Transfer Switch controller for Generator/CESC feed for Subhas Bhawan Panel board.	1	Nos.	17160.00	17160.00
425	Supply and delivery of PLA 2C/O-MPC (240A-5) Relay for Subhas Bhawan Panel board as per sample.	1	Nos.	500.00	500.00
426	Supply, delivery of LT C.T 60/5A, VA 5, Class I, for Subhas Bhawan panel board as per sample.	1	Nos.	1373.00	1373.00
427	Supply, delivery of digital panel meter for measuring electrical parameters with multiple displays in size 96 x 96 mm.(L&T VEGA TM Model A/B/C for CT Class I or Class 0.5) as per sample.	1	Nos.	18007.00	18007.00
428	Supply, delivery of 70A TP Contactor for firefighting pump 90 HP Star Delta Starter unit as per sample.	1	Nos.	4759.00	4759.00
429	Supply, delivery of over current relay (50-75A) for firefighting pump 90 HP Star Delta Starter unit as per sample.	1	Nos.	4759.00	4759.00
430	Supply, delivery of 4-Way Terminal Block Connector (15A).	1	Nos.	172.00	172.00

431	Supply, delivery of 2-Way Terminal Block Connector (15A).	1	Nos.	114.00	114.00
432	Supply, delivery of over current relay (9-14A) for firefighting pump Star Delta Starter unit as per sample.	1	Nos.	1144.00	1144.00
433	Supply, delivery of 15A TP Contactor for firefighting pump Star Delta Starter unit as per sample.	1	Nos.	985.00	985.00
434	Supply and delivery of 400A, 415V, 92 KA Fuse as per sample.	1	Nos.	2906.00	2906.00
435	Supply and delivery of 100A, 415V, 92 KA Fuse as per sample.	1	Nos.	972.00	972.00
436	Supply and delivery of Limit switch for Hoisting motor of 3 Ton Japani Crane (3 Ton ELL Wharf crane) as per sample.	1	Nos.	686.00	686.00
437	Supply and delivery of Limit switch for jib of 3 Ton Japani Crane (3 Ton ELL Wharf crane) as per sample.	1	Nos.	686.00	686.00
438	Supply and delivery of Arching copper contacts Tip for LT OCB as per sample.	1	Nos.	2000.00	2000.00
439	Supply and delivery of Arching copper contacts Tip for HT OCB as per sample.	1	Nos.	4000.00	4000.00
440	Supply and Delivery of OMRON MK3P-INJ 11 pin Relay as per sample.	1	Nos.	500.00	500.00
441	Supply and Delivery of Yuken A240 Solenoid Coil as per sample.	1	Nos.	1500.00	1500.00
442	Supply and Delivery of Transformer LT Bushing Oil Seal.	2	Set	686.00	1372.00
443	Supply and Delivery of Transformer HT Bushing Oil Seal.	2	Set	1030.00	2060.00
444	Supply and Delivery of Vacuum Bottle-B23-BEL Make suitable for 6.6KV, 13.1KA for 3 Second, 630A VCB	1	Nos.	74360.00	74360.00
445	Supply and Delivery of Spike Buster 4 way.	15	Nos.	515.00	7725.00
446	20 mm dia Polythene Pipe	60	Meter	34.00	2040.00
447	6 A Fuse unit for switch board	10	Nos.	37.00	370.00
448	8" x 6" PVC Box	6	Nos.	86.00	516.00
449	Supply and Delivery of Spout for 6KV/110V Potential Transformer.	1	Nos.	5000.00	5000.00
450	Support Insulator for Bus bar of HT Panel	1	Nos.	2860.00	2860.00
451	100 W GLS Bulb (110V).	30	Nos.	51.00	1530.00
452	HT PT Fuse for 6KV/110V Potential Transformer.	1	Nos.	5148.00	5148.00
453	LT PT Fuse for 6KV/110V Potential Transformer.	1	Nos.	1373.00	1373.00
454	LT OCB Limit Fuse.	1	Nos.	4004.00	4004.00
455	HT OCB Limit Fuse.	1	Nos.	8580.00	8580.00
456	AC starter with socket switch combination.	30	Nos.	1430.00	42900.00
457	600 mm Pedestal Fan.	4	Nos.	10296.00	41184.00
458	Well Glass Fitting suitable for 50 Watt led bulb.	2	Nos.	10868.00	21736.00
459	100W High Bay LED Light, Lumen -10000 or above, IP 65. White Light.	20	Nos.	10800.00	216000.00
460	200W High Bay LED Light, Lumen -20000 or above, IP 65. White light.	3	Nos.	16800.00	50400.00
461	Single Phase Energy Meter Box.	10	Nos.	1430.00	14300.00
462	Three Phase Energy Meter Box.	10	Nos.	1888.00	18880.00
Sub Total - II =					₹ 1,96,04,585.00

Part-III: Installation & Other Charges

Sl. No.	Item Description	Total Qty.	Unit	Unit Rate (Rs.)	Total Amount (Rs.)
1	Fixing of Sheet steel Main Switches on angle iron frame on wall (A suitable angle iron frame should be supplied and fixed on wall with it).	2	Nos.	335.00	670.00
2	Fixing of 125A, 415V, TPN on load front operated Changeover switch with Sheet Steel Enclosure on angle iron frame on wall with nuts bolts etc. (A suitable angle iron frame should be supplied and fixed on wall with it).	1	Nos.	257.00	257.00
3	Fixing of MCB SS enclosure powder coated provision for MCB, concealed in wall after cutting the wall & mending good the damages to original finish incl. painting, connection & provision for earthing attachment.	4	Nos.	335.00	1340.00
4	Fixing of MCB enclosure on wall. Fixing should be on angle iron frame on wall & mending well the damages to original finish with nuts bolts etc incl. provision for earthing attachment.	6	Nos.	257.00	1542.00
5	Fixing of MCCB SS enclosure, powder coated provision for housing MCCB, concealed in wall after cutting the wall & mending good the damages to original finish/ on flat iron frame incl. painting, connection & provision for earthing attachment.	3	Nos.	155.00	465.00
6	Fixing of MCCB SS enclosure, on wall on flat iron frame incl. painting, connection & provision for earthing attachment.	3	Nos.	213.00	639.00
7	Fixing of SPN MCB Distribution Board, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of Copper wire and neutral link & provision for earthing attachment.	2	Nos.	213.00	426.00
8	Fixing of SPN MCB Distribution Board on wall mending good the damages to original finish incl. Inter connection with suitable size of Copper wire and neutral link & provision for earthing attachment.	15	Nos.	213.00	3195.00
9	Fixing of TPN MCB Distribution board, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment.	6	Nos.	213.00	1278.00
10	Fixing of TPN MCB Distribution board, on angle iron frame on wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment.	15	Nos.	213.00	3195.00
11	Fixing of sheet metal (16 SWG) Iron Clad Bus bar chambers of 4 bars on angle iron frame on wall, incl. earthing attachment and painting as required.	2	Nos.	213.00	426.00
12	Wiring in 1.1 KV grade single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) of following sizes in 25mm PVC casing-capping (Precision Make) incl. necessary PVC clips, fittings etc.				
	i) 2 x 22/0.3 (1.5 Sq.mm) + 1 x 22/0.3 (1.5 Sq.mm)	350	RM	102.00	35700.00
	ii) 2 x 36/0.3 (2.5 Sq.mm) + 1 x 22/0.3 (1.5 Sq.mm)	350	RM	122.00	42700.00
	iii) 2 x 56/0.3 (4 Sq.mm) + 1 x 22/0.3 (1.5 Sq.mm)	200	RM	147.00	29400.00
13	Distribution wiring in 1.1 KV grade 2x22/0.3 (1.5 Sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in suitable size PVC casing-capping (Precision make) with 1x22/0.3 (1.5 Sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire for ECC, incl. necy. PVC clips, fittings etc. to light/fan/call bell point with piano key type switch				

	(Anchor make) fixed on sheet steel fabricated switch board with Perspex/Bakelite top cover on wall incl. necy. connections and making earthing attachment and mending good damages to building works. [PVC casing-capping and Switch board both on surface]				
	a) Average runs 6 metre.	200	Points	777.00	155400.00
	b) Average run 10 metre.	50	Points	1128.00	56400.00
14	Distribution Wiring in 1.1 KV grade 2x22/0.3 (1.5 Sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in suitable size PVC casing-capping (Precision make) with 1x22/0.3 (1.5 Sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire for ECC, incl. necy. PVC clips, fittings etc. to 5A 3 pin flush type plug socket with piano key type switch (Anchor make) fixed on sheet steel fabricated CRC MS switch board with Bakelite/Perspex (wall matching color) top cover of 3 mm thick flushed in wall by housing the board after cutting brick wall incl. necy. connection making earthing attachment, painting and mending good damages to building works [PVC casing-capping and plug box both on surface]				
	A) Average run 6 meter.	150	Points	713.00	106950.00
	B) Average run 3 meter.	50	Points	451.00	22550.00
15	Distribution Wiring in 1.1 KV grade 2x22/0.3 (1.5 Sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in suitable size PVC casing-capping (Precision make) with 1x22/0.3 (1.5 Sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire for ECC, incl. necy. PVC clips, fittings etc. to 5A 3 pin flush type plug socket with piano key type switch (Anchor make) fixed on sheet steel fabricated CRC MS switch board with Bakelite/Perspex (wall matching color) top cover of 3 mm thick flushed in wall by housing the board after cutting brick wall incl. necy. Connection making earthing attachment, Painting and mending good damages to building works of Average run 6 meter. [PVC casing-capping on surface and Switch board concealed]	20	Points	750.00	15000.00
16	Distribution wiring in 1.1 KV grade 2x22/0.3 (1.5 sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire with 1x22/0.3 (1.5 sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire (approved make) for ECC in 19 mm bore, 3 mm thick polythene pipe complete with all accessories embedded in wall for horizontal & vertical runs and in suitable size PVC casing-capping (Precision make) for ceiling portion only, incl. necy. PVC clips, fittings etc. To light/fan/call bell point with piano key type switch (Anchor make) fixed on sheet steel fabricated switch board with Perspex/Bakelite top cover on wall incl. necy. connections and making earthing attachment and mending good damages to building works of average run 6 meter [only PVC casing-capping on ceiling and remaining portion concealed].	20	Points	820.00	16400.00
17	Supplying and fixing PVC casing-capping [Precision Make] on Wall or ceiling, incl. necy. PVC fittings etc. and mending good damages to building works.	40	RM	61.00	2440.00
18	Distribution wiring in 1.1 KV single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in 20mm size PVC rigid conduit 'FR' (Precision make) incl. necy. fittings as required.				
	i) 2 x 36/0.3 (2.5 Sq.mm) + 1 x 22/0.3 (1.5 Sq.mm) ECC	300	RM	142.00	42600.00
	ii) 2 x 56/0.3 (4 Sq.mm) + 1 x 36/0.3 (2.5 Sq.mm) ECC	200	RM	178.00	35600.00
	iii) 2 x 84/0.3 (6 Sq.mm) + 1 x 56/0.3 (4 Sq.mm) ECC	150	RM	231.00	34650.00
19	Distribution wiring in 2 x 22/0.3 (1.5 sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in 20mm size PVC rigid conduit 'FR' (Precision make), with 1x22/0.3 (1.5 sq.mm) single core stranded 'FR' PVC insulated &	200	Points	826.00	165200.00

	unsheathed copper wire for ECC, to light/fan/call bell points with Piano Key type switch fixed on MS CRC sheet metal (16 SWG) switch board cum JB on wall complete with 2 no. suitable size "Ph & N" copper bar incl. Bakelite/Perspex (wall matching color) top cover 3 mm thick and incl. 175mmx100mmx65mm inspection box, making earthing attachment, painting the MS box and mending good the damages to original finish of average run 6 meter.				
20	Distribution wiring in 1.1 KV grade 22/0.3 (1.5 sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in 20mm size PVC rigid conduit 'FR' (Precision make), with 1.1 KV grade 1 x 22/0.3 (1.5 sq.mm) single core stranded 'FR' PVC insulated & unsheathed copper wire as ECC, to 5A 3 pin flush type plug socket & Piano Key type switch fixed on MS CRC sheet metal (16 SWG) switch board cum JB on wall incl. Bakelite/Perspex (wall matching color) top cover 3 mm thick and incl. painting the MS box and mending good the damages to original finish of average run 6 meter.	150	Points	779.00	116850.00
21	Supply and fixing PVC Rigid Conduit 'FR' [Precision Make] of 20mm size on wall, ceiling with saddles and other accessories as required and mending good damages to building works .	30	RM	61.00	1830.00
22	Supply & Fixing GI Modular Switch Board of the following sizes complete with three no. suitable size Copper bar with holes (for Ph, N & E) fixed on Bakelite/Hard Rubber insulator over the MS welded chairs incl. top cover flushed in wall for housing the board after cutting the brick wall incl. making Earthing attachment, painting and mending good damages to building works.				
	i) 4 Module	70	SET	312.00	21840.00
	ii) 6 Module	75	SET	397.00	29775.00
	iii) 8 Module	80	SET	486.00	38880.00
	iv) 12 Module	70	SET	626.00	43820.00
	v) 2 Row 12 Module	10	SET	752.00	7520.00
	vi) 2 Row 18 Module	5	SET	930.00	4650.00
	vii) 2 Module	80	SET	206.00	16480.00
23	Supply & Fixing 240 V 6 A Modular type switch (Brand approved by EIC) on existing GI Modular type switch board having top cover plate and making necessary connections as required	400	Nos.	98.00	39200.00
24	Supply & Fixing 240 V 16 A modular type switch (Brand approved by EIC) on GI Modular type switch board having top cover plate and making necessary connections as required.	200	Nos.	142.00	28400.00
25	Supply & Fixing 240 V, 6A, 5 pin Modular type plug socket (Brand approved by EIC), without switch & plug top, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	200	Nos.	144.00	28800.00
26	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and Switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	150	Nos.	194.00	29100.00
27	Supply & Fixing 240 V, 25 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	20	Nos.	810.00	16200.00
28	Supply & Fixing 240 V, 25 A, 3 pin Modular type plug top with indicator (Brand approved by EIC) & necy. Connections.	15	Nos.	154.00	2310.00
29	Supply & Fixing 240V, Modular Socket (2 Module) type fan regulator (Step type) (Brand approved by EIC) on existing Modular GI switch board with top cover plate incl. Making necy. connections etc.	120	Nos.	463.00	55560.00

30	Supply & Fixing 240 V, 4 nos. 6 A, 3 pin Modular type plug socket with 4 nos. 6A Modular type switch (Brand approved by EIC), 16A Modular switch type MCB (C-Curve) and Indicator without plug top on 2 row 18 Module GI Modular type switch board with 2 row 18 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	2	Nos.	2022.00	4044.00
31	Supply & Fixing 240 V, 3 nos. 16 A, 3 pin Modular type plug socket with 3 nos. 16A Modular type switch (Brand approved by EIC), 20A Modular switch type SP MCB (C-Curve) and Indicator without plug top on 2 row 12 Module GI Modular type switch board with 2 row 12 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	2	Nos.	1938.00	3876.00
32	Supply & Fixing 240 V, 25 A, 3 pin Modular type plug socket with 25A Modular switch (Brand approved by EIC) type SP MCB (C-Curve) and 4 Module GI Modular type switch board with 4 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	7	Nos.	640.00	4480.00
33	Supply & Fixing 240 V, 25 A, Modular type starter (Brand approved by EIC) with 25A Modular switch type DP MCB (C Curve) and 4 Module GI Modular type switch board with 4 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	30	Nos.	938.00	28140.00
34	Supply & Fixing 240 V, 25A Modular type socket, 25 A, Modular type starter (Brand approved by EIC) with 25A Modular switch type DP MCB (C-Curve) and 6 Module GI Modular type switch board with 6 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	15	Nos.	1252.00	18780.00
35	Supply, delivery and fixing of AC starter with socket & MCB of 20A Combination along with BOX on wall.	15	Nos.	938.00	14070.00
36	Distribution wiring in 22/0.3 (1.5 Sq.mm) single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire (Brand approved by EIC) in 19 mm bore, 3 mm thick polythene pipe complete with all accessories embedded in wall to light/fan/call bell points with Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate flushed in wall incl. mending good damages to original finish. 2x22/0.3 (Ph. & N) and 1x22/0.3 as ECC				
	i) Average run 6 metre	120	Points	1068.00	128160.00
	ii) Average run 8 metre	50	Points	1307.00	65350.00
37	Distribution wiring in 22/0.3 (1.5 Sq.mm) single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire (Brand approved by EIC) in 19 mm bore, 3 mm thick polythene pipe complete with all accessories embedded in wall to 240 V 6A 5 pin plug point incl. S&F 240 V 6A 3 pin Modular type plug socket & Modular type switch (Brand approved by EIC) incl. S&F earth continuity wire, fixed on 4 Module GI switch Board with 3/4 Module top cover plate flushed in wall incl. Mending good damages to original finish of Average run 6 meter.	100	Points	1300.00	130000.00
38	Distribution wiring in single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire (Brand approved by EIC) in 19 mm bore, 3 mm thick polythene pipe complete with all accessories embedded in wall mending good damages to original finish.				
	i) 2 x 36/0.3 (2.5 Sq.mm) + 1 x 22/0.3 (1.5 Sq.mm) as ECC	100	RM	142.00	14200.00
	ii) 2 x 56/0.3 (4 Sq.mm) + 1 x 22/0.3 (2.5 Sq.mm) as ECC	100	RM	178.00	17800.00
	iii) 2 x 6 Sq.mm + 1 x 4 Sq.mm as ECC	50	RM	231.00	11550.00

