

# **KOLKATA DOCK SYSTEM**

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

# **TENDER DOCUMENT**

for

"Illumination of parking Yard for M&Q Block, Sonai"

Notice Inviting Tender No.: KoPT/KDS/Mech/SE-I/ADV/418 dated 10.02.2017

E-Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

• Site inspection & Pre-bid meeting : 17.02.2017 at 11:00 hrs.

• Start date for submission of e-Tender : 21.02.2017 by 12:00 hrs.

• Date of Closing of e-Tender : 15.03.2017 at 14:00 hrs.

• Date of opening of techno-commercial bid: 15.03.2017 at 15:00 hrs.

Tender Fee: 1500/- (Non-Refundable)

**Chief Mechanical Engineer** 

#### TENDER DOCUMENT

# KOLKATA PORT TRUST KOLKATA DOCK SYSTEM

e-TENDER FOR PROCURMENT "Illumination of parking Yard for M&Q Block, Sonai" NOTICE INVITING TENDER No. KoPT/KDS/Mech/SE-I/ADV/ 418 Dated: 10.02.2017

# **TENDER NOTICE:**

Electrical Division under Mechanical & Electrical Engineering Department of Kolkata Port Trust invites E-Tender under single stage two part system (Part I: Techno-Commercial Bid and Part II: Price Bid) for "Illumination of parking Yard for M&Q Block, Sonai."

Bid Document may be downloaded from MSTC website <u>www.mstcecommerce.com/</u> eprochome/kopt and KOPT website.www.kolkataporttrust.gov.in Corrigenda or clarifications, if any, shall be hosted on the above mentioned websites only.

# **SCHEDULE OF TENDER (SOT)**

TENDER NO.	KoPT/KDS/Mech/SE-I/ADV/ 418 Dated: 10.02.2017					
MODE OF TENDER	e-Procurement System					
	(Online Part I - Techno-Commercial Bid and					
	Part II - Price Bid through					
	www.mstcecommerce.com/eprochome/kopt of MSTC					
	Ltd.					
	The intending bidders are required to submit their					
	offer electronically through e-tendering portal. No					
	physical tender is acceptable by Kolkata Dock System					
E-Tender No.	KoPT/Kolkata Dock System/CME/39/16-17/ET/549					
Estimated Value of Work	Rs 22,06,485.00					
Date of NIT available to parties to	13.02.2017 at 14:00 hrs.					
download						
Date and time of Pre-Bid Meeting and site	17.02.2017 at 11:00 hrs.					
inspection						
i) Earnest Money Deposit (Rs.44,130/-)	The intending bidders should submit Earnest Money					
	of Rs. 44,130/- (Rupees Forty Four Thousand One					
** T 1 C (D 1500/)	Hundred Thirty only). And					
ii) Tender Cost (Rs.1500/-)	"Tandan Cast" aantainina Dankan'a shasua an Dan					
	"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 of <b>Rs. 1500/-</b> (Rupees Fifteen hundred					
	only) as the cost towards tender document (applicable					
	for downloaded NIT only) or Treasury Receipt of the					
	deposit issued by the Treasurer, Kolkata Port Trust, as					
	the case may be. All Banker's cheques/Pay					
	Orders/Demand Drafts should be drawn in favour					
	of "Kolkata Port Trust"on any nationalized/					

	Scheduled bank having branch in Kolkata.
iii) Transaction Fee (Rs.1270/-)	<b>Rs.1270/-</b> [(service charge = 0.05% on estimate value) plus Service Tax @15% on Service Charge] Payment of Transaction fee by NEFT/RTGS in favour of MSTC LIMITED (refer clause. No. 4 of Annexure -A)
Last date of submission of Tender Document	15.03.2017 up to 14.00 hrs.
Fee and Earnest Money	
Last date of submission of Transaction fee through RTGS/NEFT in favour of MSTC Limited, Kolkata.	Three working days before the last date of closing of online bidding for the e-tender.
Date of Starting of e-Tender for submission	21.02.2017 at 12:00 hrs.
of on line (Techno-Commercial Bid and	
price Bid) at	
www.mstcecommerce.com/eprochome/kopt	
Date of closing of online e-tender for	15.03.2017 at 14:30 hrs.
submission of Techno-Commercial Bid &	
Price Bid.	
Date and time of opening of Part-I (i.e.	
Techno-commercial Bid after confirmation of	15.03.2017 at 15:00 hrs.
submission of Tender Document Fee and	
Earnest Money Deposit).	
Date and time of opening of Price Bid (Part-	To be informed separately.
II). Bidders hall be informed separately.	

# **List of Annexure**

# E- Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

Instruction to Tenderers	Annexure – A	Page : 5 - 9
Terms and Conditions of Tender	Annexure – B	Page :10 - 12
Special Conditions of Contract	Annexure – C	Page: 13 - 19
Scope of Work and Technical Specification	Annexure – D	Page: 20 - 33
Bill of Quantity	Annexure - E	Page: 34 - 36
Profile of Tenderer, Covering letter & Schedule "O"	Annexure – F	Page: 37 - 43
General Conditions of Contract, Forms and Agreement	Annexure – G	Page : 44 - 67

# **Instructions to Tenderers**

# E- Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

This is an e-procurement event of Kolkata Port Trust. The e-procurement service provider is MSTC Ltd., 225C, A.J.C. Bose Road, Kolkata-700 020.

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.** Process of E-tender :

A) Registration: The process involves vendor's registration with MSTC e-procurement portal which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Techno-Commercial Bid as well as Price Bid over the internet will be done. The Vendor should posses Class III signing type digital certificate. Vendors are to make their own arrangement for bidding from a P.C. connected with Internet. MSTC is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature).

SPECIAL NOTE: THE PRICE BID AND THE COMMERCIAL BID HAS TO BE SUBMITTED ON-LINE AT <a href="https://www.mstcecommerce.com/eprochome/kopt">www.mstcecommerce.com/eprochome/kopt</a>

- 1). Vendors are required to register themselves online with www.mstcecommerce.com $\rightarrow$  e-Procurement  $\rightarrow$ Psu/Govt depts $\rightarrow$ Register as Vendor under KOPT-- Filling up details and creating own user id and password $\rightarrow$  Submit.
- 2). Vendors will receive a system generated mail confirming their registration in their email which has been provided during filling the registration form.

In case of any clarification, please contact KOPT/MSTC, (before the scheduled time of the e-tender).

Contact person (KOPT):

1. Mr. Sanjib Sarkar Executive Engineer (Elect)) Mobile No. 9674720094

 $\textbf{Email:} \underline{sanjib@kolkataporttrust.gov.in}$ 

asanyal@kolkataporttrust.gov.in

2. Mr. Amit Sanyal Executive Engineer (Elect) Mobile No. 9674720093

**Email:** 

#### Contact person (MSTC Ltd):

1. Mr. Arindam Bhattacharjee Deputy. Manager (E-commerce) MobileNo:09330102643 Email-arindam@mstcindia.co.in. 2. Mr. Sabyasachi Mukherjee Junior Manager (E-commerce) Mobile- 07278030407 Email: smukherjee@mstcindia.co.in.

Landline:03322901004

1. Ms Sumona Maity
Management Trainee(E-Commerce)
Mobile-09831155225

# Email-smaity@mstcindia.co.in.

- B) System Requirement:
- i) Windows 98 /XP-SP3 & above/Windows 7 Operating System
- ii) IE-7 and above Internet browser.
- iii) Signing type digital signature
- iv) JRE 7 update 79 software to be downloaded and installed in the system. Security level should be medium

To enable ALL active X controls and disable 'use pop up blocker' under Tools→Internet Options→ custom level (Please run IE settings from the page www.mstcecommerce.com once)

- 2. The Techno-commercial Bid and the Price Bid shall have to be submitted online at <a href="https://www.mstcecommerce.com/eprochome/kopt">www.mstcecommerce.com/eprochome/kopt</a>
  - (A). Part I (Techno-Commercial bid): 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.
  - (B) Part II (Price bid): Would be opened electronically of only those bidder(s) whose Part I Techno-Commercial bid are acceptable by KoPT. Such bidder(s) will be intimated the date of opening of Part II (Price bid) through valid e-mail confirmed by them.

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 price bid.

**3.** All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.

# 4. | Special Note towards Transaction fee:

PAYMENT OF Transaction fee BY NEFT in favour of MSTC Limited .The Bank details, format etc for sending Transaction fee by NEFT to MSTC is detailed below

Bank Details : Axis Bank, Shakespeare Sarani Branch AC Details : Axis Bank A/c.No.005010200057840

IFSC Code No. : UTIB0000005.

"The vendors shall enter the transaction fee details by using the "Transaction Fee Entry" Link under "My Menu" in the vendor login. The vendors have to select the particular tender in which they want to participate against the transaction fee by clicking on the tick box at the right and then Clicking on the "Submit" Button at the bottom of the page. Then the page appears where the vendors are required to fill up the transaction details, namely the UTR No, Date Of Transaction, and the Remitting Bank in the given fields and then click on the "Confirm" Button".

NOTE: The bidders should submit the transaction fee well in advance before the last date of submission of tender as they will be activated for bid submission only after receipt of transaction fee by MSTC.

# **Contact Details:**

Fax No. : 033-22831002.

Email ids: sanjibpoddar@mstcindia.co.in, arindam@mstcindia.co.in,

rpradhan@mstcindia.co.in, smukherjee@mstcindia.co.in.

Bidders may please note that the transaction fee should be deposited by debiting the A/C of the bidder only; transaction fee deposited from or by debiting any other party's a/c will not be accepted. Transaction fee is nonrefundable.

In case of failure to submit the payment towards Transaction fee for any reason, the vendor, in term, will not have the access to online e-tender.

- Deposit (EMD), the vender will not have the access to on line e-tender and no correspondence in this respect will be entertained and KoPT will not be responsible for any such lapses on this account. Bidder(s) are advised to make remittance of Tender Fee and EMD through separate Banker's Cheque or Pay Order or Demand Draft, well in advance and verify completion of transaction in respect of Tender Fee and EMD. Vendors are instructed to use *Upload Documents* link in "My menu" to upload documents in document library. Multiple documents can be uploaded. Maximum size of single document for upload is 5 MB. Once the documents are uploaded in the library, vendors can attach documents through "Attach Document" link against the particular tender. For further assistance please follow instructions of vendor guide.
- 6. All notices. /corrigendum and correspondence to the bidder(s) shall be sent by email only during the process till finalization of tender by KOPT. 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 MSTC (i.e. Service Provider). Bidders are also requested to ensure validity of their DSC (Digital Signature Certificate).
- 7 E-tender cannot be accessed after the due date and time mentioned in NIT.

# Bidding in e-tender:

8.

