## **MORMUGAO PORT TRUST**

## **ENGINEERING MECHANICAL DEPARTMENT**

Tender no. CME/XEN(E)/ELC/T-38/19/T6



#### **TENDER**

FOR "Replacement of 11KV Double Pole Structure constituents and commissioning at Port Hospital".

Due at 15.00 Hrs on 17.07.2019

Website: www.mptgoa.gov.in

## MORMUGAO PORT TRUST ENGINEERING MECHANICAL DEPARTMENT

Tenders are invited in single cover system from firms duly super-scribed as

# TENDER FOR "Replacement of 11KV Double Pole Structure constituents and commissioning at Port Hospital".

Details about Tender:

Tender invited by	CHIEF MECHANICAL ENGINEER / MORMUGAO PORT TRUST			
Tender No.	CME/XEN(E)/ELC/T-38/19/T6			
Name of Work	"Replacement of 11KV Double Pole Structure constituents and			
	commissioning at Port Hospital".			
Earnest Money Deposit	Rs.1500/- in the form of DD only from Nationalized/Scheduled Banks in favour of the Financial Advisor & Chief Accounts Officer, MPT, payable at Vasco, Goa to be submitted along with the tender, otherwise the offer shall not be considered.			
Security Deposit	10 % of the contract value. Two parts: (i) 5% of contract value – to be furnished in the form of DD only from Nationalized Banks in favour of the Financial Advisor & Chief Accounts Officer, MPT, payable at Vasco, Goa within 20 days of placement of order/LOA whichever is earlier. (ii) 5% retention money deducted from the running A/c bills.			
Completion Period	The entire work shall be completed within <b>30days</b> from the 7th day of receipt of LOA/Purchase order whichever is earlier. However the work of removal/dismantling of existing DP structure constituents and installation, testing commissioning of new DP structure constituents at Port Hospital should be completed within 12hrs due to exigencies/criticality of the site requirements.			
Liquidated Damages	The contractor shall pay the Board as Liquidated Damages for delay to complete the work, a sum of 0.5% per week or part thereof of the total contract price subject to a maximum of 5% of the total contract price and the Board shall have the power to deduct this amount from the payment of the amount due to the contractor or from his security deposit as the case may be.			
Payment terms	100% payment shall be made within <b>30 days</b> after satisfactory completion and commissioning of work and on furnishing undisputed invoice complete in all respects. The contractor shall furnish their GST code, EPF, ESI, Wage register, Attendance register, PAN card, bank account number, MICR number Name of the Branch along with Bill for arranging payment made through E.C.S. by the Port.			
Bid Validity	120 Days from the date of opening of the tender.			
Guarantee Period	<b>12 months</b> from the date of taking over of the work upon satisfactory commissioning of the work.			
Date of submission of bids	17/07/2019 till 15:00 Hrs.			
Date of Opening of bids	17/07/2019 at 15:30 Hrs			
Address for communication and submission of bid:	Executive Engineer(E-HL),  Mechanical Engineering Department,  Mormugao Port Trust,  Electrical Section, 1st Floor, Admin. Building,  Headland sada, Vasco-da-Gama, Goa - 403804			
Contact Details	Phone :0832- 2594241 Email : xene.mgpt@gmail.com			
Website	www.mptgoa.gov.in			

#### TECHNICAL SPECIFICATION

#### 1.0 GENERAL

Mormugao Port Trust invites tender in Single cover system for the work of "Replacement of 11KV Double Pole Structure constituents and commissioning at Port Hospital".

#### 2.0 SCOPE OF WORK:

- **2.1** Supply installation, testing and commissioning of 11KV, 200A, triple pole Gang operated Air break switch (GOAB).
- **2.2** Supply installation, testing and commissioning of 11KV, 200A Horn Gap Fuse unit (set of three).
- **2.3** Supply installation, testing and commissioning of 9KV, 5KA Lighting arrestors (set of three) suitable for 11KV, 50 Hz effectively earthed neutral system.
- **2.4** Supply and erection of 11KV, 45KN disc insulator with metal parts including fixing conductor and holding clamp.
- **2.5** Supply and laying/stringing of ACSR "WEASEL" conductor (6+1/2.59mm).
- **2.6** Supply and spreading of trap metal of 50mm aggregate.
- **2.7** Dismantling of existing 200A GOAB switch, HG Fuse unit, Weasel conductor of line & earthing and handing over the same to the Port at M.M.
- **2.8** Painting the members of Double pole structure (Excluding poles). ISMC of size 75 x 40 x 6 mm- 08 nos.