39	Laying of cable up to 3/4 core 25 Sq.mm on wall/surface incl. S & F MS saddles with earthing attachment in 10 SWG GI (Hot Dip) Wire, making holes etc. as necessary mending good damages and painting.	400	RM	72.00	28800.00
40	Laying of cable from 3/3½ core 35 Sq.mm to 50 Sq.mm on Wall/surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	300	RM	85.00	25500.00
41	Laying of cable above 3½ cores 50 Sq.mm and up to 3½ cores 95 Sq.mm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. As necessary mending good damages and painting.	200	RM	99.00	19800.00
42	Laying of cable above 3½ core 95 sq.mm and up to 3½ cores 150 Sq.mm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. As necy. Mending good damages and painting.	200	RM	103.00	20600.00
43	Laying of cable above 3½ 150 sq.mm up to 3.5C 240 Sq.mm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. As necy. mending good damages and painting.	200	RM	144.00	28800.00
44	Laying of cable above 3.5C 240 Sq.mm up to 3.5C 400 Sq.mm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. As necy, mending good damages and painting.	200	RM	179.00	35800.00
45	Laying only Cable up to 50 sq.mm through existing RCC/Hume/ GI Pipe/open masonry trench for single, 2, 3, 3½ & 4 core.	300	RM	72.00	21600.00
46	Laying only Cable above 50 sq.mm but not exceeding 400 sq.mm through existing RCC/ Hume/GI Pipe/open masonry trench for single, 2, 3, 3½ and 4 core.	400	RM	72.00	28800.00
47	Laying of one No. cable up to 35 sq.mm in underground trench	350	RM	194.00	67900.00
48	Laying of one No. cable above 35 sq.mm and up to 185 sq.mm in underground trench	700	RM	206.00	144200.00
49	Laying of one No. cable above 185 sq.mm in underground trench 4	500	RM	224.00	112000.00
50	Laying of cable as below, after cutting floor/pavement/wall/ and making holes incl., embedding the cable at an average depth as below and mending good the damages to original finish incl. removing the rubbish.				
	i) From 2.5 Sq.mm to 35 Sq.mm at an average depth of 75 mm in floor/pavement/wall etc.	100	RM	152.00	15200.00
	ii) Above 35 sq.mm to 95 sq.mm at an average depth of 100 mm in floor/pavement/wall etc.	100	RM	190.00	19000.00
51	Laying of cable as below, on existing Cable Tray and binding with suitable size GI wire up to cable of dimension 150 Sq.mm.	100	RM	23.00	2300.00
52	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below for 4Core or 3.5C cables.				
	i) Up to 25 sq.mm	60	SET	194.00	11640.00
	ii) Up to 35 sq.mm	60	SET	194.00	11640.00
	iii) Up to 50 sq.mm	60	SET	236.00	14160.00
	iv) Up to 70 sq.mm	20	SET	254.00	5080.00
	v) Up to 95 sq.mm	4	SET	280.00	1120.00
	vi) Up to 120 sq.mm	20	SET	367.00	7340.00
	vii) Up to 150 sq.mm	28	SET	425.00	11900.00
	viii) Up to 185 sq.mm	8	SET	468.00	3744.00
	ix) Up to 240 sq.mm	20	SET	572.00	11440.00
	x) Up to 300 sq.mm	16	SET	617.00	9872.00
	xi) Up to 400 sq.mm	4	SET	752.00	3008.00
	xii) Up to 16 sq.mm	20	SET	158.00	3160.00

	xiii) Up to 10 Sq.mm	8	SET	158.00	1264.00
	xiv) Up to 6 Sq.mm	4	SET	138.00	552.00
53	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solder less socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
	i) 4 core 6 Sq.mm cable	4	SET	74.00	296.00
	ii) 4 core 10 Sq.mm cable	8	SET	80.00	640.00
	iii) 4 core 16 Sq.mm cable	8	SET	114.00	912.00
	iv) 4 core 25 Sq.mm cable	20	SET	138.00	2760.00
	v) 3½ core 25 Sq.mm cable	20	SET	132.00	2640.00
	vi) 3½ core 35 Sq.mm cable	60	SET	189.00	11340.00
	vii) 3½ core 50 Sq.mm cable	60	SET	250.00	15000.00
	viii) 3½ core 70 Sq.mm cable	20	SET	315.00	6300.00
	ix) 3½ core 95 Sq.mm cable	4	SET	371.00	1484.00
	x) 3½ core 120 Sq.mm cable	20	SET	456.00	9120.00
	xi) 3½ core 150 Sq.mm cable	28	SET	519.00	14532.00
	xii) 3½ core 185 Sq.mm cable	8	SET	653.00	5224.00
	xiii) 3½ core 240 Sq.mm cable	20	SET	850.00	17000.00
	xiv) 3½ core 400 Sq.mm cable	4	SET	1514.00	6056.00
	xv) 3½ core 300 Sq.mm cable	16	SET	1055.00	16880.00
54	Finishing of the PVC insulated wire ends by socketing with pin/ ring type copper sockets and insulated tapes etc., including Supplying sockets, tapes.				
	i) 2.5 sq.mm	200	SET	7.00	1400.00
	ii) 4 sq.mm	180	SET	8.00	1440.00
	iii) 6 sq.mm	120	SET	11.00	1320.00
	iv) 10 sq.mm	8	SET	13.00	104.00
55	Straight through Jointing of cable of different size by compound Jointing kit or heat shrinkable jointing kit including S&F ferrule tapes and jointing materials etc.				
	i) 3 ½ / 4 core 10-16 Sq.mm cable	18	Nos.	1249.00	22482.00
	ii) 3½ / 4 core 25-35 Sq.mm cable	26	Nos.	1418.00	36868.00
	iii) 3½ core 50 Sq.mm cable	12	Nos.	1770.00	21240.00
	iv) 3½ 70 sq.mm cable	8	Nos.	1811.00	14488.00
	v) 3½ core 95 sq.mm cable	2	Nos.	2015.00	4030.00
	vi) 3½ core 120-150 sq.mm cable	16	Nos.	2558.00	40928.00
	vii) 3½ core 185 sq.mm cable	2	Nos.	2854.00	5708.00
	viii) 3½ core 240 sq.mm cable	12	Nos.	2254.00	27048.00
	ix) 3½ core 300 sq.mm cable	6	Nos.	4199.00	25194.00
56	Termination of 3C, 120 sq. mm 11KV Grade, XLPE insulated armoured, aluminium cond. Cable.	6	SET	2000.00	12000.00
57	Transition Jointing of 3 c, 120 sq. mm 11KV Grade, XLPE-PILC insulated armoured, aluminium Conductor cable.	6	SET	6000.00	36000.00
58	Straight through cable Jointing of 3 c, 120 sq. mm 11KV Grade, XLPE/PILC insulated armoured, aluminium conductor cable.	3	SET	6000.00	18000.00
59	Laying of 3C, 120sq.mm. 11KV E Grade XLPE Insulated Armoured Aluminium Conductor Cable in underground trench.	200	Meter	299.00	59800.00
60	Laying of 3C, 120sq.mm. 11KV E Grade XLPE Insulated Armoured Aluminium Conductor Cable in hard standing with GI pipe protection.	100	Meter	800.00	80000.00

61	Heat Sink Straight through cable Transition Jointing of 3 c, 400 sq. Mm 1.1KV Grade, XLPE-PILC insulated armoured, and aluminum conductor cable.	4	SET	6000.00	24000.00
62	Installation of Breather for Transformer	3	Nos.	359.00	1077.00
63	Installation of 1 × 200W LED flood light fittings complete in all respect.	20	Nos.	864.00	17280.00
64	Installation of 300W, LED floodlight luminaries with secondary optics made in pressure die cast housing and heat sink in Aluminium extrusion with IP66.	10	Nos.	864.00	8640.00
65	Installation of Digital Multifunction meter 110VAC,CL-0.5s, Model-ELITE445 6.6 KV/110V (5A) Make-secure suitable for 'ANDREW Yule' VCB.	1	Nos.	1196.00	1196.00
66	Fixing only outdoor street light fittings with all accessories.	50	Nos.	864.00	43200.00
67	Installation of Luminaries for 1X 400W LED Luminaries Complete in all respect. Fixing only flood light fitting with suitable clamp for mounting on Pole or Tower.	20	Nos.	864.00	17280.00
68	Installation of the above 11/9 meter high GI Steel tubular Pole with suitable earthing arrangement as per IS Spec.	20	Nos.	388.00	7760.00
69	Installation of 5C 4 sq mm 1100 V Graded stranded copper conductor 1100 V Grade Cable for H M Tower.	300	Meter	179.00	53700.00
70	Replacement of sheared stainless steel wire rope for 25 Meter High Mast type Lighting Towers.	7	Nos.	6000.00	42000.00
71	Installation and commissioning of Double drum Double Gear & Pinion Winch set assembly of High Mast.	2	Nos.	6000.00	12000.00
72	Installation of the Double gear/Pinion into the same the existing Winch assembly.	9	Nos.	6000.00	54000.00
74	Construction of RCC foundation of Feeder Pillar Boxes including supply of foundation accessories consisting of cement, reinforcement steel bars, bricks, sand, stone chips, shuttering materials, labour etc. complete and refilling of earth up to the existing ground level after curing and Installation of the above High Mast Feeder Pillar & Stand Alone Pillar box by grouting the stand in concrete.	2	Nos.	5980.00	11960.00
75	Installation of dust, weather proof, IP66 protected Double Door 4 way Distribution Board at the middle platform/upper platform of each lattice tower	10	Nos.	1794.00	17940.00
76	Installation of Weather proof (IP-65) Junction Box made of cast aluminium to install on carriage assembly from which the inter-connections to the above mentioned Aviation Obstruction Luminaries, Flood Light Fittings and associated Driver Units, fixed on the carriage shall be made.	4	Nos.	598.00	2392.00
77	Installation of Weather proof (IP-65) control gear box made of cast aluminium to install on carriage assembly.	4	Nos.	598.00	2392.00
78	Installation of one no suitable LED Aviation obstruction light (including lamp of red color and other accessories) of suitable design and reputed make on top high mast tower.	1	Nos.	2392.00	2392.00
79	Laying of 3.5 c, cable above 185 Sq.mm and up to 240 sq. mm 1.1KV Grade, XLPE insulated armoured, aluminium conductor cable by cutting Hard standing and mending good as like before. The cable has to be laid in suitable size GI pipe to be supplied by the party.	250	Meter	359.00	89750.00
80	Laying of 3.5 c, 120/150 sq. mm 1.1KV Grade, XLPE insulated armoured, aluminium conductor cable by cutting Hard standing and mending good as like before. The cable has to be laid in suitable size GI pipe to be supplied by the party.	250	Meter	300.00	75000.00
81	Laying of 3.5 c,50/70 sq. mm 1.1KV Grade, XLPE insulated armoured, aluminium conductor cable by Cutting Hard standing and mending good as like before. The cable has to be laid in suitable size GI pipe to be supplied by the party.	250	Meter	280.00	70000.00
82	Laying of 3.5 c, 25/35 sq. mm 1.1KV Grade, XLPE insulated armoured, aluminium conductor cable by cutting Hard standing and mending good as like before. The cable has to be laid in suitable size GI pipe to be supplied by the party.	250	Meter	250.00	62500.00

83	Laying of 4 c, 6/10/16 sq. mm 1.1KV Grade, XLPE insulated armoured, aluminium conductor cable by cutting Hard standing and mending good as like before. The cable has to be laid in suitable size GI pipe to be supplied by the party.	200	Meter	200.00	40000.00
84	Installation of IPR -1 microprocessor over current release of Havell's Titania ACB series of 1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	5980.00	5980.00
85	Installation of IPR -1 microprocessor over current release of Havell's Titania ACB series of 630 A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	5980.00	5980.00
86	Installation of spring charging motor suitable for Havell's Titania ACB of rating 630A or 1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification. These are available in 110V and 220V AC/DC .The VA burden of the motor is 150 VA only and the charging time is 3 sec to 4 sec. Supply as per sample.	1	Nos.	5980.00	5980.00
87	Installation of shunt Trip Coil/closing coil for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification. These are available in 24V, 110 VAC/DC and 220V AC/DC & 415VAC. The inrush power is 200VA. Supply as per sample.	1	Nos.	5980.00	5980.00
88	Installation of under voltage release for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification. These are available in 24VDC, 110 VAC/DC and 220V AC/DC & 415VAC. The inrush power of this coil is 200VA. Continuous power consumption is 5VA only. Supply as per sample	1	Nos.	5980.00	5980.00
89	Installation of spring charge indication switch for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	5980.00	5980.00
90	Installation of ON/OFF push button cover for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	5980.00	5980.00
91	Installation of Trip Indication switch for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	5980.00	5980.00
92	Installation of Terminal studs for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	5980.00	5980.00
93	Shifting of existing GI Light pole and Erecting G I street light pole (single arm / double arm) at new location, including construction of concrete foundation & painting of the G I street light pole with one coat of red oxide and two coats of Aluminium paint.	5	Nos.	11960.00	59800.00
94	The RCC foundation (1:2:4, with nominal reinforcement) for outdoor Feeder Pillar. The outdoor Feeder Pillar should be erected on the aforesaid RCC foundation and the same should be fixed with the foundation bolts, grouted in the aforesaid RCC foundation.	6	Nos.	2990.00	17940.00
95	Welding of CRCA sheet on the wall of the existing pillar boxes in replacement of perforated walls.	100	RM	299.00	29900.00
96	Replacement of the canopy of the pillar box with a new canopy of 3-4 mm thick CRCA sheet.	2	Nos.	1794.00	3588.00
99	Repair of Monkey ladders of 27 meter high lattice towers with new galvanized iron bars having load capacity above 120 Kg. The new GI bar will be welded into the existing money ladder. [GI Bar.]	5	Nos.	5000.00	25000.00
100	Cage repairing of monkey ladders of 27 meter high lattice towers by GI strips. The new GI strips should be installed in place of damaged one. [GI Strip]	5	Nos.	5000.00	25000.00
101	Fixing of Junction Box on wall with suitable mounting arrangement.	4	Nos.	299.00	1196.00
102	Fixing & installation only Geysers and making connection, as required.	2	Nos.	1196.00	2392.00
103	Fixing only flood light fitting with suitable clamp for Mounting on Pole or Tower.	50	Nos.	864.00	43200.00
104	Fixing only outdoor street light fittings with all accessories to be fixed or projected from the Wall/structure of the building or to be	50	Nos.	864.00	43200.00

	installed on the arms of the street light pole.				
105	Installation of Delta connected Capacitor bank of capacity 10 KVAR.	5	Nos.	2392.00	11960.00
106	Installation of Delta connected Capacitor bank of capacity 25 KVAR.	5	Nos.	2392.00	11960.00
107	Installation of Thermo-magnetic Release Type - DN1 for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	5980.00	5980.00
108	Installation of shunt release coil for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	5980.00	5980.00
109	Installation of under voltage release for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	5980.00	5980.00
110	Installation of Closing release for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	5980.00	5980.00
111	Installation of Spring charging Motor for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	5980.00	5980.00
112	Installation of Auxiliary Contacts 6 NO + 6 NC for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	5980.00	5980.00
113	Installation of Terminal contacts and stud for L&T LT ACB CN-CS 800, 800A, 415V.	1	Nos.	5980.00	5980.00
114	Installation of Fixed contact for LT Oil Circuit Breaker	2	Nos.	5980.00	11960.00
115	Installation of Moving contact for LT Oil Circuit Breaker	2	Nos.	5980.00	11960.00
116	Installation of High efficiency 60 Watt Outdoor Street Light type LED Fitting having IP66 enclosure suitable to install at wall with GI angular Pipe.	30	Nos.	864.00	25920.00
117	Fixing of Wall mounting fan of 400mm sweep	60	Nos.	110.00	6600.00
118	Fixing only ceiling fan complete with blades, canopy, rubber bush etc. and making connection [by providing flexible copper connecting wire (3 x 1.5mm ²) & suitable flexible PVC Pipe] as required.	200	Nos.	79.00	15800.00
119	Fixing only exhaust fan and making connection [by providing flexible copper connecting wire (3 x 1.5 mm ²) & suitable flexible PVC Pipe] as required.	30	Nos.	492.00	14760.00
120	Fixing only Tube light fitting [both 4ft and 2ft size] complete with all accessories directly on wall/ PVC or HW block by screws/MS fastener and making connection [by providing flexible copper connecting wire (3 x 1.5mm ²) & suitable flexible PVC Pipe] as required.	1200	Nos.	86.00	103200.00
121	Overhauling of ceiling fan/wall fan/exhaust fan/pedestal fan rewinding ,duly changing the bearing ,painting and reinstalling the fan	100	Nos.	598.00	59800.00
122	Supplying & fixing earth bus bar of galvanized (Hot Dip) MS flat 65 mm x 8 mm on wall having clearance of 6 mm from wall including providing drilled holes on the bus bar complete with GI bolts, nuts, washers, spacing insulators etc. as required of 6 mm from wall including providing drilled holes on the bus bar complete with G. I. Bolts, nuts, washers, spacing insulators etc. as required (For MCBDBs).	40	Nos.	378.00	15120.00
123	Connecting the equipments to earth bus bar including S & F Solid GI (Hot Dip) wire of size No. 4 SWG on wall/floor with staples buried inside wall/floor as required and making connection to equipments with bolts, nuts, washers, cable lugs etc. as required and mending good damages.	400	RM	16.00	6400.00