- (a).Bidder(s) need to submit necessary Tender Document Fee, EMD and Transaction Fee for their eligibility to bid online in the e-tender. Tender Document Fee and Transaction fees are non refundable. No interest will be paid on EMD. EMD of the unsuccessful bidder(s) will be refunded by KOPT. In case of the successful tenderer, this amount may be adjusted against the Security Deposit.
- (b). An amount of **Rs 44,130/- for EMD and Rs.1,500/-** for Tender Fee has to be deposited by Demand Draft/Pay Order/ Banker's Cheque from any Scheduled/ Nationalized Bank in favour of "Kolkata Port Trust" payable at Kolkata to be submitted physically in the office of M&E Eng. Dept.
- (c). If any tenderer withdraws his tender before 120 days from the date of opening of the Techno-commercial Bid of the tender, the Earnest Money Deposit will be forfeited by the Trustees.
- (d). Tender without the Earnest Money or depositing the Earnest Money in a manner other than what has been stipulated here-in-before or for an amount less than the specified amount would be considered as invalid tender and would be summarily rejected.
- (e). NSIC registered firms under Single Point Registration scheme are exempted from depositing

Tender Fee and Earnest Money. But all the NSIC 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 be rejected.

- (f). The process involves Electronic Bidding for submission of Tender Document Fee and EMD, Techno- Commercial Bid as well as Price Bid.
- (g). The bidder(s) who have submitted the above fees can only submit their Techno Commercial Bids and Price Bid through internet in MSTC website www.mstcecommerce.com → e-procurement →Psu/Govt depts→ Login under KOPT→My menu→ Auction Floor Manager→ live event →Selection of the live event.
- (h). The bidder should allow to run an application viz. an Apple by accepting the risk and clicking on run. This exercise has to be done twice immediately after opening of Bid floor. Then they have to fill up Common terms/Commercial specification and save the same. After that clicking on the Techno-Commercial bid. If this application is not run then the bidder will not be able to save/submit his Techno-commercial bid.
- (i). After filling the Techno-Commercial Bid, bidder should click 'save' for recording their Techno-Commercial bid. Once the same is done, the Price Bid link becomes active and the same has to filled up and then bidder should click on "save" to record their price bid. Then once both the Techno-Commercial bid & price bid has been saved, the bidder can click on the "Submit" button to register their bid.
- (j). In all cases, bidder should use their own ID and Password along with Digital Signature at the time of submission of their bid.
- (k). During the entire e-tender process, the bidders will remain completely anonymous to one another and also to everybody else.
- (l). The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.
- (m). 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 fulfills all the terms and conditions of the Tender Document.
- (n). It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.
- (o). KoPT reserves the right to cancel or reject or accept or withdraw the tender the tender in full or part as the case may be without assigning any reason thereof. The tender will not be extended under any circumstances after due date is over.
- (p). 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.
- (q). 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.				
9.	The e-tender shall be governed by the terms and conditions mentioned therein.				
10.	No deviation to the technical and commercial terms & conditions are allowed.				
11.	KoPT has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reason thereof.				
12.	The online tender should be submitted strictly as per the terms and conditions and procedures				
	laid down in the website www.mstcecommerce.com/eprochome/KoPT of MSTC Ltd.				
13.	The bidders must upload all the documents required as per Pre-qualification criteria and				
	the documents enlisted under techno-commercial bid & Format-D1, 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.				
14.	The bid will be evaluated based on the filled-in technical and commercial formats uploaded.				
15.	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.				
16.	Bidders are requested to read the vendor guide and see the video in the page				
	www.mstcecommerce.com/eprochome to familiarize them with the system before bidding.				
17.	PRICE BID must be filled-up online only through MSTC Portal.				

#### **Terms and Conditions of Tender**

# E-Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

# **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 31st March, of the previous financial year of at least 30% of the estimated cost.
- ii) The firms must have either of the following as experience of having successfully completed similar works during last seven years, ending on last day of month, previous to the one in which applications are invited:
- a) Three similar completed works costing not less than 40% of the estimated value.

Or

b) Two similar completed works costing not less than 50% of the estimated value.

Or

c) One similar completed works costing not less than 80% of the estimated value.

Here "similar works" means "<u>Supply, Installation and Commissioning of High Mast Lighting Tower with all accessories, including light fittings, cables, feeder pillars, installation of street light poles, Laying of cables, Earthing etc."</u>

Work experience as a subcontractor or supply contractor shall not be considered as requisite qualification.

# **OTHER INSTRUCTION:**

Following documents/papers are to be uploaded for techno-commercial part of the tender or any subsequent stage:-

- 1. (a) Demand Draft/Banker's Cheque/Pay Order in original, for **Rs.1500/-** (Rupees One Thousand Five Hundred only) as cost of Tender Document which also needs to be physically submitted to the Chief Mechanical Engineer, Mechanical and Electrical Engineering Department, Kolkata Port Trust, 8, Garden Reach Road, Kolkata -700 043.
  - (b) Demand Draft/Banker's Cheque/Pay Order in original, for **Rs.44,130/-** (Rupees Forty Four Thousand One Hundred Thirty only). as Earnest Money Deposit which also needs to be physically submitted to the Chief Mechanical Engineer, Mechanical and Electrical Engineering Department, Kolkata Port Trust, 8, Garden Reach Road, Kolkata -700 043.
- 2. The Tenderer shall have to upload documents (certified copy), viz. order letter and proof of completion to establish his credentials and related documents as asked for.
  - Copies of self attested Audited Balance Sheet and Profit and Loss Account for the financial years 2013-14, 2014-15 and 2015-16.
  - Self attested documentary evidence of completion of similar work as proof of fulfilling the Prequalification Criteria of the tender.
  - Copies of self attested valid Service Tax Registration Certificate, VAT/CST Registration Certificate.
  - Copy of self attested valid Trade License and valid Electrical Contractor's Licence.

- Copy of self attested PAN Card issued from Income Tax Department.
- Statement to confirm the status of the Tenderer whether a Partnership Firm, Company or Proprietorship Firm. If demanded by KoPT, the tenderer would be bound to furnish necessary documents in support of their statement in this regard.
- Copy of self attested ESI registration certificate, failing which their tender/offer would be liable to be cancelled
- Copy of self attested EPF registration certificate, failing which their tender/offer would be liable to be cancelled.
- 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, Annexure-F).
- Declaration of the tenderer in the form of a COVERING LETTER (Annexure-F) 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.
- 3. All the document as mentioned here-in-before shall have to be <u>UPLOADED</u>. 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. "Price Bid" as per the format of Bill of Quantities, must be uploaded. No condition or conditional rebate should at all be indicated / mentioned in the Price Bid.
- 5. 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.
- 6. Techno-commercial bids will be opened on the schedule date of opening techno-commercial bid. Price Bids of only the qualified bidders shall be opened on a suitable date, to be intimated beforehand.

#### 7. The NIT will not be extended under any circumstances.

- 8. The Trustees will not be responsible for any cost or expense incurred by the Tenderer in connection with preparation or submission of the tenders.
- 9. 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 or Price Bid, 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 or Price Bid, as the case may be. Here, Trustees' working day means Monday to Friday in between 9-30 hrs. to 17-30 hrs.
- 10. 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 KoPT 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 KoPT's website for information of all concerned and the same shall form a part of the Tender Document. Any offer having deviation from KoPT's terms and conditions shall render such offer unacceptable to KoPT. 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.

- 11. The quoted rate should be inclusive of all taxes duties and other charges except Service Tax. The rate quoted in the tender shall hold good and shall be binding on the tenderer not withstanding 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.
- 12. The quoted rates would be kept valid for <u>at least 120 days</u> from the date of opening of the Technocommercial Bid.
- 13. The Trustees' reserve the right to disqualify a tender 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 the Trustees or to any person on his or on their behalf in relation to acceptance of the tender.
- 14. 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.

#### 15. Evaluation criteria:

- (i) A fully priced bill of quantities duly totaled shall be submitted with the tender. A price shall be inserted against each item of the bill of quantities and these prices shall include all manner of labour, material plant tools and all other matters necessary for the execution of the contract in accordance with the general conditions, specifications, drawing, if any, and bill of quantities.
- (ii) If it is found on examination of a tender that there is a discrepancy between the total amount inserted in the bill of quantities and the amount arrived at by valuing the quantities set out there in and the rates and prices set against them, by the tenderer, calculation for the total amount will be made on the basis of Unit Rates multiplied by quantities. Evaluation of the tender will be done on the basis of the total price thus arrived, after subtracting the Buy back price excluding Service tax, as applicable. The tenderer must not keep any column/space blank in any item under BOQ, else the tender is liable for disqualification

If excess work is required to be carried out in addition to the quantities stipulated in BOQ, the amount will be paid as per unit rate quoted in BOQ and as per actual measurement. In case of extra work the same will be paid as per rate of PWD schedule rate/ rate of reputed manufacturer/market rate, with justification of rates as the case may be.

The contract document shall be drawn in English language only. 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.

\_\_\_\_\_

# **Special Conditions of Contract**

# E-Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

- **2.1** 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 bye-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 KoPT accepts no liability in this regard.
- **2.2** Disclosure/indication of price in Techno-commercial part shall liable for the tender to be disqualified.
- **2.3** The income tax and sales tax deductable at source (under VAT Act) will be recovered from the Contractor's bills at source at the appropriate rate as per relevant provision of Income Tax Act, 1961 or any amendment thereof.
- **2.4** 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.
- **2.5** The tenderer must produce evidence with his tender that he has experience and is fully capable of carrying out work of the class and magnitude and by way of proof shall submit along with his tender under a list of important supply of a similar nature successfully carried out by giving the dates of commencement and completion of such supply, and full particulars of his business organization. The tenderer shall also fill in the appendices attached with the Form of Tender and all schedules attached to the Bill of Quantities.
- **2.6** The Tender and all drawings, specifications, documents and correspondences accompanying the tender shall be submitted in triplicate.
- **2.7** The tenderers shall upload certified true copies of current Trade License, VAT/CST Registration No., valid Electrical Contractors' License granted by the Government, PF code, Valid Professional tax clearance certificate/up to date copy of P.Tax payment challans, ESI Registration Certificate, Service Tax Registration No. and PAN No with the tenders. These certificates in original shall be submitted physically when so demanded for verification.
- **2.8** 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.
- **2.9** 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. No foreign exchange is payable on this contract. **2.10** 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 KoPT for loss or damage accrued to any property or rights of KoPT whatever, including KoPT'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 KoPT against all claims enforceable against KoPT (or agents/servants/employees of KoPT) or which would be so enforceable against KoPT where KoPT 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.
- 2.11 Attention of the tenderer is drawn to clause no 3.4, 3.5, 3.6 of GCC regarding earnest money and security deposit related clause no.8 regarding delay/extension of time /LD / Termination of contract including GCC.

- 2.12 The tender 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 and EMD deposited by them shall be forfeited. If tender process could not be finalized with in 90 days, the EMD's to be revalidated accordingly.
- 2.13 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.
- 2.14 KoPT 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 KoPT or any other person on his or their behalf in relation to the acceptance of this tender.
- 2.15 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 KoPT. In the event of any Tenderer failing to comply with the aforesaid requirement, the tender/ contract, if entered into, may be terminated.
- 2.16 The Tenderer shall refrain from sending revised or amended quotations after the closing date and time of the tender.
- 2.17 At any time, prior to the last date of submission of Tenders, KoPT reserves the right to amend and modify the Tender Document. Such amendment shall be hoisted in KoPT's aforesaid website and KoPT 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. KoPT 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.
- 2.18 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.
- 2.19 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/Bye-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.
- 2.20 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.