Note: Entire work should be completed within 30days from the 7<sup>th</sup> day of receipt of LOA/P.O. However, the replacement works should be completed within 12hrs from commencement of the work and commissioned upon clearing 11kV line shutdown.

#### 3. TECHNICAL SPECIFICATIONS:

#### 3.1 GANG OPERATED AIR BREAK (GOAB) SWITCH:

The isolator shall be of three poles, 200A rating and shall be vertically mounted single break, gang-operated outdoor type conforming to IS: 9921-Part1 to V as amended up to date. The blades shall move in vertical plane. The live parts shall be so designed that so far as possible sharp points, edges and other corona producing surfaces are eliminated. Live metal parts shall be of non-rusting and non-corroding metal. Current carrying parts shall be non-ferrous. Gang operated links shall be so designed that all phases shall make and break simultaneously.

Operating Mechanism: The isolators shall be arranged for manual (by hand) operation. The isolators shall be provided with 5 mts. long operating G.I pipe of suitable diameter so that it can be operated from ground level and should have pole coupler GI Rod. The operating handle shall move in a vertical plane (without any cross arm). Provision shall be made for pad locking the mechanism of isolators in both the closed and open position.

The AB switches shall be erected and aligned at the 11 KV, Double pole structure. The switch shall be aligned in such a way that operation of the switch shall be smooth without any tension of the moving parts. The operating handle will be located 1000mm – 1100mm above ground level. The earthing connections are to be made as per relevant IS standard.

MAKE: ALTAS SWITCHGEAR/ NATIONAL SWITCHGEAR/ULTIMA SWITCHGEAR/JAIPURIA BROTHERS

#### 3.2 HORN GAP FUSE UNIT:

The Horn Gap fuse unit of continuous current rating of 200 Amps shall comprise of the following fittings:

- a. Six arcing horns made of copper and coated with tin.
- b. Six Post type insulators having creepage of 320mm.

Aluminium connector with bimetallic strip suitable to clamp ACSR conductor upto 12.27 mm overall diameter shall be provided. Pad of the H.G. fuse shall be of copper and coated with tin, provided with required number of nuts, bolts, spring washers, plain washers for clamping and shall be suitable to carry the rated current.

The earthing terminal should be provided with necessary spring washers, plain washers, nut and bolts. All bolts, nuts and washers should be hot dip galvanized (HDGI).

Horn gap shall be suitably mounted on the insulators and across the fuse units. The six Post type insulators shall be fitted on base channel (ISMC) hot dipped galvanized iron of size 75x40mm for mounting the horn gap and other connecting parts and complete with clamps and all hardware which shall be HDG.

Fuse Arrangement shall be made across the narrowest portion of the Horn Gap by suitable terminal clamps/fly nut and bolts for connecting fuse wire. The arrangement of connecting shall be suitable for easy replacement of the fuse wire. The size of the fuse wire shall be chosen depending upon the capacity of the transformer and other equipment to be connected. H.G Fuse unit shall be confirming to relevant IS amended up to date and conforming with CEA guidelines.

MAKE: ALTAS SWITCHGEAR/NATIONAL SWITCHGEAR/ ULTIMA SWITCHGEAR

#### **3.3 LIGHTNING ARRESTOR:**

9KV, 5 KA nominal discharge current, Metal Oxide, gapless, distribution class lightning arrestor conforming to IS 3070 Part 3 1993 as amended up to date suitable for 11 KV, 50 HZ effectively earthed neutral system with necessary mounting arrangements and connector suitable to connect ACSR conductor up to 12.27 mm overall diameter.

The earth wire of appropriate size to take care of designed fault currents and lightning shall be used as per relevant IS amended up to date and conforming with CEA guidelines. The earth wire shall be of galvanized stranded steel or alternatively ACSR/ AACSR conductor. The earthing lead shall not pass through any iron or steel pipe but shall be taken directly to the separate earthing pit.

MAKE: ALTAS SWITCHGEAR/ ELPRO INTERNATIONAL, PUNE/ OBLUM-HYDRABAD/NATIONAL SWITCHGEAR

#### 3.4 DISC INSULATOR:

11 KV disc insulator ball and socket type, Type "A", brown glazed porcelain duly cemented at factory with MCI socket cap, forged steel ball pin and supplied with phosphor bronze "W" split pin as per IS731-1971 as amended up to date with minimum failing load of 45KN, pin ball diameter 16mm, and min creepage distance of 320mm. The metal parts and hardware shall be hot dip galvanized as per relevant IS amended up to date and conforming to CEA guidelines.