124	Earthing with 65 mm dia GI pipe (TATA-Medium)x 3.0 Mts. long and 1 No. 50 mm x 6 mm galvanized (Hot Dip) steel strip (4 Mts. long), 20 mm dia x 125 mm long galvanized bolt, double nuts, double washers including finishing both ends by making holes etc. and S & F 65 mm dia GI pipe (ISI-Medium) protection (3 Mts. long) to be filled with bitumen partly under the ground level and partly above ground level to an average depth of 3.65 Mts. Provide masonry enclosure on the top of the earth electrode of overall size 86.36 cm x 86.36 cm x 46 cm deep (below Ground level) complete with cemented brick work(1:6) of 25 cm width duly plastered with cement mortar (inside) CI hinged inspection cover of size 36.56 cm x 35.56 cm with locking arrangement, GI reducer including drilling of 46 nos. 12 mm dia holes on the GI pipe. Treatment of soil by using salt & charcoal or coke for plate electrode.	20	Nos.	6356.00	127120.00
125	Supplying & fixing earth bus bar of galvanized (Hot Dip) MS flat 65 mm x 8 mm on wall having clearance of 6 mm from wall including providing drilled holes on the bus bar complete with GI bolts, nuts, washers, spacing insulators etc. as required	20	Nos.	378.00	7560.00
126	Connecting the equipments body to earth bus bar including S & F 25 mm x 6 mm galvanized (Hot Dip) MS flat on wall/floor with GI saddles as required and connection to equipments incl. drilling holes, with bolts, nuts, washers etc.	300	RM	187.00	56100.00
127	Connecting the equipments body to earth bus bar incl. S & F 50 mm x 6 mm Galvanized (Hot Dip) MS flat on wall/floor with GI saddle as required and connection to equipments with incl. drilling holes, bolts, nuts, washers etc.	100	RM	258.00	25800.00
128	Fixing only Single Phasing Preventer on flat iron frame on wall.	10	Nos.	155.00	1550.00
129	Fixing only Voltmeter/Ammeter/Energy meter with screws & other fixing materials incl. making necessary holes and connections	30	Nos.	598.00	17940.00
130	Fixing of perforated GI cable tray reducer.	100	Each	299.00	29900.00
131	Fixing of S & F Lightning conductor.	4	Nos.	299.00	1196.00
132	Fixing of recessed type LED fitting on false ceiling (including cutting of false ceiling).	100	Nos.	176.00	17600.00
133	Fixing of recessed mounted type SPOT LED light fitting of wattage-5-7 Watt, Color Temperature -6500 K, Dimension -Any.	10	Nos.	176.00	1760.00
134	Fixing of surface mounted type SPOT LED light fitting with flexible head of wattage-5-7 Watt, Color Temperature -6500 K, Dimension - Any.	10	Nos.	176.00	1760.00
135	Cable laying of size 25/35 Sq.mm by micro-tunneling process with HDPE Pipe protection	100	RM	3588.00	358800.00
136	Cable laying of size 50 Sq.mm by micro-tunneling process with HDPE Pipe protection	100	RM	3588.00	358800.00
137	Cable laying of size 70 Sq.mm by micro-tunneling process with HDPE Pipe protection	100	RM	3588.00	358800.00
138	Cable laying of size 120/150 Sq.mm by micro-tunneling process with HDPE Pipe protection	100	RM	3588.00	358800.00
139	Cable laying of size 240 Sq.mm by micro-tunneling process with HDPE Pipe protection	100	RM	3588.00	358800.00
140	Cable laying of size 300 Sq.mm by micro-tunneling process with HDPE Pipe protection	100	RM	3588.00	358800.00
141	Fixing of Bus Bar support insulator.	10	Nos.	24.00	240.00
142	Fixing of IDMTL Over current & Earth fault relay with high set as per sample.	1	Nos.	3000.00	3000.00
143	Fixing of Spout suitable for 6.6KV, 400A HT OCB as per sample.	1	Nos.	3000.00	3000.00
144	Fixing of Spout suitable for 6.6KV, 1200A HT OCB as per sample.	1	Nos.	3000.00	3000.00
145	Fixing of Fixed contact assembly of 6.6KV, 1200 A HT OCB as per sample.	1	Nos.	3000.00	3000.00
146	Fixing of Fixed contact assembly of 6.6KV, 400 A HT OCB as	1	Nos.	3000.00	3000.00

	per sample				
147	Fixing of Moving contact assembly 6.6KV, 1200 A HT OCB as per sample.	1	Nos.	3000.00	3000.00
148	Fixing of Moving contact assembly of 6.6KV, 400 A HT OCB as per sample.	1	Nos.	3000.00	3000.00
149	Fixing of Fixed contact assembly suitable for 440V, 800A OCB as per sample.	1	Nos.	3000.00	3000.00
150	Fixing of Fixed contact assembly suitable for 440V, 400A OCB as per sample.	1	Nos.	3000.00	3000.00
151	Fixing of Moving contact assembly suitable for 440V, 800A OCB as per sample.	1	Nos.	3000.00	3000.00
152	Fixing of Moving contact suitable for 440V, 400A OCB as per sample.	1	Nos.	3000.00	3000.00
153	Fixing of Tufnell Board suitable for 440V, 800A, LTOCB as per sample.	3	Nos.	3000.00	9000.00
154	Fixing of Tufnell Board suitable for 440V, 400A, LT OCB as per sample.	3	Nos.	3000.00	9000.00
155	Fixing of Tufnell Board (between breaker & Panel) suitable for 440V, 400A, GEC. Make LT OCB as per sample.	1	Nos.	3000.00	3000.00
156	Fixing of Brass threaded stud with nut and washer suitable for 440V 800A OCB as per sample.	1	Nos.	1794.00	1794.00
157	Fixing of No Volt coil suitable for 440V, 400A / 800A, GEC make OCB as per sample.	1	Nos.	1794.00	1794.00
158	Installation of MP4 LSIg microprocessor based protection unit for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
159	Installation of shunt Trip Device unit for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
160	Installation of Under Voltage Device unit for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
161	Installation of closing coil Device unit for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
162	Installation of Motor operator unit for automatic spring charging for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
163	Installation of rear terminal (horizontal or vertical) for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
164	Installation of control button for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
165	Installation of 1000A AL Bus bar connecting Oil Circuit Breaker to the Panel bus bar as per sample.	1	Nos.	2000.00	2000.00
166	Installation of 600A AL Bus bar connecting Oil Circuit Breaker to the Panel bus bar as per sample.	1	Nos.	2000.00	2000.00
167	Installation of shunt Trip coil suitable for 440V, 400A / 800A, GEC make OCB as per sample.	1	Nos.	1196.00	1196.00
168	Installation of over current relay suitable for 440V, 400A / 800A, GEC makes OCB as per sample.	1	Nos.	1196.00	1196.00
169	Installation of under voltage relay suitable for 440V, 400A / 800A, GEC makes OCB as per sample.	1	Nos.	1196.00	1196.00
170	Installation of earth fault relay suitable for 440V, 400A / 800A, GEC make OCB as per sample.	1	Nos.	1196.00	1196.00
171	Installation of Capacitor Bank of Capacity-17.5 KVar, Delta Connected, 400V, f-50 Hz.	1	Nos.	500.00	500.00
172	Painting of any steel/iron surface with no. coats of paints as given below with ready mixed Paint/primer of ISI makes and brand incl. Preparation of surface by sand paper/emery paper, cleaning etc. for receiving fresh coat of paint (all the necessary paints and items	800	Sq.ft	120.00	96000.00

	needed for the said job is to be provided):- (a) One coat of aluminium paint over one coat of Red Oxide Priming.				
176	Welding of iron or GI or aluminium hinges for connecting the pillar box door with pillar box body.	200	Nos.	30.00	6000.00
177	Fixing of Digital Power Factor Meter.	1	Nos.	598.00	598.00
178	Fixing of Digital Energy Meter.	1	Nos.	598.00	598.00
179	Repairing and installation of Pillar Box Lock.	1	Nos.	598.00	598.00
180	Fixing of Direct-on-Line Motor Starter in Sheet-Steel Enclosure for 25 HP motor (Rating AC-3 Duty, 415V, 50Hz, 3-Ph). Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1. Sheet steel enclosures with IP 54 protection or above. Wide range of relay settings.	3	Nos.	478.00	1434.00
181	Fixing of Minilec VSP3 Single phase preventer.	6	Nos.	179.00	1074.00
182	Fixing of Direct-on-Line Motor Starter in Sheet-Steel Enclosure for 16.5 HP motor (Rating AC-3 Duty, 415V, 50Hz, 3-Ph). Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1. Sheet steel enclosures with IP 54 protection or above with overload relay and SPP.	3	Nos.	478.00	1434.00
183	Fixing of Direct-on-Line Motor Starter in Sheet-Steel Enclosure for 2 HP motor (Rating AC-3 Duty, 415V, 50Hz, 3-Ph). Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1. Sheet steel enclosures with IP 54 protection or above with overload relay and SPP.	1	Nos.	478.00	478.00
184	Fixing of VPG D1 minilec Phase failure relay with low water level guard for dry run protection.	1	Nos.	2990.00	2990.00
185	Fixing of Motor Terminal block as per sample.	6	Nos.	478.00	2868.00
186	Fixing of 3 P Copper Stud for providing shore power supply (200 A rating) with nuts, Bolts and suitable size of washers.	3	Nos.	1196.00	3588.00
187	Fixing of 3 Pole Copper Stud for providing shore power supply (400A rating) with nuts, Bolts and suitable size of washers.	5	Nos.	1196.00	5980.00
188	Fixing of Copper Jaw contact suitable for 440V 800A GEC make OCB as per sample.	1	Nos.	2000.00	2000.00
189	Fixing of Copper Jaw contact for LT OCB as per sample.	1	Nos.	2000.00	2000.00
190	Fixing of Copper Jaw contact suitable for 440V 400A GEC make OCB as per sample.	1	Nos.	2000.00	2000.00
191	Fixing of 4 inch Iron hinges for pillar box by welding.	60	Nos.	36.00	2160.00
192	Fixing of 4 or 3 inch Male Female hinges for pillar box by welding.	100	Nos.	36.00	3600.00
193	Fixing of 3 inch aluminium hinges for HMT feeder pillar box.	40	Nos.	36.00	1440.00
194	Installation of LED driver for 400W Crompton Greaves LED floodlight Product Ref: LFLPI-400-CDL/60-M.	20	Nos.	359.00	7180.00
195	Installation of LED driver for 415 W Wipro LED floodlight	23	Nos.	359.00	8257.00
196	Laying of 240 Sq.mm Single core P.V.C insulated un-armoured copper cable 1.1KV grade. (I.S specification no. 1554 Part-I & II) through wall via saddle of suitable size for Main Pump at Dry Dock.	50	Meter	299.00	14950.00
197	Installation of Bushing Suitable for LT OCB as per sample.	1	Nos.	1196.00	1196.00
198	Installation of Spout suitable for 6.6KV HT OCB as per sample.	1	Nos.	1196.00	1196.00
199	Installation of assembly of Fixed and moving contact suitable for LT OCB as per sample.	1	Nos.	1196.00	1196.00
200	Installation of Clutch & Spring, Latch Mechanism for LT OCB as per sample.	1	Nos.	1196.00	1196.00
201	Installation of assembly of Fixed and moving contact suitable for 6.6KV HT OCB as per sample.	1	Nos.	1196.00	1196.00
202	Installation of Clutch & Spring, Latch Mechanism for HT OCB as per sample.	2	Nos.	1196.00	2392.00
203	Installation of Moving arching contact for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
204	Installation of Fixed arching contact for Legrand DMX3 2500, 630A, 50 KA, Ui-1KV, Uimp-12 KV, Air Circuit Breaker.	1	Nos.	2000.00	2000.00
205	Installation of Racking Interlock with Door Interlock for L & T Make ACB (CN-CS 800) 50KA.	1	Nos.	2000.00	2000.00

206	Installation of Pole Assy. 800/1000 C D/O for L & T Make ACB (CN-CS 800) 50KA.	1	Nos.	2000.00	2000.00
207	Installation of Jaw contact Assy. 800/1000A for L & T Make ACB (CN-CS 800) 50KA.	1	Nos.	2000.00	2000.00
208	Installation of 800-1600 C/H, 630-3200 S1 & 3200/4000 H/H0/H1 (Moving Arcing Contact) for L & T Make ACB.	1	Nos.	2000.00	2000.00
209	Installation of 800-1600 C, 1600 S1 (Fixed Arcing Contact) for L & T Make ACB (CN-CS 800) 50KA.	1	Nos.	2000.00	2000.00
210	Installation of Plates for Main moving contacts for L & T Make ACB (CN-CS 800) 50KA.	1	Nos.	2000.00	2000.00
211	Installation of FRCD up to 4000 H0 3-pole for L & T Make ACB (CN-CS 800) 50KA	1	Nos.	2000.00	2000.00
212	Installation of MAIN SPRING 800-1600 C (3P), (112-125kg) for L & T Make ACB (CN-CS 800) 50KA.	1	Nos.	2000.00	2000.00
213	Installation of Moving Arcing Contact for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	2000.00	2000.00
214	Installation of Fixed Arcing Contact for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	2000.00	2000.00
215	Installation of MAIN SPRING for Havell's Titania ACB of rating 630A/1000A, Ue-690V, V-415V, Icw=50 KA for 1 Sec specification.	1	Nos.	2000.00	2000.00
216	Installation of Microcontroller Based Intelligent Power Factor Controller – IPFC 11003 of Havell's.	1	Nos.	2000.00	2000.00
217	Installation of pump proportional valve controller with supply voltage =11-30 Volt D.C.	2	Nos.	2000.00	4000.00
218	Installation of Transformer Rectifier unit .Input Voltage: 415 V (A.C), 50 Hz, Output voltage= 24V, Current= 5 A (D.C).	2	Nos.	2990.00	5980.00
219	Installation of Auto Transformer starter unit complete in all respect, H.P 50, Amp: 72-90 Amp, 400/440V, 50 Hz for capstan.	1	Nos.	2990.00	2990.00
220	Installation of Manual controller unit for capstan as per sample.	1	Nos.	1794.00	1794.00
221	The cable laying in catenary using 4 SWG GI stays wire and suitable insulator. Care must be taken to avoid unnecessary sag.				
	i) 6/10/16 Sq.mm cable	50	Meter	66.00	3300.00
	ii) 25/35 Sq.mm cable	50	Meter	102.00	5100.00
222	Installation of printed circuit board/LED chip for 400 W Crompton LED as per sample.	20	Nos.	359.00	7180.00
223	Installation of printed circuit board/LED Chip for 400 W Wipro LED flood light fitting as per sample.	23	Nos.	359.00	8257.00
224	Installation of above Post top luminaries incl. S&F of suitable dia & height of MS pipe including CC foundation as per site including S&F necy. length of Three core 1.5 sq.mm PVC insulated stranded copper wire and making connections from S&F of bakelite connector housing in JB embedded in wall to Post top light as required and mending good damages including painting, with anticorrosive paint.	2	Nos.	864.00	1728.00
225	Supply & fixing 4 meter height 50 mm G.I pipe (ISI medium) on wall with suitable size of M.S clamp for mounting of Light fittings of minimum weight above 20 Kgs.	50	Nos.	2392.00	119600.00
226	Laying of 1.1 KV grade 2 core, 10 sq.mm. XLPE insulated armoured aluminium cable comply to IS: 7908(Part-1)/1988 or latest amendment if any.	100	Meter	66.00	6600.00
227	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust and moisture proof entry of XLPE cable - 2 core 10 sq.mm aluminium cable.	4	Nos.	138.00	552.00
228	Finishing of XLPE cable ends by crimping method incl. supplying and fixing solder less sockets (Dowels make),tapes, anticorrosive paste and jointing material 2 core 10sq.mm.	4	Nos.	41.00	164.00
229	Fixing at site (16-22) watt decorative light set with lamp.	4	Nos.	120.00	480.00