#### 2.21. Completion time: Twenty (20) weeks from the date of placement of order letter.

2.22. 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.

- 2.23. 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.

- **2.24 Guarantee:** 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 exceeding 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.
- **2.25** 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
- **2.26** 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 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 of Rs. 7.00 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 unauthorised 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. The Contractor and their defaulting employees shall be liable for legal action against them for breach of rules regarding entry into the protected area.
- **2.27** <u>Permission from statutory bodies:</u> The Contractor shall make arrangement for obtaining permission and relevant clearance from the statutory bodies such as Municipal Corporation, Electricity Authorities etc. on payment of necessary charges/fees etc.
- **2.28 <u>Drawings:</u>** On completion of all work, the Contractor shall furnish the "DIAZO" and three copies of all "As made" drawings including cable route diagram to the Engineer without any cost
- **2.29** 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 countersigned by his certified Supervisor under whose direct supervision the installation has been carried out.
- **2.30.** <u>Identification mark:</u> 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 as per directive of Engineer.
- **2.31**. The tenderer must produce evidence with his tender that he and his proposed sub-contractors have 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.

#### 2.32. 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 construction at the work site or its vicinity to KoPT store/yard, dispose off 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

# **2.33.** Protection of existing service :

The contractor must pay full attention to the fact that the existing service facilities for KoPT are not disturbed at any time due to storing of materials and rubbish and take every precaution to keep the entrance passage clear is the same are being used by the labourer. The contractor shall be held liable for all damage 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 consider 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.

#### 2.34. Forwarding of Materials

All dismantled unserviceable materials are to be disposed off beyond the office compound and in conformity with the Municipal/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.

- 2.35 Kolkata Port Trust 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.
- 2.36 The Contractor shall arrange all necessary tools, tackles, equipment, measuring & testing equipment etc. required for the repair & maintenance work at no extra cost to Kolkata Port Trust.
- 2.37 The contractor shall start the work on "As-is-where-is" basis of the electrical installations.
- 2.38 The Contractor shall arrange the services, if any, required from indigenous/ foreign companies at no extra cost to Kolkata Port Trust.
- 2.39 Kolkata Port Trust will provide general security of the entire working area. Kolkata Port Trust is covered by ISPS (International Ship and Port Faculties Security) code and the contractor shall have to arrange for further security of their stock etc., if considered necessary and related coverage at his cost in terms of ISPS code.
- 2.40 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.
- 2.41 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.
- 2.42 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 KoPT 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 KoPT.
- 2.43 The contractor shall have to arrange at his own cost for all necessary insurance coverage for men and materials to be used this contract.
- 2.50 Kolkata Port Trust and the contractor will nominate a number of officers with their contact nos. indicating the chain of command at the field level who 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.

- 2.51 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.
- 2.52 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.
- 2.53 Security Deposit will be guided by clause. 3.4, 3.5 & 3.6 of the GCC, Forms & Agreement of the tender document.
- 2.54 **Dock Safety Regulations** shall be applicable for the work. All Dock Safety Regulations in vogue and as amended from time to time shall have to be satisfied.
- 2.55 Contractor shall have to arrange further security for their equipment/office/stores etc. at their own cost and responsibility.
- 2.56 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.
- 2.57 The tenderer/s shall submit manufacturers Test Certificates for all the bought-out items envisaged in the equipment.
- 2.58 An agreement shall have to be executed at the expense of the contractor within 15 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 KoPT and all documents to be submitted from the date of opening of tender till the submission of the Security Deposit should form part of the contract agreement.
- 2.59 Very particular emphasis will be laid on the completion period of the contract. The Trustees would desire early completion of work. The tenderer should note that time will be essence of the contract.
- 2.60 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 equipments, etc. at site by his own men at his own cost. However, only space for making temporary godowns can be provided.
- 2.61 The contract shall be drawn up in English language only.
- 2.62 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.
- 2.63 The contract may be terminated at one month's notice by KoPT if any one of the stipulated conditions agreed upon by the selected bidder is not met to the satisfaction of KoPT. Further, the contract shall stand terminated automatically after completion of the work.
- 2.64 The responsibility in respect of the antecedents / Credentials of the persons engaged by the contractor rest with the contractor.
- 2.65 Operation and maintenance of all electrical installation in accordance with Manufacture's specification, instruction Manuals, IE Rules and other relevant rules.
- 2.66 The staff provided by the contractor to KoPT are in case found to be indulging in any undesirable or unfair activities in the premises of KoPT, the contractor will solely be responsible for all the consequences apart from the liberty of KoPT office to lodge complaints before appropriate authorities.
- 2.67 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 a/c '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.

- 2.68 The tenderer/s shall afford all facilities to the Engineer at their own arrangement for inspection and demonstration of the equipment, quoted for.
- 2.69 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.
- 2.70 The equipment shall be supplied and delivered at the specified site.
- 2.71 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 bankii). 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.

- 2.72 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.
- 2.73 An agreement shall have to be executed at the expense of the Contractor within 15 days from the date of issuance of 'Letter of Acceptance' by the 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 KoPT and all documents to be submitted from the date of opening of tender till the submission of the Security Deposit should form part of the contract agreement.
- 2.74 All materials are to be supplied progressively as required at site subject to prior approval of Engineer or his representative.
- 2.75 The contract shall be drawn up in English language only.
- 2.76 During the course of examination of Part-I of the bid, the bidders, if asked for shall furnish any additional documents for the purpose of evaluation of his /their bids. The price bids i.e Part-II of those bidders who meet the

#### 2.77 Cor Relation and order of precedence of Tender Documents "

If the stipulations in the various tender documents be found to be at variance in any respect, one will override others (but only to the extent these are at variance) in the order of precedence as given in the list below, i.e. any particular item in the list will take precedence over all those placed lower down in the list.

- a. Order letter.
- b. Bill of Quantities.
- c. Drawings.
- d. Particular Specifications of work.
- e. Special Conditions of Contract.
- f. General Conditions of Contract.

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 Chief Engineer, Kolkata Port Trust, thereon shall be final and binding upon all parties.

#### 2.78 TERMS OF PAYMENT

#### **Supply items:-**

- **a.** 60% payment against supply and delivery of materials / equipment / machineries / items on production of proper purchase documents/challans at site together with required Test Certificates etc. from appropriate authorities including inspection certificate of KoPT's representative, as applicable and on submission of Custodian Certificate.
- **b.** 30% payment against installation and commissioning.
- c. 10% payment against testing and handing over of the entire work after completion of work as per NIT.

# **Installation and Commissioning:**

- **a.** 90% payment against installation and commissioning.
- b. 10% payment against testing and handing over of the entire work after completion work as per NIT.

Any defect and / or deficiency in the equipment supplied shall have to be made good by the contractor before any bill is passed for payment. Payment will be made subject to security deposit clause 3.4, 3.5 & 9 of GCC. Payment will be made on the basis of actual measurement.

#### **CENVAT CRITERIA:**

In the event of CENVAT-able bought out items, if any, the Contractor is required to ensure that invoices are drawn in the name of the Contractor and it should be marked "Account KOLKATA PORT TRUST" as per CENVAT Credit rules and regulations. KoPT would provide the Service Tax Registration No. for availing CENVAT Credit. As far as possible, items are to be procured from first / second stage dealer and the above formalities are to be maintained to the extent possible so that KoPT can avail the CENVAT credit. However, Service Tax as applicable on the amount of liquidated damage as well as other recoveries, i.e., damage, penalty, land rent, etc., shall be deducted from the Contractors' bill at applicable rates and the same will not be reimbursed by KoPT

#### **DETAILED SCRUTINY OF E-TENDERERS:**

During Techno-Commercial Evaluation, an offer shall be considered non-responsive in case the following documents are not uploaded:

- (i) VAT registration certificate.
- ii) Valid Trade Licence.
- iii) Valid Professional Tax Clearance Certificate / Up to date tax payment challan.
- iv) Proof of possession of valid Employees' Provident Fund (EPF) Account.
- v) Proof of being registered with Employees' State Insurance Corporation (ESIC)
- 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 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. 2013 2014, 2014 2015, 2015-16).
- ix) Addendum / Corrigendum / Notice / Extension Notice issued and drawings (if any) duly signed by the Bidder under office seal.
- x) EMD & Cost of Tender documents / NSIC Registration certificate.
- xi) Service Tax Registration Certificate.
- xii) Duly signed full Techno Commercial Part and Price Bid and the G.C.C.
- xiii) Certified copies of PAN Card.
- xiv) Form of Tender, duly filled up and signed.
- xv) Electrical Contractor Licence

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

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

- (a) The bidder provides misleading or false information in the statements and documents submitted.
- **(b)** 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 Kolkata Port Trust in this regard shall be final and binding on the Bidder.

## **SCOPE OF WORK**

# E- Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

The Scope of Work under this Tender Specification covers the following:-

- 1 Design, manufacture, supply, installation and commissioning of 20 metres long High Masts.
- 2 Design and construction of R.C.C. foundation for 20 metres High Masts.
- 3 Assembly and erection of 20 metres High Masts.
- 4 Supply and installation of 2 x 400 W HPSV Flood Light Luminaires.
- 5 Supply and installation of 2 x 400 W Metal Halide Luminaires.
- 6 Supply and installation of single dome aviation obstruction lights.
- 7 Supply, and installation of 9m Street Light Pole with double arm as per specification
- 8 Design, manufacture, supply and installation of Feeder Pillar Boxes as per specification including construction of R.C.C. foundation for the same.
- 9 Supply, laying and termination of 3.5 x 50 mm<sup>2</sup>, 3.5 x 25 mm<sup>2</sup>, 4 X 16 mm XLPE insulated, 1.1 kV grade, armoured Aluminium Cable as per BOQ.
- 10 Design, manufacture, supply, delivery and installation of Pillar Box as per specification.
- 11 Supply and installation of Celling fan, Electronic regulator, CFL lamp, Tubelight etc.
- 12 Construction of 12 numbers Earth Electrode Stations with 65 mm dia, 3 M long GI Pipes.
- 13 Circuit wiring, distribution and Point wiring.

Including all appurtenant works as described and set forth in, Bill of quantities, Special Conditions of contract, Technical Specification of works, Specification of materials & Workmanship with all additional or varied works which may thereafter be required in Accordance with Clause-7 of General conditions of contract and as per direction of The Engineer of the Contract. The intending tenderer shall inspect the site of work in consultation with the Engineer and acquaint himself with the nature of Work before preparing his tender. His attention is drawn to Clause No. 3.1 of the General Conditions of Contract in this regard. No excuse on ignorance as to the site conditions will be entertained.