MAKE: ALTAS SWITCHGEAR/BHEL/HINDUSTAN CHEMICALS/ADITYA BIRLA INSULATOR

#### 3.5 ACSR CONDUCTOR:

The ACSR cable shall be of hard drawn stranded Aluminium conductor with galvanized steel wire reinforcement, conforming to relevant IS standard. The size of conductor shall be 6+1/2.59 mm i.e. ACSR "Weasel" conductors.

MAKE: ALTAS SWITCHGEAR/ TRACO CABLE CO LTD/ APAR CONDUCTORS/ BHARAT CONDUCTORS/ TUMKUR CONDUCTORS

#### 3.6 PAINTING:

Painting including scrapping all the cross members of the old paint/rust and painting the structure using one coat of red oxide coating (primer) of 60 micron thickness and two coats of anti-corrosive silver aluminium paint of 50 micron thickness..

MAKE: NEROLAC, SHALIMAR, ASIAN

#### 4.0 INSTALLATION AND COMMISSIONING

- The work should be carried out with utmost safety precaution with minimum possible disruption of power supply.
- The replacement work at DP structure, testing & commissioning of DP structure constituents is to be completed within 12hrs. Before starting the work proper prior arrangements are required to be made in co-ordination with the Engineer-In-Charge (EIC) of the Port. Action plan is required to be furnished to EIC upon inspection of site in advance.
- The Contractor shall commence and complete the work as per the BOQ and proper safety precautions should be taken at the electrically charged installation at the substation. The work is to be carried out as per the site conditions and relevant IS standards.

#### 5.0 GENERAL TERMS AND CONDITIONS

#### 5.1. Eligibility of the Tenderer

The following should accompany the bid document in sealed cover, viz.

- i) The contractor should be experienced Electrical contractor who have executed similar works in the past. A scanned copy of completion certificate for having executed similar works may be furnished along with the bid which may be verified with the original before award of LOA/P.O.
- **ii)** Similar works implies installation, testing, commissioning of 11KV DP structure or Replacement of D.P. Structure components viz. GOAB switch, H.G Fuse units etc.
- **iii)** Tender document issued by the Port shall be duly initialled on each page with rubber stamp of the Bidder.
- **iv)** Copy of a valid Electrical Contractors License to work upon HT installations up to 11Kv should be furnished along with the bid document.
- v) Certificate of Registration with PF Commissioner/ESI authorities and GST.
- vi) Price Bid should be duly filled in. Bidders are advised to quote strictly as per price bid.

#### 5.2 Validity:

The tender shall remain valid for acceptance for a period of **120 days** from the date fixed for opening of Technical Bid. MPT reserves their right to extend the period of validity for a specific time. The request and the response, there to, shall be made in writing by post or by Fax/E-

mail. However, in the event of the Bidder agreeing to the request, he shall not be permitted to modify his tender. In the event of the Bidder agreeing to the extension, the Bidder shall correspondingly extend the validity of the tender suitably against this Tender. In case Bidders do not agree to extend the validity of their offer beyond the validity period, EMD of such Bidders shall be refunded after award of the contract.

#### 5.3 Price:

- i) The bidder shall quote the price exclusive of GST. Applicable GST shall be paid on the quoted price. The bidder shall indicate the applicable GST rate on the goods / services in the price bid.
- ii) Evaluation will be done only on the basic price.

#### **5.4 Earnest Money Deposit:**

- 5.4.1 The Bidder shall furnish an EMD of Rs. 1,500, without EMD the tender shall be treated invalid.

  The E.M.D. shall be paid in the form of DD only from Nationalized Banks in favour of the