230	Installation of HT bushing for transformer as per sample.	2	Nos.	1794.00	3588.00
231	Installation of LT bushing for transformer as per sample.	2	Nos.	1794.00	3588.00
232	Installation of Heavy Duty Switch disconnecter Fuse Max current rating of 160A for 3 Ton Diesel Electric crane.	1	Nos.	335.00	335.00
233	Installation of buchholz relay as per sample.	1	Nos.	2000.00	2000.00
234	Installation of Winding Temperature Indicator as per sample.	1	Nos.	2000.00	2000.00
235	Repair or construction of concrete foundation of street light pole.	15	Nos.	2990.00	44850.00
236	Identification of Underground cable fault in Low Tension cable through a cable fault locator machine.	25	Nos.	2990.00	74750.00
237	Identification of Underground cable fault in High Tension (11 KV grade) cable through a cable fault locator machine.	8	Nos.	2990.00	23920.00
238	Installation of Direct-on-Line Motor Starter in Sheet-Steel Enclosure for 20 HP motor (Rating AC-3 Duty, 415V, 50Hz, 3-Ph). Conforms to IS/IEC 60947-4-1 & IEC 6094 7-4-1. Sheet steel enclosures with IP 54 protection or above with overload relay and SPP.	1	Nos.	598.00	598.00
239	Installation of Arching copper contacts for LT OCB as per sample.	1	Nos.	1794.00	1794.00
240	Installation of Arching copper contacts for HT OCB as per sample.	1	Nos.	1794.00	1794.00
241	Cleaning PVC Sheet with Vinyl letters of Glow Sign Board and refixing it on the board cabinet.	15	Nos.	1435.00	21525.00
242	Replacement of LED Tube lights inside the Glow Sign Board cabinet with 20 W LED Tube light after opening the PVC Sheet cover and refixing it over the cabinet.	30	Nos.	2990.00	89700.00
243	Fixing of Well Glass Fitting.	2	Nos.	299.00	598.00
244	Fixing of 100W/200W High Bay LED Light.	23	Nos.	299.00	6877.00
245	Installation of Transformer LT Bushing Oil Seal.	2	Set	1794.00	3588.00
246	Installation of Transformer HT Bushing Oil Seal.	2	Set	1794.00	3588.00
Sub Total - III=					₹ 73,57,952.00

Total Cost (including Part-I, Part-II & Part-III)

Sl. No.	Description	Amount (Rs.)
1	Part-I: Labour Charge for Maintenance; Sub Total-I=	2,24,56,560.00
2	Part-II: Cost of Spares & Materials; Sub Total-II=	1,96,04,585.00
3	Part-III: Installation & Other Charges; Sub Total-III=	73,57,952.00
4	Grand Total=	4,94,19,097.00

(In Words: Rupees Four Crore Ninety Four Lakh Nineteen Thousand and Ninety Seven Only)

Note:

1. The quantity above may increase or decrease as per requirement for which payment will be made as per actual.
2. The rate quoted should be exclusive of GST and should be considered to complete the work in all respect.
3. GST will be paid extra at applicable rates at the time of supply of goods and services.

PRICE SHOULD BE EXCLUSIVE OF GST

Tenderer to fill up the following [score out which is not applicable]

PRICE NOT TO BE QUOTED HERE

(a).....%
(in figures)

.....Percent
(in words)

Below par (-) Rs.

(b).....%
(in figures)

.....Percent
(in words)

At par NIL

(c).....%
(in figures)

.....Percent
(in words)

Above par (+) Rs.

Total Tendered Amount: Rs. _____

Total tendered amount (in words)

[The prices quoted shall be including all statutory levies excluding GST, which shall be paid extra]

Permanent Income Tax A/C. No.....

Date:

(Signature of Tenderer)

[Total amount of tender, completion time and preliminary time as quoted /stated above are to be carried over to Form of Tender attached]

Witness: -

(Name in block letters)

Address:

Occupation:

Profile of Tenderer / FORM –D

This is to confirm that we agree to abide by all the terms and conditions of this NIT No. SMP/ KDS/Mech/SE-I/ADV/588 dated 30.08.2021, those mentioned in the “General Conditions of Contract” enclosed with this Tender Document as well as decisions taken in the pre-bid techno-commercial conference, if any. Our relevant particulars are furnished hereunder:

Particulars	To be filled in by the Tenderer or to be mentioned as “none ”
Name of the Tenderer	
Name of the owner(s) of the Tenderer	
Full postal address of the Tenderer including Police Station	
Telephone No. of the Tenderer	
Fax No. of the Tenderer	
E-mail ID of the Tenderer	
Name of the contact person of the Tenderer	
Mobile/land line Telephone No. of the contact person of the Tenderer.	
Name of the partners/directors/ members, as applicable, in this particular contract	
Name of their authorized representative(s) who would handle the contract on their behalf.	

**[DOCUMENT TO BE DOWNLOADED, FILLED IN UNDER BIDDER'S LETTERHEAD,
SIGNED, SCANNED AND UPLOADED]**

Covering Letter

Ref. No.....

Date:

The Chief Mechanical Engineer,
Kolkata Port Trust,
Mechanical and Electrical Engineering Department,
8, Garden Reach Road,
Kolkata – 700 043

Dear Sir,

1. We,(Name of Tenderer) having examined the Tender Document and understood its contents, hereby submit our Tender for..... (NIT No. SMP/KDS/Mech/SE-I/ADV/..... Dated..... and confirm that we unconditionally accept all the terms and conditions of the same including the Addendum (if issued).

2. All information and proofs provided in the Tender including Addendum and in the Appendices are true and correct and all documents accompanying such tender are true copies of their respective originals.

3. We shall make available to Kolkata Port Trust (hereinafter referred to as SMP, Kolkata) any additional information it may find necessary or require to supplement or authenticate the Tender.

4. We, (Name of Tenderer) hereby undertake that we will abide by the decisions of SMP, Kolkata in the matter of examination, evaluation and selection of Successful Tenderer and shall refrain from challenging or questioning any decision taken by SMP, Kolkata in this regard. We further acknowledge the right of SMP, Kolkata to reject our tender without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.

5. We also certify the following:

(a) We have not been debarred by the Central/State Govt. or any entity controlled by them or any other legal authority from participating in any Tender/Contract/Agreement of whatever kind.

(b) We have also not been expelled from any project or contract nor have had any contract terminated for breach in the last 3 years ending on the date of opening of the techno commercial part of the tender.

6. We declare that:

(a) We have examined and have no reservations to the Tender Document, including the Addendum, if any, issued by SMP, Kolkata thereon.

(b) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any corrupt, fraudulent or coercive practices to influence the evaluation process of the tender.

7. We understand that SMP, Kolkata reserves the right to accept or reject any tender and to annul the tendering process and reject all tenders at any time without any liability or any obligation for such acceptance, rejection or annulment without assigning any reason thereof.

Yours faithfully,

Signature of Tenderer.....

Name:

Designation:.....

Date:.....

Seal of the tenderer.....

SMP, Kolkata

SYAMA PRASAD MOOKERJEE PORT, KOLKATA

SCHEDULE – “O”

Tenderers must fill in the undernoted column:

Sl. No	Full particulars of similar works carried out by Tenderer	Value of work	Contract completion time	Actual completion time	Name and Addresses of Authorities for whom work was carried out	Name and Addresses to whom reference can be made

SCHEDULE – “O”
Sheet – 2

The Tenderers are also requested to furnish the following particulars:

A. In case of a Limited Company:

1. Name of the Company :
2. Address of its present registered office:
3. Date of its incorporation :
4. Full name and address of each of its Directors – any special particulars as to Directors if desired to be stated :
5. Name, address and other necessary Particulars of Managing Agents, if any, Appointed by the Company :
6. Copies of Memorandum and Articles of Association (with the latest amendments, if any) :
7. Copies of audited Balance Sheets of the Company for the last three years. :

SCHEDULE – “O”
Sheet – 3

B. In case of a Firm:

1. Name and address of the firm :
2. When business started :
3. If registered, a certified copy of Certificate of Registration :
4. A certified copy of the Deed Of Partnership :
5. Full name and address of each of the Partners and the interest of each partner in the Partnership. Any special particulars as to Partners if desired to be stated :
6. Whether the firm pays income tax over Rs.10, 000/- per year :

SCHEDULE – “O”

Sheet – 4

C. In case of an Individual:

1. Full name and address of the Tenderer; any special particulars of the Tenderer if desired to be stated :
2. Name of the father of the Tenderer :
3. Whether the Tenderer carried on business in his own name or any other name :
4. When business was started and by whom :
5. Whether any other person is interested in the business directly or indirectly, if so, name, address, etc. of such persons and the nature of such interest. :
6. Whether the Tenderer pays income tax over Rs.10,000/- per year :

DATED, the.....

Signature of Tenderer

**FORMAT OF AFFIDAVIT
On the Rupees Ten Non – Judicial Stamp Paper**

**BEFOR THE 1ST CLASS JUDICIAL MAGISTRATE AT-----
AFFIDAVIT**

Ison ofaged about
Years, by faith.....,by occupation....., residing at.....
-----do hereby solemnly affirm and declare as follows:

1. That I am the proprietor/Partner of ----- having office at ----- and carrying on business on the said name and style.

(In case the above Deponent is an enlisted Contractor at Kolkata Port Trust, the same should be mentioned in affidavit.)

2. THAT my aforesaid Firm is exempted from E.S.I. Act and the said Firm has no valid E.S.I Registration.

3. THAT the present affidavit is to be files before the Kolkata Port Trust as per the clause no-----
---- of Tender no -----issued by Kolkata Port Trust in respect of the work(the name
of the work is to be mentioned)

That the statements made above are all true to be the best of my knowledge and belief.

That in the event the declaration is found to be wrong and false, I will be held responsible for all the consequences in respect of compliance of The Employees State Insurance Act, 1948

DEPONENT

Identified by me

(FORMAT OF INDEMNITY BOND)
On the Rupees Fifty Non – Judicial Stamp Paper

INDEMNITY BOND

By THIS BOND, Shri/Smt _____, son of Shri/Smt _____
_____ Residing at _____ by
occupation -----the Partner/Proprietor/Director-----having office at-----
---- am a tenderer under Mechanical Engineering Department, Kolkata Port Trust (A statutory body
under MPT Act, 1963)

2. WHEREAS , the said Kolkata Port Trust asked the every tenderer, who is not covered under E.S.I Act or exempted to furnish an Indemnity Bond in favour of Mechanical Engineering Department, Kolkata Port Trust against all damages and accident to the Labourer Tenderer/contractor.
3. NOW THIS BOND OF INDEMNITY WITNESSETH THAT the Tenderer/contractor named herein above shall indemnify the Kolkata Port Trust AGAINST ALL DAMAGES AND ACCIDENT OCCURRING TO THE Labourers of the Tenderer/contractor as demanded by the Kolkata Port Trust and which shall be legal and /or claimed by the Kolkata Port Trust during the execution of the work stated in the NIT No _____ of _____
4. AND the contractor hereunder agree to indemnity and at all times keep indemnified the Kolkata Port Trust and its administrator and representative.
5. And also all such possible claim or demand for damages and accidents. In the event the declaration is found to be wrong and false, the tenderer will be held responsible for all the consequences in respect of compliance of The Employees State Insurance Act, 1948.

In WITNESS WHEREOF I-----,the Partner/Proprietor/Director----- Hereto
set and seal this the _____ Day of _____ In the year _____ at _____
.....

Sureties

1. Signature:

Name:

Address:

2. Signature:

Name:

Address:

Signature of the Indemnifier

3 Witness

Signature

Name:

Address

**[DOCUMENT TO BE DOWNLOADED, FILLED IN UNDER BIDDER'S LETTER HEAD,
SIGNED, SCANNED AND UPLOADED]**

Undertaking to be submitted in lieu of uploading/submitting signed copy of full tender document

Ref. No.....

Date.....

The Chief Mechanical Engineer,
Kolkata Port Trust,
Mechanical and Electrical Engineering Department,
8, Garden Reach Road,
Kolkata – 700 043

Dear Sir,

We,..... (Name of Tenderer) have fully read and understood the entire Tender Document, GCC, and Addenda, if any, downloaded from the instant e-tender and no other source, and will comply to the said Tender document, GCC and Addenda.

We are submitting this undertaking in lieu of submission of signed copy of the full Tender document.

Yours faithfully,

Signature of Tenderer.....

Name:

Designation:

Date:

Seal of the tenderer.....

Bid Securing Declaration Form

NIT No.: SMP/KDS/Mech/SE-I/ADV/588 dated 30.08.2021

Date:

To,
The Chief Mechanical Engineer,
Mechanical and Electrical Engineering Department,
Syama Prasad Mookerjee Port, Kolkata,
8, Garden Reach Road,
Kolkata – 700 043.

Sir,

I/We, The undersigned, declare that:

I/We understand that according to the terms and conditions of the Tender vide NIT No. dated, the bid must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you **for a period of three years** from the date of notification, if I am /We are in a breach of any obligation under the tender conditions in any manner as follows:

(a) have withdrawn/modified/amended, impaired or derogated from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

(b) notification of the acceptance of our Bid during the period of bid validity (i) have failed or refused to execute the contract, if required, or (ii) failed or refused to furnish the Performance Security, in accordance with the terms and conditions of the tender.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon award of order in favour of the successful bidder.

Signature with date:

Name:

Seal:

Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.

Checklist for Documents to be Uploaded

[Bidder to submit this document completely filled up for evaluation of its offer]

Name of the Firm:

Sl. No.	Documents to be uploaded as per instructions of NIT	Details of Documents as Uploaded
1	Earnest Money (details of DD no./Banker's Cheque No. with date or NSIC No. with validity period, if applicable, to be mentioned here)	
2	Tender Fee (details of DD no./Banker's Cheque No. with date or NSIC No. with validity period, if applicable, to be mentioned here)	
3	PAN No.	
4	Trade License Details	
5	Electrical Contractor License Details (No. & Validity period)	
6	ESI Regn. No. (If registered)	
7	Affidavit/Indemnity Bond Uploaded (Yes/No) (If ESI Registration is not applicable for the firm)	
8	PF Regn. No.	
9	GST Regn. certificate No.	
10	Professional Tax No.	
11	Undertaking (Annexure-I) Uploaded (Yes/No)	
12	Form -D, Covering letter Uploaded (Yes/No)	
13	Schedule 'O' Uploaded (Yes/No)	
14	Status of Tenderer (i.e. Pvt. Ltd./Partnership/Proprietorship etc.)	
15	Bid Securing Declaration Form Uploaded (Annexure-J)	
	"Financial Turnover (Average of Last 3 year turnover shall be 30% of the Tender value)"	FY: 2018-19
		FY: 2019-20
		FY: 2020-21
15	Details as required for ECS Payment [Scanned copy of unissued cheque is to be uploaded.]	Name of Bank with Code
		Branch Name
		Type of A/C
		A/C no.
		MICR Code
		IFSC No.

Note: No field is to be left blank.

Signature of Tenderer.....

Name:

Designation:

Date:

Seal of the tenderer.....

NIT No. SMP/KDS/Mech/SE-I/ADV/588 dated 30.08.2021

(On the Rupees Fifty Non-Judicial Stamp Paper of worth Rs.50/-)

INTEGRITY PACT

Between

Kolkata Port Trust (Kolkata Port Trust) hereinafter referred to as “The Principal/Employer”

And

.....hereinafter referred to as “The Bidder/Contractor”.

Preamble

The principal intends to award, under laid down organizational procedures, contract/s for.....The Principal values full compliances with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and/ or contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM) appointed by the principal, will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

NOW, THEREFORE

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence /prejudiced dealings prior to, during and subsequent to currency of the contract to be entered into with a view to:

Enabling the PRINCIPAL / EMPLOYER to get the contractual work executed and / or to obtain / dispose the desired said stores / equipment at a competitive price in conformity with the defined specifications / scope of work by avoiding the high cost and the distortionary impact of corruption on such work / procurement /disposal and Enabling BIDDERS /CONTRACTORS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will abstain from bribing and other corrupt practices and the PRINCIPAL/EMPLOYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

Section 1- Commitments of the Principal/employer.

(1) The Principal commits itself to take measures necessary to prevent corruption and to observe the following principles:

- a. No employee of the Principal, personally or through family members, will, in connection with the tender for, or the execution of a contract, demand, take a bribe or promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

- b. The Principal will, during the tender process, treat all Bidder(s) with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c. The Principal will exclude from the process all known prejudiced persons.