Unless otherwise specified, the work to be provided for by the contractor shall include but not be limited to the following:-

# **DRAWINGS FOR APPROVAL:**

The Electrical Layout Drawings, Single Line Diagram, Distribution Diagram, Circuit

**Drawings**, etc. should be prepared by the Successful Tenderer and the same should be submitted to the Engineer for necessary approval, in triplicate, before installation.

#### AS BUILT DRAWINGS including,:

- i) Electrical Layout Drawings.
- ii) Single line electrical schematic drawings, including Circuit Drawings, Distribution Diagram and Electrical Piller Box etc.
- iii) Cable Routes so laid with reference to permanent installations enroute, clearly marking position of the cable there at showing distance from such references at an suitable interval, where so available are to be provided.
- b) The Contractor should arrange, at their own cost, all necessary tools, tackles, lifting machineries, transport etc., required for the execution of total work. Should also provide all materials, supervision, services, scaffolding and temporary lighting as required for work purposes etc.
- c) The lengths of Cable run through existing/new Duct / Tray / Laid Pipe/undergound etc. as given in the Bill of Quantities are indicative only. There may be little variation in quantity during execution of the work depending upon site conditions.

Any work, considered required by the contractor and not mentioned hereunder, for successful completion of the project, is to be included in the item of bill of Quantity suitably, which should be finalized in the pre bid meeting.

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.

\_\_\_\_\_

# **TECHNICAL SPECIFICATIONS**

#### **HIGH MAST**:

#### .01 **Structure**:

The High Mast shall be of 20 Mtrs. High, continuously tapered, polygonal cross section, at least 20 sided, presenting a good and pleasing appearance, based on the above referred applicable standards. The structure shall be suitable for wind loading as per IS 875 (Part 3), 1987. Dimensions of the High Mast shall be as per the following TECHNICAL DATA SHEET FOR 20 MTRS HIGH MAST WITH INTEGRAL POWER TOOL. Thickness of 2 (two) sections of High Mast made, should be mentioned in the offer clearly.

The Mast shall be fabricated from special steel plates, conforming to BS-EN 10025, S-355 or equivalent, cut and folded to form a polygonal section as stated above and shall be telescopically jointed giving a continuous tapered profile with good visual appearance and welded. The welding shall be in accordance with BS.5135/AWS.

The Mast shall be delivered in sections of effective length of 10 meters at site. Thus 20 Mtrs. High Mast shall be supplied in two sections & each section shall be fabricated out of individual plate duly folded and welded. At site, the sections shall be joined together by slip-stressed-fit method. No site welding or bolted joint shall be done on the Mast. The minimum over lap distance shall be 1.5 times the diameter at penetration. The concerned design calculations shall be submitted for verification. The Mast shall be provided with fully penetrated flange, which shall be free from any lamination or incursion. The welded connection of the base flange shall be fully developed to the strength the bolt-holes to ensure elimination of helical stress concentration. For the environmental protection of the mast, the entire fabricated mast shall be hot dip galvanized, internally and externally, having a uniform thickness as per IS: 4759 – 1984/BS. ISO 1461. The galvanization is to be done by single dipping method only for better adhesion and life.

# .02 <u>Life of High Mast</u>:

The High Mast structure shall be suitable to sustain an assumed maximum reaction arising from a wind speed as per IS 875 (three second gust) and shall be measured at a height of 10 Metres above ground level.

# .03 Lantern Carriage:

## **Fabrication:**

A fabricated Lantern Carriage shall be provided for fixing and holding of 12 no of symmetrical arms each holding 2 x 400 Watts HPSV non-integral type Flood Light Fittings along with Control Gear Boxes, 1 (one) number single dome aviation obstruction lights with Neon Spiral lamp and 2 (two) Nos. Cast Aluminium Junction Boxes radially and symmetrically. The Lantern Carriage shall be of special design and shall be of ring type steel tubular construction, the tubes acting as conduits for wires, with holes fully protected by grommets. The Lantern Carriage shall be so designed and fabricated to hold the above mentioned light fittings, Control Gear Boxes & Junction Boxes and also have a perfect self balance. It shall have proper arrangement to prevent swing and to prevent damage to Mast surface or other installed parts, during lowering/raising operation of the carriage.

The Lantern Carriage shall be fabricated in two halves and joined by bolted flanges with stainless steel bolts and stainless steel nuts to enable easy installation or removal from the erected High Mast. The inner lining of the carriage shall be provided with protective PVC arrangement, so that no damage is caused to the surface of the mast during the raising and lowering operation of the carriage. The entire Lantern Carriage shall be hot dip galvanized after fabrication. All hardware used shall have necessary corrosion protection provision.

# .04 <u>Junction Box:</u>

Weather proof Junction Boxes, made of Cast Aluminium shall be provided on the Carriage Assembly as required, from which the inter-connections to the above mentioned Aviation Obstruction Luminaries, Flood Light Fittings and associated Control Gear Boxes fixed on the carriage, shall be made. Inter connections shall have to be done by 1100 Volts grade PVC insulated

& PVC sheathed 3 core 2.5 sq. mm. copper conductor flexible cables conforming to IS: 694. Bottom entry of Cable/ Wire with the Luminaries/Control Gear Boxes/Junction Boxes are preferred.

# .05 Raising and lowering mechanism:

For the installation and maintenance of the luminaries and lamps, it shall be necessary to lower and raise the Lantern Carriage Assembly. To enable this, a suitable Winch Arrangement shall be provided, with the winch fixed at the base of the mast and the specially designed head frame assembly at the top.

# .06 Winch:

The winch shall be of completely self sustaining type, without the need for brake shoe, springs or clutches. Each driving spindle of the winch shall be positively locked when not in use, by gravity activated PAWLS. Individual drum also should be operated for fine adjustment of lantern carriage. The capacity, operating speed, safe working load, recommended lubrication and serial number of the winch shall be clearly marked on each winch.

The gear ratio of the winch and the minimum working load shall be indicated by the tenderer. The winch shall be self-lubricating type by means of an oil bath and the oil shall be readily available grades of reputed producers.

The winch drums shall be grooved to ensure perfect seat for stable and tidy rope lay, with no chances of rope slippage. The rope termination in the winch shall be such that distortion or twisting is eliminated and at least 5 to 6 turns of rope remains on the drum even when the lantern carriage is fully lowered and rested on the rest pads. It should be possible to operate the winch manually by a suitable handle and by an integral power tool. Operation of the winch with manual handle shall be independent of the power tool. Winches with manual operation through the power tool shaft shall not be accepted. Individual drum operation of the winch shall be possible. A double drum winch shall have two drums and two worm gears independent in operation for increased safety. It shall be possible to remove the double drum after dismantling, through the door opening provided at the base of the mast. Also, a winch Gear Box for simultaneous and reversible operation of the double drum winch shall be provided as part of the contract.

Sufficient distance is to be maintained between the switch gears and the winch assembly inside the lower part of the High Mast to provide easy maintenance facility.

Manufacturer's Test Certificate for the winch will have to be provided. A test certificate shall be furnished by the Contractor for each winch in support of the maximum load operated by the winch.

#### .07 Head Frame:

The head frame which is to be designed as a capping unit of the mast, shall be of welded steel construction, galvanized both internally and externally after fabrication. The top pullies shall be of appropriate diameter, large enough to accommodate the stainless steel wire ropes and the multi-core electric cable. The pulley block shall be made of non-corrodable material, and shall be of die cast Aluminium Alloy (LM-6). **Pulley made of synthetic materials such as Plastic or PVC are not acceptable.** Self-lubricating bearings and stainless steel shaft shall be provided to facilitate smooth and maintenance free operation for a long period. The pulley assembly shall be fully protected by a canopy galvanized internally and externally.

Close fitting guides and sleeves shall be provided to ensure that the ropes and cables do not get dislodged from their respective positions in the grooves. The head frame shall be provided with guides and stops with PVC buffer for docking the lantern carriage.

#### .08 Stainless Steel Wire Ropes:

The suspension system shall essentially be without any intermediate joint and shall consist of only non-corrodable stainless steel of AISI 316.

The Stainless steel wire ropes shall be of 7/19 construction, the **central core being of the same material.** The overall diameter of the rope shall not be less than 6 mm. The breaking load of each rope shall not be less than 2400 kg. giving a factor of safety of over 5 for the system at full load as per the TR – 7 Technical

Report Number 7 High Masts for Lighting and CCTV, 2000 Edition of The Institution of Lighting Engineers as mentioned above. The end constructions of ropes to the winch drum shall be fitted with talurit.

The thimbles shall be secured on ropes by compression splices. Two continuous lengths of stainless steel wire ropes shall be used in the system and no intermediate joints are acceptable in view of the required safety. No intermediate joints/terminations, either bolted or else, shall be provided on the wire ropes between winch and lantern carriage. Manufacturer's Test Certificate for the stainless steel wire rope will have to be provided

# .09 Electrical System, Cable and Cable Connections:

A suitable terminal box shall be provided as part of the contract at the base compartment of the High Mast for terminating the incoming cable (3.5 cores x 35 sq. mm. XLPE insulated cable of 1100 Volts grade) through a connector. The electrical connections from the bottom to the top of the High Mast shall be **through 2 (two) Nos. separate circuits** made by 2 (two) Nos. special trailing cables. Each circuit will have to be protected by 1 (one) No. 40 Amps TPN MCB (breaking capacity not less than 10 KA). Incoming of the above mentioned TPN MCB will be connected with the above mentioned connector (where the incoming cable is being terminated) by copper flexible cable of proper size. **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. The cable shall be of reputed make.** 

At the top, there shall be weather proof Junction Boxes, as mentioned above to terminate the trailing cable. Connections from the top Junction Boxes to the individual luminary and Control Gear Box shall be made by using 1100 Volts grade PVC insulated 3 core 2.5 sq. mm. copper conductor flexible cables of ISI marked.

#### The system shall have in-built facilities for testing the luminaries while in lowered position.

Suitable provision should also be made at the base compartment of the High Mast to facilitate the operation of internally mounted, electrically operated power tool for raising and lowering of the lantern carriage assembly. The trailing cables shall be terminated by means of specially designed, metal clad, multi-pin plug and industrial type socket provided in the base compartment to enable easy disconnection when required

# .10 Power Tool for the Winch:

A suitable, high-powered, electrically driven, **internally mounted power tool**, with manual over ride shall be supplied for the raising and lowering of the lantern carriage for maintenance purposes. The speed of the power tool shall be to suit the system. The power tool shall be single speed, provided with a motor of the required rating.

The power tool shall be supplied complete with a suitable control arrangement so that the operation of the mast can be done at a safe distance. The capacity and speed of the electric motor used in the power tool shall be suitable for lifting of the design load installed on the lantern carriage.