(2). If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC)/ Prevention of Corruption (PC) Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

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

(1). The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- a. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bid or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The Bidder(s)/Contractor (s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purpose of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representative in India, if any. Similarly the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the “**Guidelines on Indian Agents of Foreign Suppliers**” shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines, all the payments made to the Indian Agent/representative have to be in Indian Rupees only. Copy of the Guidelines on Indian Agents of foreign Suppliers is annexed and marked as ANNEXE – Z.
- e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all

payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(2). The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

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

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

Section 4 - Compensation for Damages

(1). If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand the recover the damages equivalent to Earnest Money Deposit / Bid Security.

(2). If the Principal has terminated the contract according to Section 3 or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section 5- Previous transgression

(1) . The Bidder declares that no previous transgressions occurred in the last 3 years from the date of signing the Integrity Pact with any other Company in any country conforming to the anti corruption approach or with any other Public Sector Undertakings /Enterprise in India, Major Ports, / Govt. Departments of India that could justify his exclusion from the tender process.

(2). If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as considered appropriate.

Section 6- Equal treatment of all Bidders / Contractors/ Subcontractors

(1) The Bidder(s)/ Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and subcontractors.

(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Other Legal actions violating Bidder(s)/Contractor(s)/ Sub contractor(s)

The actions stipulated in this Integrity pact are without prejudice to any other legal action that may follow in accordance with provisions of the extant law in force relating to any civil or criminal proceedings.

Section 8- Role of Independent External Monitor (IEM)

- (a) The task of the monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- (b) The monitors shall not be subject to instructions by the representatives of the parties and shall perform their functions neutrally and independently.
- (c) Both the parties accept that the Monitors have the right to access all the documents relating to the contract.
- (d) As soon as the Monitor notices, or has reason to believe, a violation of this pact, he will so inform the authority designated by the Principal and the Chief Vigilance Officer of Kolkata Port Trust.
- (e) The BIDDER / CONTRACTOR(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the PRINCIPAL including that provided by the BIDDER / CONTRACTOR. The demonstration of a valid interest, unrestricted and unconditional access to his contract documentation, if any. The same is applicable to Sub-contractors. The Monitor shall be under contractual obligation to treat the information and documents of the Bidder / Contractor / Subcontractor(s) with confidentiality.
- (f) The Principal / Employer will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor, the option to participate in such meetings.
- (g) The Monitor will submit a written report to the designated Authority of Principal / Employer / Chief Vigilance Officer of Kolkata Port Trust within 8 to 10 weeks from the date of reference or intimation to him by the Principal / Employer / Bidder / Contractor and should the occasion arise, submit proposals for correcting problematic situation. BIDDER / CONTRACTOR can approach the Independent External Monitor (s) appointed for the purposes of this Pact.
- (h) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or to take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (i) If the Monitor has reported to the Principal substantiated suspicion of an offence under the relevant IPC/PCA and the Principal / Employer has not, within reasonable time, taken visible action to proceed against such offence or reported to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (j) The word 'Monitor' would include both singular and plural.

Section 9 – Facilitation of Investigation:

In case of any allegation or violation of any provisions of this Pact or payment of commission, the PRINCIPAL / EMPLOYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER / CONTRACTOR shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

Section 10 – Pact Duration:

The pact begins with when both parties have legally signed it and will extend up to 2 years or the complete execution of the contract including warranty period whichever is later. In case

bidder/ contractor is unsuccessful this Integrity Pact shall expire after 6 months from the date of signing of the contract. If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman of Kolkata Port Trust

Section 11- Other provisions:

- (1) This agreement is subject to Indian law. Place of performance and jurisdiction is the Registered Office of the Principal in Kolkata.
- (2) Changes and supplements as well as termination notices need to be made in writing in English.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners of consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the reminder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For and on behalf of the Principal)

(For and on behalf of Bidder/Contractor)

(Office Seal)

(Office Seal)

Place.....

Date.....

Witness 1: (Name and Address)
.....
.....

Witness 2: (Name & Address)
.....
.....

GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS

1.1. There shall be compulsory registration of Indian agents of foreign suppliers for all Tender. An agent who is not registered with SMP, Kolkata shall apply for registration in the prescribed Application – Form.

1.2. Registered agents will file an authenticated Photostat copy (duly attested by a Notary Public) / Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission / remuneration / salary / retainer ship being paid by the principal to the agent before the placement of order by SMP, Kolkata.

1.3. Wherever the Indian representatives have communicated on behalf of their principals and foreign parties have stated that they are not paying any commission to the Indian agents and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

2. DISCLOSURE OF PARTICULARS OF AGENTS/REPRESENTATIVES IN INDIA, IF ANY.

2.1. Bidders of Foreign nationality shall furnish the following details in their offer:

2.1.1. The name and address of the agents / representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent / representative be a foreign Company, it is to be confirmed whether it is real substantial Company and details of the same shall be furnished.

2.1.2. The amount of commission / remuneration included in the quoted price(s) for such agents / representatives in India.

2.1.3. Confirmation of the Bidder that the commission / remuneration if any, payable to his agents / representatives in India, is to be paid by SMP, Kolkata in Indian Rupees only.

2.2. Bidders of Indian Nationality shall furnish the following details in their offers:

2.2.1. The name and address of the foreign principals indicating their nationality as well as their status, i.e. whether manufacturer or agent of manufacturer holding the Letter of 59 Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents / representatives.

2.2.2. The amount of commission / remuneration included in the price (s) quoted by the bidder for himself.

2.2.3. Confirmation of the foreign principals of the Bidder that the commission / remuneration, if any, reserved for the Bidder in the quoted price (s), is paid by SMP, Kolkata in India in equivalent Indian Rupees.

2.2.4. In either case, the event of contract materializing, the terms of payment will provide for payment of the commission / remuneration, if any payable to the agents / representatives in India in Indian

Rupees on expiry of 90 days after the discharge of the obligations under the contract.

2.2.5. Failure to furnish correct and detailed information as called for in paragraph – 2.0 above will render the concerned tender liable for rejection or in the event of a contract materializing, the same liable to termination by SMP, Kolkata. Besides this there would be a penalty of banning business dealings with SMP, Kolkata or damage or payment of a named sum.

SMP, Kolkata

KOLKATA PORT TRUST



MECHANICAL & ELECTRICAL ENGINEERING DEPARTMENT
8, Garden Reach Road, Kolkata – 700 043.

GENERAL CONDITIONS OF CONTRACT

FORMS AND AGREEMENTS

SANCTIONED BY TRUSTEES UNDER RESOLUTION NO. 92
OF
THE 6TH MEETING HELD ON 27TH MAY, 1993.

(Copy of Booklet Published on May, 1993)

1. DEFINITIONS

- 1.0. In the contract, as here-in-after defined, the following words and expressions shall have the meaning here-in assigned to them, except where the context otherwise required.
- 1.1. "**Employer**" or "Board" or "Trustees" means the Board of Trustees for the Port of Kolkata, a body corporate under Section 3 of the Major Port Trust Act, 1963, including their successors, representatives and assigns.
- 1.2. "**Chairman**" means the Chairman of the Board and includes the person appointed to act in his place under Sections 14 and 14A of the Major Port Trusts Act, 1963.
- 1.3. "**Contractor**" means the person or persons; Firm or Company whose tender /offer has been accepted by the Trustees and includes the Contractor's representative's heirs, successor and assigns, if any permitted by the Board / Chairman.
- 1.4. "**Engineer**" means the Board's official who has invited the tender on its behalf and includes the Chief Engineer, the Chief Mechanical Engineer, the Senior Executive Engineer the Chief Hydraulic Engineer, the Deputy Chief Engineer, the Deputy Chief Mechanical Engineer, the Senior Resident Engineer, The Manager (Infrastructure & Civic Facilities), the Manager (Plant & Equipment) the Deputy Manager (Infrastructure & Civic Facilities) and the Deputy Manager (Plant & Equipment), or other official as may be appointed from time to time by the employer, with written notification to the Contractor, to act as Engineer for the purpose of the contract, in place of the "Engineer" so designated.
- 1.5. "**Engineer's Representative**" means any subordinate Engineer or Assistant to the Engineer or any other official appointed from time to time by the Engineer to perform the duties set forth in Clauses 2.4 to 2.6 hereof.
- 1.6. "**Work**" means the Work to be executed in accordance with the Contract and includes authorized "Extra Works" and "Excess Works" and Temporary Works.
- 1.7. "**Temporary Works**" means all temporary works of every kind required in or about the execution, completion or maintenance of the works and includes (without thereby limiting the foregoing definitions) all temporary erections, scaffolding, ladders, timbering, soaking vats, site offices, cement and other god owns, platforms and bins for stacking building materials, gantries, temporary tracks and roads, temporary culverts and mixing platforms.
- 1.8. "**Extra Works**" means those works required by the Engineer for completion of the Contract which were not specifically and separately included in the schedule of items of works (i.e., Bills of Quantities) of the tender. "Excess Works" means the required quantities of work in excess of the provision made against any item of the Bill of Quantities.
- 1.9. "**Specifications**" means the relevant and appropriate Bureau of Indian Standard's Specifications (latest revisions) for materials and workmanship unless stated otherwise in the Tender.
- 1.10. "**Drawings**" means the drawings referred to in the Tender and specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.
- 1.11. "**Contract**" means and includes the General and Special Conditions of Contract, Specifications, Drawings, priced Bill of Quantities, the Tender/ Offer, the letter of acceptance of the Tender/Offer, the Contract Agreement if separately entered into and the Schedule of Rates and Price, if any, adopted by the Trustees at their discretion.
- 1.12. "**Constructional Plant**" means all appliances or things of whatsoever nature required in or about the execution, completion or maintenance of the works or temporary works and includes (without thereby limiting the foregoing definition) all machinery and tools but does not include materials or other things intended to form or forming part of the permanent work.
- 1.13. "**Site**" means the land and other places, on, under, in or through which the works are to be executed or carried out and any other lands or places provided by the Trustees for the purpose of the Contract.
- 1.14. "**Contract Price**" means the sum named in the letter of acceptance of the Tender/ Offer of the Contractor, subject to such additions thereto and deduction there from as may be made by the Engineer under the provisions here-in-after contained.
- 1.15. "**Month**" means English Calendar Month.
- 1.16. "**Excepted risks**" are riot in so far as it is uninsurable, war, invasion, act of foreign enemies, hostilities (whether war be declared or not) Civil War, rebellion, revolution, insurrection or military or usurped power or use or occupation by the Trustees of any portion of the works in respect of which a certificate of completion has been issued (all of which are herein collectively referred to as the excepted risks)
- 1.17. Word importing the **singular** only, also includes the **plural** and vice-versa where the context so required.
- 1.18. The **headings and marginal notes** in these General Conditions of Contract shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
- 1.19. Unless otherwise stipulated the word "Cost" shall be deemed to include overhead costs of the contractor, whether on or off the site.

2. DUTIES & POWERS OF ENGINEER & ENGINEER'S REPRESENTATIVE

- 2.0. The Contractor shall execute, complete and maintain the works in terms of the contract to the entire satisfaction of the Engineer and shall comply with the Engineer's direction on any matter whatsoever.
- 2.1. The Contractor shall take instructions from the Engineer and subject to limitation of Clause 2.5 herein, from the Engineer's Representative
- 2.2. The Engineer shall have full power and authority
 - (a) to supply to the contractor from time to time during the progress of the works such further drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of the works and the contractor shall carry out and be bound by the same.
 - (b) to alter or modify the specification of any material and workmanship and to inspect the work at any time.
 - (c) to order for any variation, alternation and modification of the work and for extra works.
 - (d) to issue certificates as per contract
 - (e) to settle the claims & disputes of the Contractor and Trustees, as the first referee.
 - (f) to grant extension of completion time.
- 2.3. The Engineer's representative shall:
 - (a) watch and supervise the works,
 - (b) test and examine any material to be used or workmanship employed in connection with the work.
 - (c) have power to disapprove any material and workmanship not in accordance with the contract and the contractor shall comply with his direction in this regard.
 - (d) take measurements of work done by the contractor for the purpose of payment or otherwise.
 - (e) order demolition of defectively done work for its reconstruction all by the Contractor at his own expense,
 - (f) have powers to issue alteration order not implying modification design and extension of completion time of the work and
 - (g) have such other powers and authorities vested in the Engineer, which have been delegated to him in writing by the Engineer under intimation to the Contractor.
- 2.4. Provided always that the Engineer's Representative shall have no power:
 - (a) to order any work involving delay or any extra payment by the Trustees,
 - (b) to make variation of or in the works and
 - (c) to relieve the Contractor of any of his duties or obligations under the Contract.
- 2.5. Provided also as follows:
 - (a) Failure of Engineer's Representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or materials and to order the pulling down, removal, braking-up thereof and re-construction at the contractor's cost and the contractor shall have no claim to compensation for the loss sustained by him.
 - (b) If the contractor shall be dissatisfied by reason of any decision of the Engineer's Representative, he shall be entitled to refer the matter to the Engineer who shall thereupon confirm, reverse or vary such decision.
 - (c) Any written instructions or written approval given by the Engineer's Representative to the contractor, within the terms of delegation of power and authority vested in Engineer to his Representative in writing shall bind the contractor and the Trustees as though it had been given by the Engineer, who may from time to time make such delegation. Contractor and the Trustees as though it had been given by the Engineer, who may from time to time, make such delegation.

3. THE TENDER / OFFER AND ITS PRE-REQUISITES

- 3.0. The Contractor shall, before making out and submitting his tender / offer be deemed to have inspected and examined the site, fully consider all factors, risks and contingencies, which will have direct and in direct impact on his expenses and profit from the work and shall be specifically deemed to have taken the following aspects into consideration:
 - (a) The form and nature of the site and its surroundings including their sub-surface, hydrological, tidal and climate conditions, the means of access to the site and all other local conditions including the likely charges and costs for temporary way- leave, if any, required for the work.
 - (b) The drawings, specifications, the nature and extent of work to be executed and the quality, quantity and availability of the required materials and labour for the work and the need to execute the work to the entire satisfaction of the Engineer, and also by complying with the General and Special Conditions of Contract.

(c) The accommodation required for the workmen and site office, mobilization / demobilization and storage of all plant, equipment and Construction materials.

(d) The sources and means of procurement of water for drinking, washing and execution of work, and source and availability of electrical power, all of Contractor's cost.

(e) Payment of taxes and duties and compliance of all applicable statutes, ordinances and law together with the rules made there under, the rules, regulations and bye-laws of public bodies or any local or other authority by the Contractor, keeping the Trustees indemnified against penalties and liabilities of every kind arising from the Contractor's failure in such compliance.

(f) Payment of all kinds of stamp-duty for exacting the agreement or for any legal instrument including Bank Guarantees and Indemnity Bonds.

3.1. The Contractor's tender shall be in ink on the Tender Forms supplied by the Trustees, unless stipulated otherwise in the Notice-Inviting the Tender and shall be faultless in figures and free from erasing.

Corrections, if any, shall only be made by scoring out and initialing of the revised figure.

3.2. If required by the Engineer or the Trustees, the Contractors in their tender or subsequently, shall disclose the names of their owners/partners/Share Holders at the required points of time. The failure in this regards shall be treated as a breach and a contract, if entered into, shall be liable to be cancelled.

3.3.(a) Unless otherwise stipulated in the Notice Inviting the Tender/Offer, every tender must be submitted with Earnest Money of the amount calculated as per the following scale.

Estimated Value	Amount of Earnest Money	
	For works contract.	For contract of supplying materials of equipment only
Up to Rs.1,00,000/-	5% of the estimated value of work	1% of the estimated value of work.
Over Rs. 1,00,000/-	2% of the estimated value of work subject to a maximum of Rs.20,000/- and minimum of Rs. 5,000/-	1/2% of the estimated value of work subject to a maximum of Rs. 10,000/- and minimum of Rs. 1,000/-

(b) Earnest Money shall be deposited with Trustees' treasurer in cash or by Banker's Cheque of any Kolkata Branch of a Nationalized Bank of India drawn in favour of Kolkata Port Trust or in the form of an "Kolkata Port Trust" and payable at Kolkata / Haldia Holding as the case may be and the receipt granted there for be kept attached to the Tender / offer in the Sealed Cover.

(c) Earnest Money of un-accepted tender shall be refunded without any interest through A/c. Payee Cheque drawn on a Nationalized Bank of Kolkata / Haldia.

(d) The enlisted (registered) Contractors of the Trustees, who have deposited fixed Security with the Trustees FA & CAO / Manager (Finance) according to his Class of Registration, shall be exempt from depositing the Earnest Money, as per the following scale:

Class of Registration	Amount of Fixed Security	Financial limit of each tender
A	Rs. 10,000/-	Any tender priced up to Rs. 2,00,000/-
B	Rs. 5,000/-	Any tender priced up to Rs.1,00,000/-
C	Rs. 2,500/-	Any tender priced up to Rs.50,000/-

(e) (i) Tender submitted without requisite Earnest Money may be liable to rejection.

(ii) If before expiry of the validity period of his Tender / offer, the tender amends his quoted rates or tender/ offer making them unacceptable to the Trustees and / or withdraws his tender / offer, the Earnest Money deposited shall be liable to forfeiture of the option of the Trustees.

(f) The Earnest Money of accepted Tender / offer shall be retained by the Trustees as part of the Security Deposit, for which a separate Treasury Receipt shall be issued to the Contractor after cancellation of the previous Receipt of Earnest Money.

(g) Balance security for works contract shall be recovered by deduction from all progressive Bill (including final Bill, if necessary) @ 10% of the gross value of work in each such bill, so that the total recovery may not exceed the

quantum computed as per the under noted percentages of the total value of work actually done up to the stage of completion.

Value of Work	% of Security Deposit for works contract	% of Security Deposit for Contract of supplying materials and equipments only
For works up to Rs. 10,00,000/-	10% (Ten percent)	1% (One percent)
For works costing more than Rs.10,00,000/- and up to Rs.20,00,000/-	10% on first Rs. 10,00,000/- + 7 1/2% on the balance	1% on first Rs.10,00,000/-+1/2% on the balance
For works costing more than Rs.20,00,000/-	10% on first Rs. 10,00,000/- + 7 1/2% on next Rs.10,00,000/-+ 5% on the balance	1% on first Rs.10,00,000/-+1/2% on next Rs.10,00,000/-+ 1/4% on the balance

(h) Balance Security for Contract of supplying materials and equipment computed in terms of the percentages given above, shall have to be deposited with the trustees' Treasurer in advance and within 30 days from the date of placement of supply order, either in cash or by A/c. Payee Draft of a Nationalized Bank of India drawn in favour of Kolkata Port Trust and payable at Kolkata / Haldia, as the case may be.

(i) No interest shall be paid by the trustees to the Tenderer / Contractor on the amount of Earnest Money / Security Deposit held by the Trustees, at any stage.

3.4. (i) The Security Deposit shall be refunded to the Contractor in terms of Clause 9.3 hereinafter and subject to deduction, if any, under the provision of Sub-Clause 3.5(ii) herein below. If, however, the contract provides for any maintenance period, 50% of the Security Deposit may be refunded against any of the Treasury Receipt for that amount on expiry of half of the maintenance period and the balance deposit on the said maintenance period and after the Engineer has certified the final completion of work in form G.C.2 and the Contractor has submitted his "No Claim" Certificate in form G.C.3.

(ii) The Security Deposit/Earnest Money may be liable to forfeiture at the option of the Trustees, if the Contractor fails to carry out the work or to perform/observe any of the conditions of the contract. The Trustees shall also be at liberty to deduct any of their dues from the Security Deposit, fixed Security, Earnest Money or from any sum due or to become due to the Contractor under any other contract.

3.5 If stipulated in the contract as a Special Condition, the Contractor shall have to submit to the Engineer performance Bond in the form of an irrevocable guarantee from Kolkata/Haldia Branch, as the case may be, of any Nationalized Bank of India in the Proforma annexed hereto and for the sum and period as mentioned in the letter of acceptance of the Tender/Offer, within 15 days from the date of such letter, failing which the contract shall be liable to be terminated and the Earnest Money are liable to forfeiture; all at discretion of the Engineer. The cost of obtaining this or any other Bank Guarantee and/or the revalidation thereof, wherever required, has to be borne by the Contractor and it shall be his sole responsibility to arrange for timely revalidation of such bank guarantee, failing which and for non-fulfilment of any contractual obligation by the Contractor, the Engineer and/or the Trustees shall be at liberty to raise claim against the Guarantee and/or enforce the same unilaterally.

4. THE CONTRACT & GENERAL OBLIGATIONS OF CONTRACTOR

4.0.(a) The contract documents shall be drawn-up in English language.

(b) The contract shall be governed by all relevant Indian Acts as applicable only within the jurisdiction of the High Court at Kolkata, India, including the following Act:

- i. The Indian Contract Act, 1872.
- ii. The Major Port Trust, Act, 1963.
- iii. The Workmen's Compensation Act, 1923.
- iv. The Minimum Wages Act, 1948.
- v. The Contract Labour (Regulation & Abolition) Act, 1970.
- vi. The Dock Workers' Act, 1948.
- vii. The Indian Arbitration Act (1940) (in the case of a definite arbitration Agreement only).

4.1. After acceptance of his Tender / Offer and when called upon to do so by the Engineer or his representative, the Contractor shall, at his own expense, enter into and execute a Contract Agreement to be prepared by him in the form annexed hereto. Until such Contract Agreement is executed the other documents referred to in the definition of the term "Contract" here-in-before shall collectively be the Contract.

- 4.2. Several documents forming the contract are to be taken as mutually explanatory of one another. Should there be any discrepancy, ambiguity, omission or error in the various contract documents, the Engineer shall have the power to correct the same and his decision shall be final and binding on the parties to the Contract.
- 4.3. Two copies of the Drawing referred to in the General and Special Conditions of Contract and in the Bill of Quantities, shall be furnished by the Engineer to the Contractors free of cost for his use on the work, but these shall remain the property of the Trustees and hence, the Contractor shall return them to the Engineer or his Representative on completion of the work. If not torn or mutilated on being regularly used at site.
- 4.4 The Contractor shall prove and make at his own expense any working or progress drawings required by him or necessary for the proper execution of the works and shall, when required, furnish copies of the same free of cost to the Engineer for his information and/ or approval, without meaning thereby the shifting of Contractor's responsibility on the engineer in any way whatsoever.
- 4.5. The Contractor shall not directly or indirectly transfer, assign or sublet the Contract or any part thereof without the written permission of the engineer. Even if such permission be granted, the Contractor shall remain responsible (a) for the acts, defaults and neglect of any sub-contractor, his agents servants or workmen as fully as if these were the acts, defaults or neglects of the Contractor himself or his agents, servants or workmen, and (b) for his full and entire responsibility of the contract and for active superintendence of the works by him despite being sublet, provided always that the provision of labourers on a "piece rate" basis shall not be deemed to be subletting under this clause.
- 4.6. Unless otherwise specified, the Contractor shall be deemed to have included in his Tender / Offer all his cost for supplying and providing all constructional plant, temporary work, materials both for temporary and permanent works, labour including supervision thereof transporting to and from the site and in and about the work, including loading, unloading, fencing, watching, lighting, payment of fees, taxes and duties to the appropriate authorities and other things of every kind required for the construction, erection, completion and maintenance of the work.
- 4.7. The Contractor shall be solely responsible for the adequacy, stability and safety of all site operations and methods of construction, even if any prior approval thereto has been taken from the Engineer or his Representative. The Contractor shall not be responsible for the correctness of the design or specification of the Temporary and Permanent works formulated by the Engineer; but the contractor shall be fully responsible for the correct implementation thereof as also for any design and specification prepared / proposed / used by the Contractor.
- 4.8. Whenever required by the Engineer or his Representative, the Contractor shall submit to him the details of his (a) programme for execution of the work, (b) proposed procedure and methods of work, (c) proposed deployment of plant, equipment labour, materials and temporary works. The submission to and/ or any approval by the Engineer or his Representative to any such programme or particulars, shall not relieve the Contractor of any of his obligations under the contract. If for any reason the contractor be unable to adhere to his earlier programme, he shall submit his revised programme for completion of work within the stipulated time whenever asked to do so.
- 4.9. Necessary and adequate supervision shall be provided by the Contractor during execution of the works and as long thereafter as the Engineer or his Representative shall consider necessary during the maintenance period. The Contractor or his competent and authorised agent or representative shall be constantly at site and instructions given to him by the Engineer or his Representative in writing shall be binding upon the Contractor subject to limitation in clause 2.5 hereof. The Contractor shall inform the Engineer or his Representative in writing about such representative/agent of him at site.
- 4.10. The Contractor shall employ in execution of the Contract only qualified, careful and experienced persons and the Engineer shall be at liberty to direct the Contractor to stop deployment of any of his staff, workmen or official at site and the Contractor shall within 48 hours comply with such instruction without any demur, whenever the Engineer shall feel that the deployment of the person concerned will not be conducive to the proper and timely completion of the work.
- 4.11. The Contractor shall be responsible for the true and proper setting-out of the works in relation to reference points/lines/levels given by the Engineer in writing. The checking of any setting-out or of any alignment or level by the Engineer or his Representative shall not in any way relieve the contractor of his responsibility for the correctness thereof and he shall fully provide, protect and preserve all stakes, templates, bench marks, sight rails, pegs, level marks, profile marks and other things used in setting-out the works.
- 4.12. From the commencement of the works till issue of the completion certificate in Form G.C.1, vide Clause 5.12 hereof, the contractor shall take full responsibility for the care thereof. Save for the excepted risks, any damage, loss or injury to the work or any part thereof shall be made good by the Contractor at his down cost as per instruction and to the satisfaction of the Engineer, failing which the Engineer or his Representative may cause the same to be made good by any other agency and the expenses incurred and certified by the Engineer, shall be recoverable from the Contractor in whatever manner the Engineer shall deem proper. This Clause will not apply to that part of the work, which might have been taken over by the Trustees on partial completion of the work and in such case the Contractor's obligation will be

limited to repairs and replacement for manufacturing or construction defects during the Maintenance period (Guarantee Period) as per the directions of the Engineer as also for defects/ damages if any caused to the work by the Contractor during such repairs and replacement in the maintenance period.

4.13. The Contractor shall at his own cost protect, support and take all precautions in regard to the personnel or structure or services or properties belonging to the Trustees or not, which may be interfered with or affected or disturbed or endangered and shall indemnify and keep indemnified the Trustees against claim for injury, loss or damage caused by the Contractor in connection with the execution and maintenance of the work to the aforesaid properties, structures and services and/ or to any person including the Contractor's workmen. Cost of Insurance Cover, if any, taken by the Contractor shall not be reimbursed by the Trustees, unless otherwise stipulated in the Contract.

4.14. The Contractor shall immediately inform the Engineer's Representative if any fossil, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological importance be discovered at site which shall remain the property of the Trustees and protect them from being damaged by his workmen and arrange for disposal of them at the Trustees expense as per the instruction of the Engineer's Representative.

4.15. The Contractor shall be deemed to have indemnified the Trustees against all claims, demands, actions and proceedings and all costs arising there from on account of:

- (a) Infringement of any patent right, design, trade-mark, or name or other protected right, in connection with the works or temporary work.
- (b) Payment of all royalties, rent, toll charges, local taxes, other payments or compensation, if any, for getting all materials and equipment required for the work.
- (c) Unauthorized obstruction or nuisance caused by the Contractor in respect of Public or Private road, railway tracks, footpaths, crane tracks, waterways, quays and other properties belonging to the Trustees or any other person.
- (d) Damage / injury caused to any highway and bridge on account of the movement of Contractor's plants and materials in connection with the work.
- (e) Pollution of waterway and damage caused to river, lock, sea-wall or other structure related to waterway, in transporting contractor's plants and materials.
- (f) The Contractor's default in affording all reasonable facilities and accommodation as per the direction of the Engineer or his Representative to the workmen of the Trustees and other agencies employed by or with the permission and / or knowledge of the Trustees on or near the site of work.

4.16. Debris and materials, if obtained by demolishing any properly, building or structure in terms of the Contract shall remain the property of the Trustees.

4.17. The Contractor's quoted rates shall be deemed to have been inclusive of the following:

- (a) Keeping the site free of unnecessary obstruction and removal from site of constructional plant wreckage, rubbish, surplus earth or temporary works no longer required.
- (b) Cleaning and removal from site all the surplus materials of every kind to leave the site clean and tidy after completion of the work, without which payment against final bill may be liable to be withheld.
- (c) Precautionary measures to secure efficient protection of Docks, the River Hooghly and other waterways against pollution of whatever nature during execution and maintenance of the works, and to prevent rubbish, refuse and other materials from being thrown into the water by the Contractor's men or those of his agency.
- (d) Making arrangements for deployment of all labourers and workers, local or otherwise including payment for their wages, transport, accommodation, medical and all other statutory benefits and entry permits, wherever necessary.
- (e) Making arrangements in or around the site, as per the requirements of Kolkata Municipal Corporation or other local authority or the Engineer or his Representative, for preventing (i) spread of any infectious disease like smallpox, cholera, plague or malaria by taking effective actions for destruction of rats, mice, vermin, mosquitoes etc. and by maintaining healthy and sanitary condition, (ii) illegal storage and distribution of Drugs, Narcotics, Alcoholic liquor, Arms and Ammunitions, (iii) unlawful, riotous or disorderly conduct of the Contractor's or his Sub-Contractor's workmen, (iv) deployment of workmen of age less than 16 years.

4.18. Every direction or notice to be given to the Contractor shall be deemed to have been duly served on or received by the Contractor, if the same is posted or sent by hand to the address given in the tender or to the Contractor's Site Office or in case of Trustee's enlisted Contractor to the address as appearing in the trustee's Register or to the Registered Office of the Contractor. The time mentioned in these conditions for doing any act after direction or notice shall be reckoned from the time of such posting or dispatch.

4.19. The Contractor and his sub-contractor or their agents and men and any firm supplying plant, materials, and equipment shall not publish or caused to be published any photographs or description of the works without the prior authority of the Engineer in writing.

4.20. The Contractor shall, at the Trustees' cost to be decided by the Engineer, render all reasonable facilities and Co-operation as per direction of the Engineer or his representative to any other Contractor engaged by the Trustees and their workmen, to the Trustees' own staff and to the men of other Public Body on or near the site of work and in default, the contractor shall be liable to the trustees for any delay or expense incurred by reason of such default.

4.21. The work has to be carried out by the Contractor causing the minimum of hindrance for any maritime traffic or surface traffic.

4.22. All constructional plants, temporary works and materials when brought to the site by the contractor, shall be deemed to be the property of the Trustees who will have a lien on the same until the satisfactory completion of the work and shall only be removed from the site in part or in full with the written permission of the Engineer or his Representative.

5. COMMENCEMENT, EXECUTION AND COMPLETION OF WORK

5.0. The contractor shall commence the work within 7 days of the receipt of Engineer's letter informing acceptance of the Contractor's tender / offer by the Trustees or within such preliminary time as mentioned by the contractor in the Form of Tender or the time accepted by the Trustees. The contractor shall then proceed with the work with due expedition and without delay, except as may be expressly sanctioned or ordered by the Engineer or his Representatives, time being deemed the essence of the contract on the part of the Contractor.

5.1. The Contractor shall provide and maintain a suitable office at or near the site, to which the Engineer's Representative may send communications and instructions for use of the Contractor.

5.2. Unless specified otherwise in the contract or prior permission of the Engineer has been taken, the contractor shall not execute the work beyond the working hours observed by the Engineer's Representative and on Sundays and Holidays observed in the trustees system, except in so far as it becomes essential on account of tidal work or for safety of the work. If the progress of the work lags behind schedule or the work has been endangered by any actor neglect on the part of the contractor, then the Engineer or his Representative shall order and the contractor at his own expense shall work by day and by night and on Sundays and Public Holidays. Any failure of the Engineer or his Representative to pass such an order shall not relieve the contractor from any of his obligations. The Engineer's decision in this regard shall be final, binding and conclusive.

5.3. Unless stipulated otherwise in the contract, all materials required for the work shall be procured and supplied by the contractor with the approval of the Engineer or his Representative and subject to subsequent testing as maybe required by the Engineer or his Representative. The engineer shall exercise his sole discretion to accept any such materials.

5.4. Unless stipulated otherwise, in the contract, all materials, workmanship method of measurement shall be in accordance with the relevant Codes (Latest Revision) of the Bureau of Indian Standards and the written instructions of the Engineer or his Representative. Where no specific reference is available in the contract, the materials and workmanship shall be of the best of their respective kinds to the satisfaction of the Engineer.

5.5. Samples shall be prepared and submitted for approval of the Engineer or his Representative, whenever required to do so, all at the contractor's cost.

5.6. Unless stipulated otherwise in the contract, the cost of any test required by the Engineer or his representative in respect of materials and workmanship deployed on the work shall be borne by the contractor.

5.7. Regarding the supply of any materials by the Trustees to the contractor in accordance with the contract, the following conditions shall apply:

- (a) The contractor shall, at his own expense, arrange for transporting the materials from the Trustees' Stores, watching, storing and keeping them in his safe custody, furnishing of statement of consumption thereof in the

manner required by the Engineer or his representative, return of surplus and empty container to the Trustees' Stores as per the direction of the Engineer or his Representative.

(b) Being the custodian of the Trustees' materials, the contractor shall remain solely responsible for any such materials issued to him and for any loss or damage thereof for any reason other than "Excepted Risks", the contractor shall compensate the Trustees' in the manner decided by the Engineer and shall at no stage remove or cause to be removed any such material from the site without his permission.