The power tool mounting shall be so designed that it shall be not only self supporting but shall also align the power tool perfectly with respect to the winch spindle during the operations. Also, a handle for the manual operation of the winches in case of problems with the electrically operated tool, shall be provided. There shall be a separate torque-limiting device to protect the wire ropes from over stretching. It shall be mechanical with suitable load adjusting device. The torque limiter shall trip the load when it exceeds the adjusted limits. There shall be suitable provision for warning the operator once the load is stripped off. The torque limiter is a requirement as per the relevant standards in view of the overall safety of the system. Each mast shall have its own power tool motor

# .11 Lightning Finial (Lightning Arrestor)

One number heavy duty hot dip galvanized lighting finial shall be provided for each mast. The lightning finial shall be minimum 1.2 Metre in length and shall be provided at the centre of the Head Frame. It shall be bolted solidly with the head frame to get a direct conducting path to the earth through the High Mast structure. The lightning finial shall not be provided on the lantern carriage under any circumstances in view of safety of the system.

# .12 Foundation for High Mast:

It is the responsibility of the contractor to provide suitable RCC foundation for the High Mast. The general soil bearing capacity at site is 10 Tonnes per Sq. Metre at a depth of 2.5 Metre from the existing ground level. If slushy materials are found, the contractor should take suitable strengthening measure as mentioned in the Scope of Work

#### .13 TECHNICAL DATA SHEET FOR 20 MTRS. HIGH MAST WITH INTEGRAL POWER TOOL

HIGH MAST SYSTEM		
Height of High Mast.	:	20 Metres
No. of Sections.	:	2 (two) Sections.
Make of High Mast	:	To be mentioned by the bidder.
Material of Construction.	:	BSEN 10025, S-355
Minimum thickness of Sections.	:	To be mentioned by the bidder.
Length of individual Section.	:	To be mentioned by the bidder. However,
		effective length of each section should be 10
		meters.
Cross Section of High Mast.	:	20 sided polygon (minimum).
Minimum Bottom diameter of Botto		Minimum Bottom diameter of Bottom
Section and Minimum Top diameter	of	Section: 400 mm.
Top Section (A/F).		Minimum Top diameter of Top Section: 150
		mm.
Type of joints.	:	Slip-stress-fit method at site.
Length of overlap.	:	To be mentioned by the bidder. However,
		minimum over lap distance shall be 1.5 times the
		diameter at penetration.
Metal protection treatment for Hi	gh :	Hot-Dip Galvanized.
Mast Sections.		Charle District
Method of Hot dipping.	<u>:</u>	Single Dipping.
Average thickness of galvanization.	<u>:</u>	As per IS: 4759 – 1984/BS. ISO 1461
Maximum size of opening door at bas		1200 mm x 250 mm.
Type of locking arrangement.	:	Close fitting, vermin proof, vandal resistant,
		weatherproof door provided with a heavy-duty
Details of slack board inside the ba	ise :	double internal lock with special paddle key.  PVC Board.
	ise :	PVC Board.
compartment.  Provision for incoming call	ole :	Connector.
termination.		Connector.
Diameter of base plate	:	To be mentioned by the bidder.
Thickness of base plate.	:	To be mentioned by the bidder. However,
The kness of ouse place.	'	thickness should not be less than 30 mm.
Size of Anchor Plate and thickness.	:	To be mentioned by the bidder. However,
		thickness should not be less than 8 mm.
Details of Template.	:	To be mentioned by the bidder. However,
1		thickness should not be less than 2 mm.
Weight of 20 Metres High Ma	ast ·	To be mentioned by the bidder.

	(without accessories).						
	Lightning Protection Finial.	:	1 (one) No. Heavy duty hot dip galvanized				
		-	lighting finial of minimum 1.2 Metre in length.				
2.	DYNAMIC LOADING AS PREVAIL	ING	•				
	Maximum Wind Speed.	:	50 Metres/ Second.				
	Maximum Gust Speed time.	:	3 (three) Seconds.				
	Height above ground level these two	:	10 (ten) Metres.				
	factors are measured.						
	Factor of safety for Wind Load.	:	1.25				
	Factor of safety for other Load.	:	1.15				
3.	FOUNDATION DETAILS						
	Type of foundation.	:	Open Raft Shallow footing.				
	Size of foundation.	:	To be designed by the tenderer.				
<u> </u>	Soil bearing capacity at site.	:	10 Tonnes per Sq. Metre at a depth of 2.5 Metre				
			from the existing ground level				
	Design Safety Factor.	:	As per IS: 456				
	Considered Wind Pressure (Kg/Mt <sup>2</sup> )	:	As per IS: 875 – 1987				
	Depth of foundation.	:	To be designed by the tenderer.				
	No. of Foundation Bolts.	:	12 (twelve) Nos. (minimum).				
	PCD of Foundation Bolts.	:	To be mentioned by the bidder.				
	Type of Foundation Bolts.	:	High Tensile Studs (6.8 grade).				
	Length of Foundation Bolt	:	To be mentioned by the bidder. However,				
	Zongui of Lountamizon Zon	•	length should not be less than 850 mm.				
	Foundation Bolt diameter.	:	39 mm (minimum).				
4.			7.				
<u>-</u>	Material of Construction.	:	Ring type steel tubular construction. However,				
			further details to be provided by the bidder.				
	Minimum Diameter of Lantern Carriage	:	To be mentioned by the bidder.				
	Ring.		,				
	Construction.	:	Construction having not less than 12 Arms.				
	No. of joints.	:	2 (two).				
	Type of Joints.	:	Joined by bolted flanges with stainless steel bolts				
			and stainless steel nuts.				
	Buffer between Lantern Carriage and	:	PVC sleeve on Lantern Carriage.				
	Mast Section.						
	Load carrying capacity.	:	Minimum 750 Kgs.				
	Total Weight of Lantern Carriage	:	To be mentioned by the bidder.				
	Assembly with fittings.	'	25 55 mentioned by the blader.				
	Number of fittings/ Type of fittings &	:	12 Nos. 2 x 400 Watts HPSV non-integral type				
	fixtures.		Flood Light Fittings along with Control Gear				
	Tired est		Boxes, single dome aviation obstruction lights				
			with Neon Spiral lamp and 2 (two) Nos. Cast				
			Aluminium Junction Boxes to be fitted radially				
			and symmetrically.				
5.	HEAD FRAME	<u> </u>	1 ··· · · · · · · · · · · · · · · · · ·				
	Pulley Quantity	:	To be mentioned by the bidder. However, the				
			quantity should not be less than 4 (four) Nos.				
	Pulley Diameter	:	To be mentioned by the bidder.				
	Pulley material.	:	Die cast Aluminium Alloy (LM-6).				
	Shaft of Pulley	:	Stainless Steel.				
	Bearing of Pulley.	:	Maintenance Free self lubricating type Bush				
		•	Bearing.				
	Head Frame Cover	:	MS galvanized, both internally and externally.				
	Bolts and Accessories	:	Stainless Steel.				
6.	RISING CABLE OF HIGH MAST	<u>, -</u>					
0.	TOTAL OF HIGH MADE						

	Type of 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.
	Material of core of cable.	:	Stranded Copper Conductor.
	Minimum Conductor size.	:	4.0 Sq. mm.
	Minimum No. of cores.	:	5 (five).
	No. of Circuits.	:	2 (two).
7.	WINCH		
	Make of Winch.	:	To be mentioned by the bidder.
	No. of Drums per Winch.	:	Double Drum Double Gear type.
	Gear Ratio.	:	To be mentioned by the bidder.
	Capacity.	:	750 Kgs.
	Method of operation.	:	Both Electrical and Mechanical.
	Lubrication arrangement.	:	Permanent Oil Bath.
	Type of lubricant.	:	To be mentioned by the bidder.
8.	STAINLESS STEEL WIRE ROPE		
	Make.	:	To be mentioned by the bidder.
	Grade.	:	AISI 316
	No. of Ropes.	:	Two continuous ropes.
	Construction.	:	7/19
	Central Core Material.	:	Stainless steel core.
	Minimum diameter in millimeter.	:	6 (six).
	Thimbles and Talurit.	:	SS Thimble.
	Minimum Breaking load capacity.	:	2400 Kgs. x 2
	Factor of safety.	:	More than 5 for system at full load.
9.	POWER TOOL		
	Model.	:	Integral.
	Input supply.	:	3 Phase, 415 Volts, 50 Hz AC System.
	Wattage/HP.	:	To be mentioned by the bidder.
	No. of speed.	:	Single speed.
10	TORQUE LIMITER		
	Lifting capacity.	:	Upto 750 Kgs.
	Adjustable/Non-adjustable	:	Adjustable.
	Tripping device.	:	Mechanical.

# .15 Installation of High Mast

The contractor shall make necessary arrangements for installation of the High Mast by using suitable equipments. Derrick or crane required for the purpose shall be arranged by the contractor at his risk, cost and arrangement. Rate to be quoted accordingly. Locations of the five number high masts are shown here in the overall perspective of the area to be illuminated

### .16 EARTHING FOR HIGH MASTS (INCLUDING LUMINARIES & CONTROL GEAR BOXES),

#### .16.01 FEEDER PILLAR BOXES.

Suitable Pipe Earthing Stations will have to be provided near High Mast/Feeder Pillar Box. There shall be two number Earth Stations for High Mast or Feeder Pillar Box by using Earth pipe electrode made from M.S. Pipe (65 mm N.B, Medium Duty, IS:1239 and 3 Metre length each]. The pipe assembly shall be Hot Dip Galvanized after fabrication. Earthing should be done generally conforming to latest edition of IS: 3043. Two earth stations for High Mast/Feeder Pillar Box is to be inter connected by G.I. flat of size – 50mm x 6 mm. is to be used for connection between High Mast/Feeder Pillar Box and Earth Stations. Cadmium plated/G.I Nuts, Bolts and Washers are to be used.

All types of non-current carrying metal parts of electrical installations shall be earthed in conformity with the Indian Electricity Rules and relevant Indian Standard Specifications.

#### .16.02 FEEDER PILLAR BOX

The Feeder Pillar Box will be made from 3.15 mm thick CRCA sheet with 50 x 50 x 6 mm MS angle Frame, double flap Hinged Door, both in front & rear sides with stiffeners, Handle complete with integral canopy and panel lock. The Feeder Pillar Box will be suitable for outdoor installation. After completion of total fabrication work of the Feeder Pillar Box, the assembly will be Hot Dip Galvanized. 2 Nos. Panel Key are to be provided with each Feeder Pillar Box. Door sealing arrangement are to be made with Neoprene Rubber Gasket of thickness not less than 3 mm. Cable(s) entry will be from bottom only for which detachable type Gland Plate (made from 3.15 mm thick MS Sheet) with punched holes suitable for 3.5 cores x 50 sq. mm and 4core x 16 sq mm XLPE insulated LT Cables shall be provided. The Feeder Pillar Box will have Earth Bus made from G.I Flat of size 50 x 6 mm. Electrolytic grade tinned copper bus of size 50 x 6 mm for each phase and Neutral will have to be provided. Bus-Bars should be colour coded PVC sleeved. Inter connections between Bus-Bars and the components are to be made by Electrolytic grade tinned copper flat/ 1.1KV grade insulated copper conductors of suitable size, along with tinned copper lugs.

The Pillar box should have the following components.

- i) 2Nos 100 Amps 25KA, MCCB ii) 1 No 45 Amps TP Contactor (AC 3 duty).
- iii) 3 Nos 40 Amps. TPN MCB (Breaking capacity not less than 10KA).
- iv) 1 No Time Switch (with rechargeable battery backup v) Bypass Switch 1 No.
- vi) 2 No 9A contactors for raising and lowering.
- 2 Nos. full threaded GI Bolts (M 10 x 40mm) along with G.I. Nuts & washers are to be provided on two sides of the Feeder Pillar Box as Earth Stud. The Feeder Pillar Box shall be suitable for IP 55 Protection.

#### .16.03 Foundation of the Feeder Pillar Box:

The Feeder Pillar Box will be installed on a raised Reinforced Cement Concrete (RCC) foundation, to be constructed above ground level. The Feeder Pillar Box will be fixed with its foundation by bolts of adequate size, grouted in the concrete foundation. The foundation will be raised by 500 mm from ground level

#### .16.04 Feeder Pillar Box for High Mast Lighting Tower:-

The overall tentative dimension of the Feeder Pillar Box for High mast tower will be 1000 (H) x 550 (L) x 350 (D) [approx.] with the following components:

- i) 63 Amps TPN MCB 1 Nos.
- ii) 45 Amps TP Contactor 1 No.
- iii) 9 Amps. TP Contactor (AC 3 duty) 2 Nos.
- iv) Double 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 Boxs 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.

#### .16.05 Foundation of the Feeder Pillar Box:

The Feeder Pillar Box will be installed on a raised Reinforced Cement Concrete (RCC) foundation, to be constructed above ground level. The Feeder Pillar Box will be fixed with its foundation by bolts of adequate size, grouted in the concrete foundation. The foundation will be raised by 300 mm from ground level.

## .16.06 NEON SPIRAL AVIATION OBSTRUCTION LIGHTS:

One number single dome suitable Neon Spiral Aviation Obstruction Light (including lamps of Red colour and other accessories) of suitable design and reputed make will have to be provided on top of each High Mast Tower.

# .16.07 WORK NOT SPECIFIED:

The workmanship of works not herein fully specified shall be carried out as per relevant. Standard Specifications and in absence thereof shall be as per the best standard practice as approved by the Engineer of Kolkata Port Trust.

# 17 MISC. MATERIALS SPECIFICATION REQUIRED FOR CABLING SYSTEM:

# 17.01 CABLE LUGS AND SOCKETS:

Cable termination shall be done with Aluminium/tinned copper Crimping Type Solderless Lugs/Sockets of following Make. DOWELLS/USHA/JAINSON/KLIPPON.

# 17.02 CABLE IDENTIFICATION:

PVC Cable Tags of suitable sizes will have to be provided.

#### 17.03 BI-METALIC WASHER:

Where copper to Aluminium Connections are to be made, Bi-metallic Washers shall be used.

#### 17.04 BRICKS:

Crushing strength, effloresencess shall conform to class designation 10 (as per IS 1077, 1986) and as per the specification, given below:

- I) The brick shall have clear ringing sound.
- II ) The average size of the bricks shall be in the range of 250 mm ( $\pm 4$  mm) x 125 mm ( $\pm 2$  mm) x 75 mm ( $\pm 2$  mm).

#### 18 Cables

**18.01 Item Details: -** Following sizes of XLPE insulated, armoured, overall PVC sheathed PVC sheathed armoured Al. conductor cable of 1100 volts grade conforming to IS: 7098(Part - I) / 1988 with latest amendment, are included under the scope of this tender.

- a) 3.5 C x 50 mm<sup>2</sup> XLPE insulated PVC sheathed armoured Aluminium cable
- b) 3.5 C x 25 mm<sup>2</sup> XLPE insulated PVC sheathed armoured Aluminium cable
- c) 4C X 16 mm<sup>2</sup> XLPE insulated PVC sheathed armoured Aluminium cable
- $\pm$  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.

#### **18.02** Laying

Cable shall be laid generally in accordance with I S:1255-1983. The 3.5C 25 mm<sup>2</sup> XLPE cable is to fed power from the existing/proposed switch room to the poles via loop in loop out box. 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. 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. G.I. pipe shall have to be used where cable pass through walls, roads, drains, culverts, railway line etc.

75 mm dia HDPE 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 50 m.

#### 18.03 Termination

The 4 C x 16 mm<sup>2</sup> XLPE cable shall be terminated in each of the street light pole by loop-in loop-out process. Termination of cable shall have to be made by using suitable compression cable gland and sockets by crimping to the size of the cable. The 3.5C X 25 sq mm cable is to be used for feeding power from the pillar boxes to High Mast Towers and they are to be terminated by using suitable compression cable gland and sockets by crimping to the size of the cable. The 3.5C X 50 sq mm cable is to be used for feeding power from the main panel to the feeder pillar boxes and they should be terminated by using suitable compression cable gland and sockets by crimping to the size of the cable.

# 19 Supply, delivery and installation of street light poles

#### 19.01 Item details

The Street light MS poles shall be swaged ones made of seamless or welded tubes of suitable length, swaged and joined together having Cast Iron loop-in-loop-out box in sheet steel lockable enclosure at suitable height and with base plate and cap fitted at suitable height. No circumferential joints shall be allowed in the individual tube lengths. There shall be one longitudinal weld seam only. The pole is to be painted with 2 coats of anti-corrosive enamel paint over primer coating. The pole will be of 9meter high and of type 410 SP 30 having double arm bracket. The length of the bracket shall be 1500 mm suitable for fixing 2 nos integral type metal halide light fittings at two different directions. All the poles shall be manufactured and supplied as per technical specification of IS 2713, Part II 1980 with its latest amendment.

# 19.02 <u>Installation</u>

The poles shall have to be properly installed in an absolute vertical manner at a suitable gap so that the truck terminals gets adequately illuminated. The planting depth shall be 1.5 meter. **All the poles shall be properly earthed with spike electrodes**. Suitable foundation for lighting poles is to be provided if planting depth of 1.5 meter could not be achieved. If slushy material are found at the location of installation of poles, the slushy material shall have to be removed and is to be replaced by silver sand and compacted for strengthening and making the base suitable for pole foundation.

#### 19.03 Luminiaries

#### **HPSV Street Lighting Luminiaries**

#### a. Item details

- (a) Non-integral type Flood Light Luminaries with anodized Aluminium Reflector in Cast Aluminium Housing along with SON-T HPSV Lamps and Cast Aluminium Control Gear Boxes (with electronic igniter) to be supplied and installed.
  - 2 x 400 Watts HPSV Flood Light Fittings along with Control Gear Boxes will have to be supplied. Lamps will be conforming to relevant BIS Specification. The fittings will be similar to Bajaj type BGENF 22R/BJEF 21S or equivalent
- (a) Street light luminaire with cast Aluminium housing, high purity electrochemically brightened and anodized reflector, transparent cover, suitable for use with integral type 1no 400 watt Metal halide lamp with luminiarie having IP 54 protection, ingress protection and with wide beam distribution is to be supplied.
- (b) Surface Mounted Single tube light fittings fitted with 1X 36 W tube light complete in all respects are to be provided of any approved make having high power factor and good light output at low voltages.
- (c) CFL lamps of 230 V, 23 W of any approved make are to be provided

# 19.04 Installation

- (a) Each HPSV luminaries are to be installed on each arm of the High Mast with proper clamping arrangement
- (b) The metal halide luminaries shall have to be installed on each bracket of the Street light poles with proper clamping arrangement. It is to be ensured that the luminaries do not get tilted and the light get focused uniformly
- (c) The tube light fittings with tubes and with all other accessories shall be installed on the ceiling/wall of the meter/office room at each truck terminals.
- (d) CFL lamps with holder & all other accessories are to be installed on round block as per site requirement

#### 20. Panel Board

#### **20.01 Supply**

The Panel will comprise of 1 no 250A ,415V, 25 KA TPN MCCB as incomer with adjustable settings and 3 nos of 100A, 415V, 25KA, TPN, MCCB, 4 No 40A, 415V, 25KA, TP MCB and 2Nos 6A, 230V,10KA SP MCB as outgoing, units of fixed thermal and magnetic setting mounted in factory built /fabricated TPN distribution boards of sheet steel, phosphatised, powder painted complete with bus bars, neutral links, blanking plates etc. conforming to IS norm. The MCCBs should be adjustable thermal and fixed magnetic setting type.

#### 20.02 Installation

1no of such Panel boards is to be provided near the switch room of the truck terminal. The Panel Boards is to be installed in the meter room attached to annex building. The DBs shall be floor mounted and are to be double earthed.

# 21.01 Ceiling Fans

Energy saving, 3 blade, ball bearing type, armature with copper winding, ceiling fan of 1200 mm sweep complete with blade, canopy of any approved make of appropriate colour are to be provided.

#### 21.02 Installation

The ceiling fans complete with blades, canopy, fork, rubber and electronic step regulator, connection wire are to be installed. Down rods are to be provided wherever necessary.

#### 22. Wiring, wires

Details are given in **BOQ items** 

#### 23. Earthing:

Suitable Pipe Earthing Stations will have to be provided near each High Mast/Feeder Pillar Box. There shall be two number Earth Stations for each High Mast or Feeder Pillar Box by using Earth pipe electrode made from M.S. Pipe (65 mm N.B, Medium Duty, IS:1239 and 3 Metre length each]. The pipe assembly shall be Hot Dip Galvanized after fabrication. Earthing should be done generally conforming to latest edition of IS: 3043. Two earth stations for each High Mast/Feeder Pillar Box is to be inter connected by G.I. flat of size – 50mm x 6 mm. G.I flat of 50mm x 6mm size is to be used for connection between High Mast/Feeder Pillar Box and Earth Stations. Cadmium plated/G.I Nuts, Bolts and Washers are to be used. All types of non-current carrying metal parts of electrical installations shall be earthed in conformity with the Indian Electricity Rules and relevant Indian Standard Specifications

Also the street light poles are to be individually earthed with spike electrode. The panel boards at each truck terminals shall have to be earthed in accordance with the requirement of Indian Electricity Rules and IS 3043. Interconnections of two earth stations have to be done by  $25 \times 6$  mm GI flats shall be used for same.

Earthing shall be provided with 50 mm dia GI pipe 3.64 mm thick x 3.04 Mts long and 1x4 SWG GI (Hot Dip) wire (4 Mts. Long), 13 mm dia x 80 mm long GI bolts, double nuts, double washers incl. S & F 15 mm dia GI pipe protection (1 Mt. long) to be filled with bitumen, partly under the ground level and partly above ground level driven to an average depth of 3.65 Mts. below the ground level & restoring surface duly rammed.