(c) The Trustees' materials will generally be supplied in stages and in accordance with the rate of progress of work, but, except for grant of suitable extension of completion time of work as decided by the Engineer, the contractor shall not be entitled to any other compensation, monetary or otherwise, for any delay in the supply of Trustees' materials to him. The Contractor shall, however communicate his requirement of such materials to the Engineer from time to time.

(d) Unless stipulated otherwise in the contract, the value of the Trustees' materials issued to the contractor shall be recovered from the Contractor's bills and / any of his other dues. Progressively according to the consumption thereof on the work and / or in the manner decided by the Engineer or his Representative and at the rate / stipulated in the contract. These rates shall only be considered by the contractor in the preparation of his tender / offer and these will form the basis of escalation / variation, if in future the contractor is required to procure and provide any such material on the written order of the Engineer consequent on the Trustees' failure to effect timely supply thereof.

(e) If the Engineer decides that due to the contractor's negligence, and of the Trustees' materials issued to the contractor has been – (i) lost or damaged, (ii) consumed in excess of requirement, and (iii) wasted by the contractor in excess of normal wastage, then the value thereof shall be recovered from the contractor's bills or from any of his other dues, after adding 19¼% extra over the higher one of the followings:

- i. The issue rate of the materials at the Trustees' Stores, and
- ii. The market price of the material on the date of issue as would be determined by the Engineer.

5.8. The Engineer or his Representative shall have the power to inspect any material and work at any time and to order at any time – (i) for removal from the site of any material which in his opinion is not in accordance with the contract or the instruction of the Engineer or his Representative, (ii) for the substitution of the proper and suitable materials, or (iii) the removal and proper re-execution of any work, which in respect of material and workmanship is not in accordance with the contract or the instructions of the Engineer.

The contractor shall comply with such order at his own expense- and within the time specified in the order. If the contractor fails to comply, the Engineer shall be at liberty to dispose and such materials and re-do any work in the manner convenient to the Trustees by engaging any outside agency at the risk and expense of the contractor and after giving him a written prior notice of 7 days.

5.9. No work shall be covered up and put out of view by the contractor without approval of the Engineer or his Representative and whenever required by him the contractor shall uncover any part or parts of the work or make openings in or through the same as may be directed by the Engineer or his Representative from time to time and shall reinstate or make good those part of works thus affected to the satisfaction of the Engineer, all at the cost of the contractor. The Trustees shall reimburse such cost as determined by the Engineer, if the initial covering up was with prior written order of the Engineer or his Representative.

5.10. On a written order of the Engineer or his Representative the contractor shall delay or suspend the progress of the work till such time the written order to resume the execution is received by him. During such suspension the contractor shall protect and secure the work to the satisfaction of the Engineer or his Representative. All extra expenses in giving effect to such order shall be considered by the Trustees, unless such suspension is:

- i. Otherwise provide for in the contract, or
- ii. Necessary by reason of some default on the part of the Contractor, or
- iii. Necessary by reason of climatic conditions on the site, or
- iv. Necessary for proper execution of the works or for the safety of the works or any part thereof.

The Engineer shall settle and determine such extra payment and / or Extension of completion time to be allowed to the contractor, as shall, in the opinion of the Engineer, be fair and reasonable.

If at any time before or after commencement of the work the Trustees do not require the whole of the work tendered for, the Engineer shall notify the same to the contractor in writing and the contractor shall stop further works in compliance of the same. The Contractor shall not be entitled to any claim for compensation for underived profit or for such premature stoppage of work or on account of curtailment of the originally intended work by reason of alteration made by the Engineer in the original specifications, drawings, designs and instruction.

5.11. When the whole of the work has been completed to the satisfaction of the Engineer and has passed any final test prescribed in the contract, the contractor shall, within 21 days of submission of his application to the Engineer be entitled to receive from him a certificate for completion of work in Form G.C.1 annexed hereto. If any part of the total work having been completed to the satisfaction of the Engineer, be takeover and / or used by the Trustees the Contractor shall on application be entitled to partial completion certificate in the Form of G.C.1 indicating the portion of the work covered by it, so that the Contractor's liability during maintenance period of the contract, if any, shall commence from the date mentioned in such certificate so far as the completed portion of the work is concerned.

6. TERMS OF PAYMENT:

6.0. No Sum shall be considered as earned by or due to the Contractor in respect of the work till final and satisfactory completion thereof and until a certificate of final completion in Form G.C.2 has been given by the Engineer. On account payments, if any, made prior to issue of the certificate in Form G.C.2, shall all be treated as mere advances, which shall stand recoverable in full or in part, if the Engineer so decides in the context of Contractor's unfulfilled contract condition, if any.

6.1. All payments shall be made to the Contractor on the basis of measurement of actual work done, as recorded in the Trustees' measurement books and at accepted tendered or at agreed rates, as the case may be except as otherwise provided in the contract and when the Engineer decided any other rate for change in the scope of work or omission, if any, on the part of the Contractor.

6.2. For work of sanctioned tender value more than Rs. 50,000/- or having an initially stipulated completion period of 4 months or more, on account payments may be made at the discretion of the Engineer or his Representative at intervals deemed suitable and justified by him. Provided always that, subject to execution of work of substantial value in the context of the contract price, the interval of such on account payments shall be decided by the Engineer or his Representative, which shall ordinarily not be less than 1 month in between two payments for on account bill and / or advance.

6.3. Measurement for works done shall be progressively taken by the Engineer's Representative and entered in the Trustees' Measurement Book, at intervals deemed suitable and proper by him and / or the Engineer. The Contractor or his duly accredited Representative or Agent shall remain present at the time of such measurement and assist the Engineer's Representative in every manner required by him. After the measurements taken have been entered in the Measurement Book, the Contractor or his Agent shall sign the Measurement Book at the end of such Measurements over the Contractor's Rubber Stamp as a taken of acceptance of all such measurements, recorded above and prior to such signature. If the Contractor or his Agent fails to participate even after 3 days written notice from the Engineer's Representative the measurement shall be taken ex-part by the Engineer's representative and those shall be accepted by the Contractor.

6.4. Based on the quantum of work and the value thereof computed in the Measurement Book, the Contractor shall type out his bill in the proforma approved by the Engineer and submit the same to the Engineer's Representative in quadruplicate, duly signed by him or his accredited Agent over his Rubber Stamp. The Engineer or his Representative may, in his absolute discretion, allow advance payment against such bill to the extent of an amount not exceeding 75% of the "net payable" sum of the said bill, subject to adjustment there of against the bill at the time of checking and auditing the bill at the Trustees end., The measurement Book will not be handed over to the Contractor; but he will obtain the abstracts of quantities, amount and recoveries to type out the bill.

6.5. At the discretion of the Engineer or his Representative and only in respect of accepted offers/ where estimated amount put to tender would be Rs. 2,00,000/- or more, advance payment may be made to the extent of 75% of the value of any material purchased and brought to the site by the Contractor. Provided always that

- i. The materials shall, in the opinion of the Engineer or his Representative, be of imperishable nature.
- ii. The value of such materials shall be assessed by the Engineer or his Representative, at their own discretions,
- iii. A formal agreement has been drawn up with the contractor, under which the Trustees secure a lien on the contractor's materials.
- iv. The materials are safe-guarded by the contractor against losses, shortage and misuse due to the contractor postponing the execution of the work or otherwise,
- v. In the event of shortage of such materials within the Trustees' protected areas in the Docks, the contractor shall submit an indemnity Bond in the proforma and manner acceptable to Trustee' whereby the contractor shall indemnify the Trustees' against all financial loss/ damage, on account of loss/ damage to such materials for whatever reasons.
- vi. In the event of storage of such materials outside the Trustees' protected areas the Contractor shall submit to the Engineer an irrevocable Bank Guarantee favouring the Trustees and for the same sum as is being advance, in the proforma and manner acceptable to the Trustees. The Guarantee shall be of a Kolkata / Haldia Branch of any Nationalized Bank or a Scheduled Commercial bank, as the case may be, acceptable to the Trustees and shall

remain valid till the anticipated period of consumption of such materials in the work. The Bank Guarantee must bear an undertaking by the issuing Bank guaranteeing automatic payment of the guaranteed sum to the Trustees by the Bank on the date of expiry of the validity of the Guarantee, unless with the prior written approval of the Engineer on behalf of the Trustees, the Bank has extended the validity of the Guarantee.

vii. The amount of advance shall be recoverable from the contractor's bills or any other dues, progressively with the consumption of the materials on the basis of quantity consumed. Consequent on full recovery of the advance the Indemnity Bond / Bank Guarantee, vide sub-clause (v) & (vi) above, shall be returned to the Contractor duly discharged by the Engineer on behalf of the Trustees.

6.6. No Certificate of the Engineer or his Representative shall protect the Contractor against or prevent the Trustees from obtaining repayment from the Contractor, in case the Engineer or his Representative should over certify for payment or the Trustees should over-pay the Contractor on any account.

6.7. No claim for interest shall be admissible to the Contractor at any stage and in respect of any money or balance or Bank Guarantee, which may be due to the Contractor from the Trustees, owing to dispute or otherwise or for any delay on the part of the Trustees in making interim or final payment or otherwise.

7. VARIATION AND ITS VALUATION:

7.0. The Quantities set out in the Bill of Quantities of the tender shall be treated as estimated quantities of the work and shall never be deemed as actual or correct quantities of the works to be executed by the contractor in fulfilment of his obligation under the contract.

7.1. The Engineer shall have the power to order the Contractor in writing to make any variation of the Quantity, quantity or form of the works or any part thereof that may, in his opinion, be necessary and the Contractor upon receipt of such an order shall act as follows:

- a) Increase or decrease the quantity of any work included in the contract.
- b) Omit any work included in the contract.
- c) Change the Character or quality or kind of any work included in the contract.
- d) Change the levels, lines, position and dimensions of any part of the work, and
- e) Execute extra and additional work of any kind necessary for completion of the works.

7.2. No such variation shall in any way vitiate or invalidate the contract or be treated as revocation of the contract, but the value (if any) of all such variations evaluated in accordance with the Engineer's sole decision shall be taken into account and the contract price shall be varied accordingly.

7.3. Provided always that written order of the Engineer shall not be required for increase or decrease in the quantity of any work up to 15% where such increase or decrease is not the result of any variation order given under this clause but is the result of the quantities exceeding or being less than those stated in the bill of quantities. Provided also that verbal order of variation from the Engineer shall be complied with by the Contractor and the Engineer's subsequent written confirmation of such verbal order shall be deemed to be an order in writing within the meaning of this clause.

7.4. **a)** The Contractor shall not be entitled to any claim of extra or additional work unless they have been carried out under the written orders of the Engineer.

b) The Engineer shall solely determine the amount (if any) to be added to or deducted from the sum named in the tender in respect of any extra work done or work omitted by his order.

c) All extra, additional or substituted work done or work omitted by order of the Engineer shall be valued on the basis of the rates and prices set out in the contract, if in the opinion of the Engineer, the same shall be applicable. If the contract does not contain any rates or prices directly applicable to the extra additional or substituted work, then the Engineer may decide the suitable rates on the basis of Schedule of Rates (including surcharge in force at the time of acceptance of tender), if any, adopted by the Trustees with due regard to the accepted contractual percentage, if any thereon. In all other cases the Engineer shall solely determine suitable rates in the manner deemed by him as fair and reasonable, and his decision shall be final, binding and conclusive.

d) If the nature or amount of any omission or addition relative to the nature or amount of the whole of the contract work or to any part thereof shall be such that, in the opinion of the Engineer, the rate of prices contained in the contract for any item of the works or the rate as evaluated under sub-clauses (b) and (c) of this clause, is by reason of such omission or addition rendered unreasonable or in-applicable the Engineer shall fix such other rate or price as he deems proper and the Engineer's decision shall be final, binding and conclusive.

8. DELAY / EXTENSION OF COMPLETION TIME / LIQUIDATED DAMAGE / TERMINATION OF CONTRACT.

8.0. Should the quantum of extra or additional work of any kind or delayed availability of the Trustees' materials to be supplied as per contract or exceptionally adverse climatic conditions and natural phenomenon or strikes, lockouts, civil commotions or other special circumstances of any kind beyond the control of the Contractor cause delay in completing the work, the contractor shall apply to the Engineer in writing for suitable extension of completion time within 7 days from the date of occurrence of the reason and the Engineer shall there upon consider the stated reasons in the manner deemed necessary and shall either reject the application or determine and allow in writing the extension period as he would deem proper for completion of the work, with or without the imposition of "Liquidated Damages" Clause (No.8.3 hereof) on the Contractor and his decision shall be binding on the contractor. If an extension of completion time is granted by the Engineer, the clause No.8.3 of the Liquidated damage shall apply from its date of expiry, if the work be not completed within the extended time, unless stated otherwise in the decision communication by the Engineer, as aforesaid.

8.1. a) If the Contractor fails to complete the work within the stipulated dates or such extension thereof as communicated by the Engineer in writing, the contractor shall pay as compensation (Liquidated Damage) to the Trustees and not as a penalty, ½ % (half percent) of the total value of work (contract price) as mentioned in the latter of acceptance of the tender/offer, for every week or part thereof the work remains unfinished. Provided always that the amount of such compensation shall not exceed 10% the said value of work.

b) Without prejudice to any of their legal rights, the Trustees shall have the power to recover the said amount of compensation / damage in Sub-Clause (a) of this clause, from any money due or likely to become due to the contractor. The payment or deduction of such compensation / damage shall not relieve the Contractor from his obligation to complete the work or from any of his other obligations / liabilities under the contract and in case of the Contractor's failure and at the absolute discretion of the Engineer, the work may be ordered to be completed by some other agency at the risk and expense of the Contractor, after a minimum three days' notice in writing has been given to the contractor by the Engineer or his Representative.

8.2. Without being liable for any compensation to the Contractor, the Trustees may, in their absolute discretion, terminate the contract due to occurrence of any of the following reasons and decision of the Trustees in this respect, as communicated by the Engineer shall be final and conclusive :

- (i) The Contractor has abandoned the contract.
- (ii) In the opinion of the Engineer, either the performance of the Contractor is not satisfactory or the work is not getting completed within the agreed period on account of Contractor's lapses.
- (iii) The Contractor has failed to commence the work or has without any lawful excuse under these conditions, has kept the work suspended despite receiving the Engineer's or his Representative's written notice to proceed with the work.
- (iv) The Contractor has failed to remove materials from site after receiving from the Engineer or his Representative the written notice stating that the said materials or work are rejected by him .
- (v) The Contractor is not executing the work in accordance with the contract or is persistently or flagrantly neglecting to carry out his obligations under the contract.
- (vi) Any bribe, commission, gift or advantage is given, promised or offered by or on behalf of the contractor to any officer, servant or representative of the Trustees or to any person on his or their behalf in relation to the obtaining or to the execution of the contract.
- (vii) The Contractor is adjudged insolvent or enters in to composition with his creditors or being a company goes in to liquidation either compulsorily or voluntarily.

8.3.1 Upon receipt of the letter of termination of work, which may be issued by the Engineer on behalf of the Trustees, the Contractor shall hand over all the Trustees' tools, plant and materials issued to him at the place to be ascertained from the Engineer, within 7 days of receipt of such letter.

8.3.2 In all such cases of Termination of work, the Trustees shall have the power to complete the Work through any other agency of the Contractor's risk and expense and the Contractor shall be debited any sum or sums that maybe expended in completing the work beyond the amount that would have been due to the contractor, had he duly completed the whole of the work in accordance with the contract.

8.3.3 Upon termination of contract, the contractor shall be entitled to receive payment of only 90 % of the value of the work actually done or materials actually supplied by him and subject to recoveries as per contracts, provided the work done and materials conform to specifications at the time of taking over by the Trustees. The payment for work shall be based on measurements of actual work done and priced at approved contract rates or other rates, as decided by the Engineer. The payment for materials supplied shall be at the rates as decided by the Engineer, which shall in no case be more than market rates prevailing at the time of taking over by the Trustees. The Engineer's decision in all such case shall be final, binding and conclusive.

8.3.4 The Trustees shall have the power to retain all moneys due to the Contractor until the work is completed by other agency and the Contractor's Liabilities to the Trustees and known in all respect.

9. MAINTENANCE AND REFUND OF SECURITY DEPOSIT:

9.0. On completion of execution of the work the contractor shall maintain the same for a period, as may be specified in the form of a Special Condition of the Contract, from the date mentioned in the initial Completion Certificate in the Form G.C.1. Any defect / fault, which may appear in the work during aforesaid maintenance period, arising, in the sole opinion of the Engineer or his Representative, from materials or workmanship not in accordance with the contract or the instruction of the Engineer or his Representative, shall, upon the written notice of the Engineer or his Representative, be amended and made good by the Contractor at his own cost within seven days of the date of such notice, to the satisfaction of the Engineer or his Representative, failing which the Engineer or his Representative shall have the defects amended and made good through other agency at the Contractor's risk and cost and all expenses, consequent thereon or incidental thereto, shall be recoverable from the Contractor in manner deemed suitable by the Engineer.