Masonry enclosure shall be provided on the top of earth electrode of overall size 86.36cm x 86.36cm x 46cm deep (below Ground level) complete with cemented brickwork (1:6) of 25 cm width duly plastered with cement mortar (inside) CI hinged inspection cover of size 35.56 x 35.56 cm with locking arrangement, GI reducer including drilling of 46 nos 12 mm dia holes on the GI pipe and treatment of soil by using salt & charcoal or coke for plate electrode

**24.** 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.

# 25. 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 damages made on for drawing of cables/installation of equipments shall be made good by the tenderer at his own cost.

List of Approved Makes

Item	Make				
Street Light Pole	Utkarsh/Bansal/Jindal/TATA/any other reputed				
	make				
MCCB / MCB / DOL Starter/ Switch	ABB/Siemens/ Havells/ L&T/ Crompton / GE/				
fuseunit/Main Switch	Legrand.				
Luminaries, lamps.	Philips/ Bajaj / Crompton / Havells / Crompton				
	Greaves/ GE.				
PVC Copper wire for internal wiring	KDK-Evershine/Finolex/Havells/				
	National/Nicco/ Supercab.				
Piano type switches/ Electronic regulator.	Havells/Anchor/ Pritam /Sleek/				
	Ellora/Precision/Rider/Pearl Electrical				
	Industries any other reputed make				
L.T. power cable	NICCO/ Gloster/Havells/ Polycab/Crystal				
CeilingFan /Exhaust Fan	Havells/Usha/Orient /Crompton Greaves/Polar				

N.B: Any other reputed make of any particular item will only be considered if none of the specified make for that particular item is not available in the market for some reason or the other which is to be acceptable to competent authority

## 26 Inspection & Testing

Inspection and testing will be carried out by KOPT Engineers/concerned experts. Inspection will be carried out **as applicable** as per **relevant IS** clauses and also as per relevant Standard/ Technical Specification/ Approved Drawing etc.

Manufacturer's Test and guarantee certificate as applicable will have to be submitted for verification. All pre commissioning tests shall be carried out by the authorized representative of the firm having valid Certificate of Competency.

Inspection of the items to be supplied by the contractor will be carried out by the Engineer or his representative in presence of contractor or his representative prior to dispatch. The Engineer reserves the right to waive inspection at Manufacturer's premises (witnessing tests) or to inspect (physically) the materials at site, against Manufacturer's Internal Test Certificate & Guarantee Certificate as applicable. The cost of conducting inspection at the factory premises to be carried out by the Engineer or his representative including cost of logistics is to be borne by the contractor. Inspection will be carried out as applicable as per relevant Standard/ Technical Specification/Approved Drawing etc. Manufacturer's Test and guarantee certificate as applicable will have to be submitted for verification.

Inspection and Testing by the Engineer or his representative shall not relieve the successful bidder of their obligation for supplying the items and execution of the entire work in accordance with the Contract Condition and relevant Acts, Rules and Codes of Practice. The tenderer/s shall afford all facilities to the Engineer or his representative at their own cost & arrangement for inspection and testing of the equipment.

\_\_\_\_\_

# BIDDERS ARE REQUESTED NOT TO QUOTE HERE. THE PRICE PART TO BE QUOTED ONLINE ONLY.

# **UNPRICE Bill Of Quantity (BOQ)**

# E-Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

Work: Illumination of parking Yard for M&Q Block, Sonai

Sl No	Description of item	Qty	Unit	Unit rate (in Rs)	Total Value (in Rs)
1	Supply and delivery of 4 core 16 sq mm 1.1KV grade armoured XLPE, Aluminium cable	250	Mtr		
2	Laying of above cable in underground trench	250	Meter		
3	Termination of the above cable	16	No		
4	Supply & delivery at site 9meter high Street light Pole of type 410 SP 30 with double arm bracket fitted suitable for installing two no integral type metal halide luminiaries. 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	6	No		
5	Installation of the above poles with suitable earthing arrangement	6	No		
6	Supply and delivery at site 400W integral type Metal Halide luminaries having die cast aluminum housing with IP65 protection, ingress protection and with wide beam distribution.	12	No		
7	Fixing above light fitting with suitable clamps for mounting on the pole bracket and connecting the same with 2.5sqmm PVC insulated copper wire as required from loop box	12	No		
8	Supplying and fixing medium gauge 75 mm dia HDPE pipe protection with necessary fittings and jointing materials as required	250	Meter		
9	Supply and delivery of 3.5 core 50 sq mm 1.1KV grade armoured XLPE, Aluminium cable	400	Meter		
10	Laying of above cable in underground trench	400	Meter		
11	Termination of the above cable	8	No		
12	Supply and delivery of 3.5 core 25 sq mm 1.1KV grade armoured XLPE, Aluminium cable	20	Meter		
13	Laying of the above cable in underground trench	20	Meter		
14	Termination of the above cable	4	No		
15	Design, Supply and Delivery of 20 Mtrs. long high mast system with its accessories. Mast shaft shall be in two sections, having 12 arm hot dip galvanized and suitable for wind velocity of 50 m/sec. It shall also include accessories for high mast including head frame, two continuous SS wire rope without any joint of 6 mm dia (7/19 construction), trailing cable, connector, double drum winch, galvanized lantern carriage arrangement suitable for 12 luminaires arranged symmetrically & its control gear boxes and lightning finial. The mast should possess integral power tool, manual handle, junction box installed inside the base compartment for its operation. The system should also have Carriage mounting clamps and bolts, luminary mounting bolts, foundation bolts along with nuts, washers, anchor plate and template.	2	No		
16	Assembly of 20 Mtrs. High Mast with all its accessories and erection, testing & commissioning of the same with the help of suitable equipments	2	Nos		

Sl No	Description of item	Qty	Unit	Unit rate (in Rs)	Total Value (in Rs)
17	Supply and delivery of non-integral type flood light luminaries having 2 X 400W HPSV lamps with anodized Aluminium reflector and its control gear boxes	24	No	(111 210)	(111 210)
18	Installation and commissioning of 2 x 400 Watts non- integral type HPSV Flood Light Luminary along with lamps and Control Gear Boxes for High Mast	24	No		
19	Supply and delivery of single dome aviation obstruction lights with Neon Spiral lamp.	2	No		
20	Supply and delivery of Feeder Pillar Box, of suitable dimension having double flap Hinged Door, both in front & rear sides with stiffeners, Handle complete with integral canopy and panel lock, Hot Dip Galvanized and should be of protection IP 55. 2 Nos. Panel Keys are to be provided with each Feeder Pillar Box. Door sealing arrangement are to be made with Neoprene Rubber Gasket of thickness not less than 3mm. Cable(s) entry will be from bottom only for which detachable type Gland Plate with punched holes suitable for cable entry. The Feeder Pillar Box will have Earth Bus made from G. I. Flat of size 50 x 6mm.  Electrolytic grade tinned copper bus of size – 50 x 6mm for each phase and Neutral will have to be provided. Inter connections between Bus-Bars and the components are to be made by Electrolytic grade tinned copper flat/ 1.1KV grade insulated copper conductors of suitable size, along with tinned copper lugs.  The Pillar box should have the following components.  i) 2Nos 100 Amps 25KA, MCCB  ii) 1 No 45 Amps TP Contactor (AC - 3 duty).  iii) 3 Nos 40 Amps. TPN MCB (Breaking capacity not less than 10KA).  iv) 1 No Time Switch (with rechargeable battery backup)  v) Bypass Switch – 1 No.  vi) 2 No 9A contactors for raising and lowering.	2	No		
	G.I. Nuts & washers are to be provided on two sides of the Feeder Pillar Box as Earth Stud				
21	Design and construction of R.C.C. foundation for 20 Mtrs. High Mast with M20 grade concrete considering soil bearing capacity at site of 10 Ton/ Sq. Mtr, including excavation of earth (after strengthening of soil condition by removing slushy materials and replacing by silver sand and compacting thereafter to make the base suitable for foundation of High Mast), brick soling of two layers, PCC, and supply of PVC/ GI Pipe of suitable size for cable entry, supply of cement, reinforcement steel bars, bricks, sand, stone chips, shuttering materials, labour etc. complete and refilling of earth upto the existing ground level after curing. The design and foundation of the High Mast shall be based on IS: 875 & IS: 456	2	No		
22	Erection of the High Mast with the help of suitable tools and plants, wiring of luminaries with all wiring materials	2	No		
23	Construction of RCC foundation for the Feeder Pillar Box including supply of foundation accessories consisting of cement, reinforcement steel bars, bricks, sand, stone chips, shuttering materials, labour etc. complete and refilling of earth upto the existing ground level after curing	2	No		
24	Supply & Delivery of a Panel having 1 no 250A TPN MCCB as incomer and 3 nos of 100A TPN MCCB, 4 No 40A TP MCB &2 No 6A SP MCB as outgoing	1	No		

Sl No	Description of item	Qty	Unit	Unit rate (in Rs)	Total Value (in Rs)
25	Installation of the above panel on angle iron frame	1	No	(III KS)	(III KS)
26	Supply and delivery of 32A, 415V DOL starter with	2	No		
20	overload relay range from 23-32A		110		
27	Installation of the starters	2	No		
28	Circuit Wiring: Supplying and drawing 1.1KV grade single core stranded 'FR'PVC insulated & unsheathed copper wire (approved make) in 20mm size PVC rigid conduit 'FR'incl necy fittings of size 2 X36/0.3 (2.5sqmm) +1 X22/0.3 (1.5sqmm) ECC (From panel to Switch board)	100	RM		
29	Distribution wiring in 2 X 22/0.3 (1.5 sq mm) single core stranded 'FR' PVC insulated & unsheathed copper wire in 20 mm size PVC rigid conduit 'FR' with 1.5 sq mm single core stranded FR PVC insulated & unsheathed copper wire for ECC to light/fan/points with piano key type switch fixed on MS CRC sheet metal for avg run 5 mtr	5	Points		
30	Distribution wiring in 1.1kv grade 22/0.3 (1.5sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire (approved make) in 20 mm size PVC rigid conduit 'FR' with 1.1kv grade 1.5sq mm single core stranded 'FR' PVC insulated & unsheathed copper wire as ECC to <b>5A,3 pin type plug socket &amp; piano key type switch</b>	2	Point		
31	Supply of Ceiling Fan of 1200 mm sweep	1	No		
32	Supply & delivery of electronic step regulator	1	No		
33	Installation of Ceiling fan with electronic regulator	1	No		
34	Supply and delivery of Single tubelight fittings with lamps	2	No		
35	Installation of the tubelight fittings with necessary flexible copper wire	2	No		
36	Supply & delivery of 23W CFL lamps	2	No		
37	Installation of the CFL lamps with backelite holder	2	No		
38	Earthing	8	Set		
39	Supplying & Fixing earth bus bar of galvanized (Hot Dip) MS Flat 50mm X 6mm on	2	Meter		
40	Connecting the High Mast, earth bus from earth pit & interconnecting by 50mm X 6mm Galvanised MS flat	500	Meter		
41	Connecting the panel to earth bus bar including S&F GI(Hot Dip) wire of size 4 SWG	20	Meter		
	Grand Total				

# Note:

The above price is inclusive of all taxes and duties except service tax, which will be paid extra, if applicable, as per actual. As KoPT is not a Registered body corporate, it is not liable to pay Service Tax under 'Reverse charge Mechanism' as per Service Tax Law. The service provider is liable to recover Service Tax as applicable.