9.1. The Contract shall not be considered completed and the work shall not be treated as finally accepted by the Trustees, until a final Completion Certificate in form G.C. 2 annexed hereto shall have been signed and issued by the Engineer to the contractor after all obligations under the Contract including that in the maintenance period, if any, have been fulfilled by the Contractor. Previous entry on the works or taking possession, working or using thereof by the trustees shall not relieve the Contractor of his obligations under the contract for full and final completion of the work.

9.2. On completion of the contract in the manner aforesaid, the Contractor may apply for the refund of his Security Deposit by submitting to the Engineer (i) The Treasury Receipts granted for the amount of Security held by the Trustees, and (ii) his "No further claim" Certificate in form G.C.3 annexed hereto (in original), where upon the Engineer shall issue Certificate in form G.C.2 and within two months of the Engineer's recommendation, the Trustees shall refund the balance due against the Security Deposit to the Contractor, after making deduction there from in respect of any sum due to the Trustees from the Contractor.

10. INTERPRETATION OF CONTRACT DOCUMENTS, DISPUTES & ARBITRATION

10.0. In all disputes, matters, claims, demands or questions arising out of or connected with the interpretation of the Contract including the meaning of Specifications and Instructions or as to the quality of workmanship or as to the materials used in the work or the execution of the work whether during the progress of the work or after the completion and whether before or after the determination, abandonment or breach of the contract the decision of the Engineer shall be final and binding on all parties to the contract and shall forthwith be given effect to by the Contractor.

10.1. If, the Contractor be dissatisfied with any such decision of the Engineer, he shall within 15 days after receiving notice of such decision require that the matter shall be referred to Chairman, who shall thereupon consider and give a decision.

10.2. If, however, the contractor be still dissatisfied with the decision of the Chairman, he shall, within 15 days after receiving notice of such decision required that within 60 days from his written notice, the Chairman shall refer the matter to an Arbitrator of the panel of Arbitrators to be maintained by the Trustees for the purpose and any such reference shall be deemed to be a submission to arbitration within the meaning of Indian Arbitration Act, 1940 or any statutory modification thereof.

10.3.1 If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another person from panel shall be appointed as Sole Arbitrator and he shall proceed from the stage at which it was left by his predecessor.

10.3.2 The Arbitrator shall be deemed to have entered on reference on the date he issues notice to both the parties fixing the date of first hearing.

10.3.3 The time limit within which the Arbitrator shall submit his award shall normally be 4 months as provided in Indian Arbitration Act, 1940 or any amendment thereof. The Arbitrator may, if found necessary, enlarge the time for making and publishing the award, with the consent of the parties.

10.3.4 The Venue of the arbitration shall be Kolkata or as may be fixed by the Arbitrator in his sole discretion. Upon every or any such reference to cost of any incidental to the reference and award respectively shall be in discretion of the Arbitrator who may determine, the amount thereof or by whom and to whom and in what manner the same shall be borne and paid.

10.3.5 The Award of the Arbitrator shall be final and binding on all parties subject to the provisions of the Indian Arbitration Act, 1940 or any amendment thereof. The Arbitrator shall give a separate award in respect of each item of disputes and respective claim referred to him by each party and give reason for the award.

10.3.6 The Arbitrator shall consider the claims of all the parties to the contract within only the parameters of scope and conditions of the contract in question.

10.3.7 Save as otherwise provided in the contract the provisions of the Arbitration Act, 1940 and rules made there under, for the time being in force, shall apply to the arbitration proceedings under this Clause.

10.3.8. The Contractor shall not suspend or delay the work and proceed with the work with due diligence in accordance with Engineer's decisions. The Engineer also shall not withhold any payment, which, according to him, is due or payable to the Contractor, on the ground that certain disputes have cropped up and are likely to be referred to arbitration.

10.4. Provided always as follows:

- (a) Nothing of the provisions in paragraphs 8.3 to 8.3.7 hereinabove would apply in the case of contracts, where tendered amount appearing in the letter of acceptance of the tender / offer is less than Rs.40,00,000/-.
- (b) The Contractor shall have to raise disputes or differences of any kind whatsoever in relation to the execution of the work to the Engineer within 30 days from the date of occurrence of the cause of dispute and before the preparation of the final bill, giving detailed justifications, in the context of contract conditions.
- (c) Contractor's dispute, if any, arising only during the maintenance period stipulated in the contract, must be submitted to the Engineer, with detailed justifications in the context of contract Conditions, before the final completion of the work. No dispute or difference on any matter whatsoever, pertaining to the contract can be raised by the contractor after the completion of the work.
- (d) Contractor's claim / dispute raised beyond the time limits prescribed in sub-clauses 8.5(b) and 8.5(c) hereinabove, shall not be entertained by the Engineer and / or by any Arbitrator, subsequently.
- (e) The Chairman / Trustees shall have the right to alter the panel of Arbitrators on their sole discretion, by adding the names of new Arbitrators and / or by deleting the names of existing Arbitrators, without any reference to the Contractor.

THE BOARD OF TRUSTEES FOR THE PORT OF KOLKATA

FORM OF TENDER

CONTRACT NO......

To,

.....
.....
.....

I/We.....
of.....having
examined the site of works, inspected the Drawings and read the Specifications, General and Special
Conditions of Contract and Conditions of Tender, hereby tender and undertake to execute and complete all the
works required to be performed in accordance with the Specification, Bill of Quantities, General & Special
Conditions of Contract and Drawings prepared by or on behalf of the Trustees and at the rates and prices set out
in the annexed Bill of Quantities with.....month/week from the date of the order to commence
the work and in the event of our Tender being accepted in full or in part, I/We also undertake to enter into a
Contract Agreement in the Form hereto annexed with such alterations or additions thereto which may be
necessary to give effect the acceptance of the Tender and incorporating such Specification, Bill of Quantities,
Drawings and Special & General Conditions of Contract and I/We hereby agree that until such Contract
Agreement is executed the said Specifications, Bill of Quantities, Conditions of Contract and the Tender,
together with the acceptance thereof in writing by or on behalf of the Trustees shall be the Contract.

THE TOTAL AMOUNT OF TENDER Rs.

(Repeat in
words).....

*I/We require days/months preliminary time to arrange and procure the materials required by
the work from date of acceptance of the Tender before I/We could commence the Work.

(* This should be scored out in the case of labour contracts)

I/We have deposited with the Trustees' Financial Advisor & Chief Accounts Officer / Manager (Finance),
Haldia Dock Complex vide Receipt No of as Earnest
Money.

I/We agree that period for which the Tender shall remain open for acceptance shall not be less than four
months.

Signature of the Tenderer

Witness:

(Seal of the Tenderer)

Signature

Name

(In Block Letters)

Address

Occupation

Name of the Tenderer

(In Block Letters)

Dated

Address

.....

THE BOARD OF TRUSTEES FOR THE PORT OF KOLKATA

FORM OF AGREEMENT

THIS AGREEMENT made thisday of.....200.....between the Board of Trustees for the Port of Kolkata, a body corporate constituted by the Major Port Trusts Act, 1963 (hereinafter called "Trustees" which expression shall unless excluded by or repugnant to the context be deemed to include their successors in office) of the one part and(hereinafter called "the Contractor", which expression shall unless excluded by or repugnant to the context be deemed to include its heirs, executors, administrators, representatives and assignees or successors in office) of the other part.

WHEREAS the Trustees are desirous that certain works should be executed / constructed, viz.....and have accepted a Tender / Offer by the Contractor for the execution and maintenance of such work NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in General Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.
 - (a) The said Tender / Offer & the acceptance of the Tender / Offer
 - (b) The General Conditions of Contract
 - (c) The Special Conditions of Contract
 - (d) The Conditions of Tender
 - (e) The Technical Specifications
 - (f) The Schedule of Rates
 - (g) The Terms of Payment
 - (h) All correspondence by which, the contract is added, amended, varied or modified in any way by mutual consent.
3. In consideration of the payments to be made by the Trustees to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Trustees to execute and maintain the work in conformity in all respects with the provisions of the contract.
4. The Trustees hereby covenants to pay to the Contractor, in consideration of such execution and maintenance of the Work, the Contract Prices at the times and in the manner prescribed by the Contract.

IN WITNESS whereof of the parties hereto have caused their respective Common Seals to be hereunto affixed (or have hereunto set their respective hands and seals) the day and year first above written.

The Seal of.....
.....

Was hereunto affixed in the presence of:

Name

Address

.....

Or

SIGNED, SEALED AND DELIVERED

by the said

In the presence of:

Name

Address:

.....

The Common Seal of the Trustees was hereunto affixed in the presence of:

Name.....

Address:

KOLKATA PORT TRUST

FORM G.C.1

Contract
Address
.....

Date of Completion

Dear Sir/s,

This is to certify that the following works viz.

Name of the Work.....
Estimate Number E.E.Odt
C.E.Odt
Work Order Number
Allocation
Contract Number

Which was carried out by you is in the opinion of the undersigned completing in every respect on the Day of 20..... in accordance with clause 62 of the General Conditions of Contract and under the provisions of the Contract for a period of..... Days /weeks / months / years.

From the day of 20
of the day of 20

Signature (.....)
(Engineer / Engineer's Representative)

Name.....
Designation.....

Office Seal

c.c. to The Deputy Chief Engineer ()
The Deputy Manager ()
Financial Adviser & Chief Accounts Officer/
Manager (Finance), Haldia Dock Complex.

KOLKATA PORT TRUST

FORM G.C.2

The Financial Adviser & Chief Accounts Officer.
The Manager (finance), Haldia Dock Complex.

CERTIFICATE OF FINAL COMPLETION

This is to certify that the following works viz.

Name of Work
Estimate No. E.E.O. No. dt
C.E.O. Nodt
Work Order Nodt
Contract No
Resoln. No & Meeting No
Allocation

Which was carried out by Shri / Messrs.'is now complete in every respect in accordance with the terms of the Contract and that all the obligations under Contract have been fulfilled by the Contractor.

Signature (.....)
(Engineer / Engineer's Representative)

Name.....
Designation.....

Office Seal

KOLKATA PORT TRUST

FORM G.C.3

(‘No Claim’ Certificate From Contractor)

The Engineer
Kolkata Port Trust
Kolkata / Haldia

(Attn)

(Address, the Trustees’ Official, mentioned in
the work Order and under whom the Contract
was executed)

Dear Sir,

I/We do hereby declare that I/We have received full and final payment from Kolkata Port Trust for the execution of the following work, viz.

Name of Work

Work Order No dt

Contract Nodt.....

Agreement Nodt.....and I/We have no
further claim against Kolkata Port Trust in respect of the above mentioned job.

Yours faithfully,

(Signature of Contractor)

Date.....

Name of Contractor

Address

.....

(Official Seal of the Contractor)

Draft Proforma of Bank Guarantee (Performance Bond) in lieu of cash Security Deposit, to be issued by the Kolkata/Haldia, as the case may be, of any nationalized Bank of India on Non-Judicial Stamp Paper worth Rs.50/- or as decided by the Engineer / Legal Adviser of the Trustees.

To
The Board of Trustees
for the Port of Kolkata.

BANK GUARANTEE NO.....DATE.....

Name of issuing Bank.....

Name of Branch.....

Address.....

In consideration of the Board of Trustees of the Port Kolkata, a body corporate - duly constituted under the Major port Trust Act, 1963 (Act 38 of 1963), having agreed to exempt Shri / Messrs a proprietary / Partnership / Limited / Registered Company, having its Registered Office at (hereinafter referred to as "The Contractor") from cash payment of Security Deposit / Payment of Security Deposit through deduction from the Contractors' bills under the terms and conditions of a contract made between the Trustees and the Contractor for (write the name of the work as per Work Order) in terms of the Work order No dated.....(hereinafter referred to as "the said contract"), for the due fulfillment by the contractor of all the terms and conditions contained in the said contract, on submission of a bank Guarantee for Rs (Rupees) we,.....Branch, Kolkata...../ Haldia, do on the advise of the contractor, hereby undertake to indemnify and keep indemnified the Trustees to the extent of the said sum of Rs (Rupees) We.....Branch, Kolkata/Haldia, further agree that if a written demand is made by the Trustees through any of its officials for honouring the Bank Guarantee constituted by these presents, We,..... Branch, Kolkata /Haldia shall have no right to decline to cash the same for any reason whatsoever and shall cash the same and pay the sum so demanded to the Trustees within a week from the date of such demand by an A/c. Payee Banker's Cheque drawn in favour of "Kolkata Port Trust", without any demur. Even if there be any dispute between the contractor and the Trustees, this would be no ground for us,.....(Name of Bank), Branch, Kolkata...../Haldia to decline to honour the Bank Guarantee in the manner aforesaid. The very fact that We,Branch, Kolkata /Haldia, decline or fail or neglect to honour the Bank Guaranteed in the manner aforesaid shall constitute sufficient reason for the Trustees to enforce the Bank Guarantee unconditionally without any reference, whatsoever, to the contractor.

2. We,.....Branch,Kolkata..... /Haldia, further agree that a mere demand by the Trustees at any time and in the manner aforesaid, is sufficient for us, Branch, Kolkata / Haldia, to pay the amount covered by this Bank Guarantee in full and in the manner aforesaid and within the time aforesaid without reference to the contractor and no protest by the contractor, made either directly or indirectly or through Court , can be valid ground for us,Branch,Kolkata /Haldia, to decline or fail or neglect to make payment to the Trustees in, the manner and within the time aforesaid.

3. We, Branch, Kolkata /Haldia, further agree that the Bank Guaranteed herein contained shall remain in full force and effect, during the period that is taken for the due performance of the said contract by the contractor and that is shall continue to be enforceable till all the dues of the Trustees under and/or by virtue of the terms and conditions of the said contract have been fully paid and its claim satisfied and/or discharged in full and/or till the Trustees certify that the terms and conditions of the said contract have been fully and properly observed/fulfilled by the contractor and accordingly, the Trustees have discharged the Bank Guarantee, subject however, that this guarantee shall remain valid up to and inclusive ofday of19.....and subject all so that the provision that the Trustees shall have no right to demand payment against this guarantee after the expiry of 6(six) calendar months from the expiry of the aforesaid validity period up to Or any extension thereof made by us,Branch, Kolkata/Haldia, in further extending the said validity period of this Bank Guarantee on Non-Judicial Stamp Paper of appropriate value, as required / determined by the Trustees, only on a written request by the Trustees to the contractor for such extension of validity of this Bank Guarantee.

4. We, Branch, Kolkata /Haldia, further agree that, without our consent and without affecting in any manner our obligations hereunder, the Trustees shall have the fullest liberty to vary from time to time any of the terms and conditions of the said contract or to extend the time for full performance of the said contract including fulfilling all obligations under the said contract by the contractor or to postpone for any time or from time to time any of the powers exercisable by the Trustees against the contractor and to forebear or enforce any of terms and conditions relating to the said contract and We, Branch, Kolkata/Haldia, shall not be relieved from our liability by reason of any such variation or extension being granted to the contractor or for any fore-bearance, act or commission on the part of the Trustees or any indulgence by the Trustees to the contractor or by any such matter or thing of whatsoever nature, which under the law relating to sureties would, but for this provision, have effect of so relieving us,.....Branch, Kolkata...../Haldia.

5. We Branch, Kolkata/Haldia, lastly undertake not to revoke this Bank Guarantee during its currency except with the previous consent of the Trustees in writing.

SIGNATURE.....
NAME.....
DESIGNATION.....

(Duly constituted attorney for and on behalf of)

BANK.....
BRANCH.....
Kolkata...../Haldia.

(OFFICIAL SEAL OF THE BANK)

ADDENDUM

Modification of clause no.3.4 of GCC as sanctioned vide Reso. No.210 by the Board of Trustees for the Port of Kolkata in the 13th Meeting held on 26.02.2013.

i. Earnest Money: Earnest money deposit @ 2% of the estimated cost will be applicable for works / service / O&M contract only and not for procurement contract for which existing system as mentioned in the GCC should be followed.

ii. There will be no minimum ceiling of Earnest Money which will be @ 2% of estimated cost of projects up to Rs.10 crores. EMD of project estimated above Rs.10 crore will be Rs.20 lakh + 1% of estimated cost by which it exceeds Rs.10 crores.

iii. Upto Rs.10 lakh Earnest Money will be accepted by Banker's cheque / Demand Draft / Pay order. EMD beyond Rs.10 lakh may be accepted in the form of Bank Guarantee issued by an Indian Nationalized / Scheduled Bank.

iv. Refund of Earnest money to other than L-1 bidders will be made within 2 month of opening of bid or on finalization / acceptance of tender, whichever is earlier.