Calculation for the total amount will be made on the basis of Unit Rates multiplied by quantities.

# **Profile of Tenderer / FORM -D**

## E-Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

This is to confirm that we agree to abide by all the terms and conditions of this NIT No. **KoPT/KDS/Mech/SE-I/ADV/418 Dated: 10.02.2017**, those mentioned in the "General Conditions of Contract" enclosed with this Tender Document as well as decisions taken in the prebid techno-commercial conference, if any.

Our relevant particulars are furnished hereunder:

D 4 1	
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.	
Tonce Station.	
T-11N	
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.	
<u>r</u>	
Name of the partners/directors/ members, as	
applicable, in this particular contract	
applicable, in this particular contract	
Name of their authorized representative(s)	
who would handle the contract on their	
behalf.	

	Signature of the Tenderer
Date	
	Office seal of the Tenderer.

# E-Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

# [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,	
Tender Document and understood its	(Name of Tenderer) having examined the contents, hereby submit our Tender for ( NIT No. KoPT/KDS/Mech/SE-I/ADV/ dated all the terms and conditions of the same including the
	Tender including Addendum and in the Appendices are ach tender are true copies of their respective originals.
3. We shall make available to Kolkata Port information it may find necessary or require to supp	Trust (hereinafter referred to as KoPT) any additional lement or authenticate the Tender.
abide by the decisions of KoPT in the matter of Tenderer and shall refrain from challenging or que further acknowledge the right of KoPT to reject or hereby waive our right to challenge the same on any 5. We also certify the following	State Govt. or any entity controlled by them or any other

for breach in the last 3 years ending on the date of opening of the techno commercial part of the tender.

(b)

We have also not been expelled from any project or contract nor have had any contract terminated

6.	We	declare	that:
----	----	---------	-------

- (a) We have examined and have no reservations to the Tender Document, including the Addendum, if any, issued by KoPT 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 KoPT 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	

# KOLKATA PORT TRUST SCHEDULE - "O"

# Tenderers must fill in the undernoted column:

Sl.N	Full particulars	Value of	Contract	Actual	Name and	Name and
О	of similar	work	for	completion	Addresses of	Addresses
	works carried		completion	time	Authorities	to whom
	out by		time		for whom	reference
	Tenderer				work was	can be
					carried out	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 f 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"

# <u>SHEET – 4</u>

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 any 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.	:
5.	Whether the Tenderer pays income tax over Rs.10,000/- per year	•
D	ATED, the	Signature of Tenderer

# E-Tender No. KoPT/Kolkata Dock System/CME/39/16-17/ET/549

## **KOLKATA PORT TRUST**



# MECHANICAL 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  $6^{\rm TH}$  MEETING HELD ON  $27^{\rm TH}$  MAY, 1993.

THE UNICE THIS HELD ON 27 MAI, 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

- 2.1. 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.
- 2.2. The Contractor shall take instructions from the Engineer and subject to limitation of Clause 2.5 herein, from the Engineer's Representative
- 2.3. 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.
- 2.4. 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 and 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 Contactor 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.
- 2.5. 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.
- 2.6. 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

- 3.1. 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, ad 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 statues, 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.
- 3.2. 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.
- 3.3. 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 regard shall be treated as a breach and a contract, if entered into, shall be liable to be cancelled.
- 3.4 (a) Unless other wise 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	1% of the estimated value of
	work	work.
Over	2% of the estimated value of	1/2% of the estimated value of
Rs. 1,00,000/-	work subject to a maximum	work subject to a maximum of
	of Rs.20, 000/- and	Rs. 10,000/- and minimum of Rs.
	minimum of Rs. 5,000/-	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	Amount of Fixed Security	Financial limit of each tender
Registration		
A	Rs. 10,000/-	Any tender priced up to Rs. 2,00,000/-
В	Rs. 5,000/-	Any tender priced up to Rs.1,00,000/-
C	Rs. 2.500/-	Any tender priced up to Rs.50,000/-

- (a)
- (i) Tender submitted without requisite Earnest Money may be liable to rejection.
- (ii) If before expiry of he 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.
- (b) 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.
- (c) 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	% of Security Deposit for Contract of
	for works contract	supplying materials and equipments only
For works up to Rs.	10% (Ten percent)	1% (One percent)
10,00,000/-	_	_
For works costing more	10% on first Rs.	1% on first Rs.10,0,000/-+1/2% on the
than Rs.10,00,000/- and	10,00,000/- + 7 1/2% on	balance
up to Rs.20,00,000/-	the balance	
For works costing more	10% on first Rs.	1% on first Rs.10,0,000/-+1/2% on next
than Rs.20,00,000/-	10,00,000/- + 7 1/2% on	Rs.10,00,000/-+ 1/4% on the balance
	next Rs.10,00,000/-+ 5%	
	on the balance	

- (d) 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.
- (e) 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 a 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-fulfillment 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

4.1.

- (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).
- 4.2. 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.
- 4.3. 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.
- 4.4. 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 properly 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.

- 4.5. 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.
- 4.6. 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.
- 4.7. 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. faxes and duties to the appropriate authorities and other things of every kind required for the construction, erection, completion and maintenance of the work.
- 4.8. 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.
- 4.9. 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.
- 4.10. 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.
- 4.11. 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.
  - 4.12. 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.
  - 4.13. 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 there of 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.
  - 4.14. 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.

- 4.15. 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.
- 4.16. 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.
- 4.17. Debris and materials, if obtained by demolishing any properly, building or structure in terms of the Contract shall remain the property of the Trustees.
- 4.18. 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.
- 4.19. 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.
- 4.20. 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.
- 4.21. 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.
- 4.22. The work has to be carried out by the Contractor causing the minimum of hindrance for any maritime traffic or surface traffic.
- 4.23. 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

- 5.1. 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 o 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.
- 5.2. 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.
- 5.3. 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 act or 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.
- 5.4. 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 may be required by the Engineer or his Representative. The engineer shall exercise his sole discretion to accept any such materials.
- 5.5. 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.
- 5.6. 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.
- 5.7. 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.
- 5.8. 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 then "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 contactor 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) last 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 19 ¼% 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.
- 5.9. 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 falls 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.

- 5.10. 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.
- 5.11. 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.

5.12. 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:

- 6.1. 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.
- 6.2. 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.
- 6.3. 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.
- 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 other 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.

- 6.5. 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 thereof 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.
- 6.6. 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 Nationalised 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.
- 6.7. 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.
- 6.8. 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:

- 7.1. 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 fulfillment of his obligation under the contract.
- 7.2. 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.
- 7.3. 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.
- 7.4. 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.
- 7.5. 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 decided 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

8.1. 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, lock-outs, 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 thereupon 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 Damaged" Clause (No.8.3hereof) 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.

- 8.2. 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 money6 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 discreti9on 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.
- 8.3. 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 may be 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 talking 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

- 9.1. On completion of execution of the work the contractor shall maintain t6he 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.
- 9.2. 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 from 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 relive the Contractor of his obligations under the contract for full and final completion of the work.
- 9.3. 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 from G.C.3 annexed hereto (in original), where upon the Engineer shall issue Certificate in from 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

- 10.1. 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.
- 10.2. 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.
- 10.3. 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.
- 10.4. 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.
- 10.5. 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.

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 of the Tenderer
Name	(In Block Letters)
(In Block Letters)	
Address	Dated
	Address

.....

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

Occupation .....

## THE BOARD OF TRUSTEES FOR THE PORT OF KOLKATA

### FORM OF AGREEMENT

THIS	AGREEM	MENT made thisday of
Truste	ees for the	Port of Kolkata, a body corporate constituted by the Major Port Trusts Act, 1963 (thereinafter called
"Trus	tees" whic	ch expression shall unless excluded by or repugnant to the context be deemed to include their successors
in offi	ice) of the	one part and(hereinafter called "the
Contr	actor", wl	hich expression shall unless excluded by or repugnant to the context be deemed to include its heirs,
execu	tors, admi	nistrators, representatives and assignees or successors in office) of the other part.
		he Trustees are desirous that certain works should be executed / constructed, viz
		nder / Offer by the Contractor for the execution and maintenance of such work NOW THIS WITNESSETH as follows:
1.		Agreement words and expressions shall have the same meanings as are respectively assigned to them
in Ge	neral Cond	ditions of Contract hereinafter referred to.
2.		ollowing documents shall be deemed to from and be read and construed as part of this ment, 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 covenant 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 h	ereunto affixed in the presence of:
Name	
Addre	SS
Or	
SIGN	ED, SEALED AND DELIVERED
	saidpresence of:
Name	
	SS:
The Co	ommon Seal of the Trustees was hereunto affixed in the presence of:
Name	
Addre	SS:

## KOLKATA PORT TURST

# FORM G.C.1

	Contract
	Address
Date of	Completion
	Dear Sir/s,
Name of	This is to certify that the following works viz.  f the Work
	e Number E.E.O
Listimate	C.E.O
Work O	rder Number
	on
	t Number
	Which was carried out by you is in the opinion of the undersigned completing in every respect on the
General	Conditions of Contract and under the provisions of the Contract for a period of
	From the
	of the
_	re () neer / Engineer's Representative)
Name	
Designa	tion
T	Seal The Deputy Chief Engineer ( ) The Deputy Manager ( ) Tinancial Adviser & Chief Accounts Officer/
	Manager (Finance), Haldia Dock Complex.

## KOLKATA PORT TURST

FORM G.C.2

The Financial Adviser & Chief Accounts Officer.

The Manager (finance), Haldia Dock Complex.

Office Seal

### 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
Signature () (Engineer / Engineer's Representative)
Name
Designation

## 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
Contract Nodt
Agreement 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 Trust	tees
for the Port of Koll	cata.
BANK G	UARANTEE NODATE
1	Name of issuing Bank
1	Name of Branch
F	Address
Trust Act, 19	the Board of Trustees of the Port Kolkata, a body corporate - duly constituted under the Major port 963 ( Act 38 of 1963), having agreed to exempt Shri / Messrs
Registered Compare (hereinafter referred through deduction and the Contractor per Work Orded dated	ny, having its Registered Office at
Kolkata	
Wewritten demand is these presents, We have no right to demanded to the T favour of "Kolkata Trustees, this wou Bank),	Branch, Kolkata
aforesaid, is s pay the amou without refere Court, can	Branch, Kolkata

Trustees in, the manner and within the time aforesaid.

3. We,
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 of
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 W
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,/Haldia.
5. We
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 13<sup>th</sup> 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 upto Rs.10 crore. EMD of project estimated above Rs.10 crore will be Rs.20 lakh + 1% of estimated cost by which it exceeds Rs.10 crore.
- **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.