  Financial Advisor & Chief Accounts Officer, MPT, payable at Vasco, Goa to be

  submitted along with the tender, otherwise the offer shall not be considered
- 5.4.2 EMD exemption is provided to SSI/MSME registered with NSIC. To claim EMD exemption, the tenderers are required to produce an attested copy of the NSIC registration Certificate issued in the name of the firm who will submit the tender document. The exemption from the payment of EMD will be allowed only if similar work of the tender match with the enlistment statement shown in the Certificate issued by SSI/MSME registered with NSIC. No claims for exemption without the details stipulated above will be considered.
- 5.4.3 In the event of Bidder withdrawing his tender before the expiry of **tender validity period of 120 days** from the date of opening of bid, the tender submitted by the Bidder shall be cancelled and EMD shall be forfeited.
- 5.4.4 The Earnest Money Deposit of unsuccessful Bidders shall be returned on award of Contract to the successful Bidder. No interest shall be payable on the amount of E.M.D in any case. The Earnest Money Deposit of the successful Bidder shall be refunded only on receipt of Security Deposit as stipulated in the tender.
- 5.4.5 MPT reserves the right to forfeit the Earnest Money Deposit in respect of successful Bidder, if he fails to furnish the necessary Security Deposit towards performance within 20 days from the date of receipt of Letter of Acceptance (LOA)/Purchase order whichever is earlier.
- 5.4.6 In addition to above, the EMD shall be forfeited by the Port in the following events;
  - (i) If the Bid is varied or modified in a manner not acceptable to Port after opening of Tender during the validity period or any extension thereof.

- (ii) If the Bidder tries to influence the evaluation process.
- (iii) In case the Bidder, submits false certificate in terms of any documents supported to the Tender.
- (iv) In case the bidder is found to indulge in corrupt or fraudulent practices at any stage including the execution of the contract.

#### 5.5 Security Deposit:

- (i) The contractor shall within 20 days from the date of LOA, shall furnish a DD from Nationalized Banks in favour of the Financial Advisor & Chief Accounts Officer, MPT, payable at Vasco, Goa, This Security Deposit will be converted to Performance Guarantee upon completion of the work.
- (ii) Security deposit shall consist of two parts:
  - a) The DD equivalent to 5% of the contract value rounded off to nearest 100 rupees, shall be submitted within 20 days of issue of Letter of Acceptance
  - b) The balance 5% shall be recovered as Retention Money from the running bills. Thereafter, the total of 10% (DD 5% and 5 % Retention money) shall be returned after completion of Guarantee period of "12 months".
- (iii) On receipt of full deposit as arrived above in any manner aforesaid the Earnest Money submitted with the Tender will be refunded. No interest will be allowed on the earnest money from the date of its receipt until it is refunded. In the case, however for unsuccessful Tenderers, Earnest Money will be refunded, as soon as possible after the finalisation of the contract. The successful Tenderer shall when his tender is accepted, furnish Security Deposit. The Earnest Money shall retain its character as such, till the Security Deposit is furnished by the Tenderer.
- (iv) Forfeiture of SD: The security deposit will be forfeited, if the contractor fails to fulfill any or all the conditions of this contract, without any interference from it towards all rights of the Board to recover from the contractor any other amounts falling due to the Board through nonobservance/compliance by the contract conditions and any of the clause thereof by the contractor.

#### 5.6 Completion Period:

The entire work shall be completed within **30days** from the 7th day of receipt of LOA/Purchase order whichever is earlier. However the work of removal/dismantling of existing DP structure constituents and installation, testing commissioning of new DP structure constituents at Port Hospital should be completed within 12hrs due to exigencies/criticality of the site requirement.

#### 5.7 Guarantee Period:

The aforesaid Security Deposit (Clause no. 5.5) will be converted to Performance Guarantee upon completion of the work. The validity of such Guarantee issued, towards performance of the Contract, shall be for a period of 12 months from taking over of the work. Any defect observed during the guarantee period, the same shall be set right by the Contractor, free of cost without any financial implications to the Port, whatsoever.

#### 5.8 Payment Terms:

- i) 100% payment shall be made within 30 days after satisfactory and successful completion of work on furnishing undisputed invoice complete in all respects.
- ii) The contractor shall furnish their bank account details for the payment through ECS by the Trust. A copy of the PAN card, GST code, wage register, attendance register, EPF& ESI, Bank account number, MICR number, Name of the Branch along with Bills shall be furnished for arranging payment made through E.C.S. by the Trust.
- iii) The bidder shall quote GST No. of MPT (30AAALM0293P1ZY) on all invoices raised on Port. If bidder is not registered under GST or opted for composition scheme under GST, undertaking of the same shall be submitted by the bidder.

#### 5.9 Liquidated Damages:

In the event of failure by the contractor to complete the execution of the work within the time stipulated in the contract or by the expiry of any period of extension granted by the Board's terms thereof, the contractor shall pay the Board as Liquidated Damages for delay to complete the work, a sum of 0.5% per week or part thereof of the total contract price subject to a maximum of 5% of the total contract price and the Board shall have the power to deduct this amount from the payment of the amounts due to the contractor or from his security deposit as the case may be. The GST @18% on LD will be deducted at the time of making payment to Vendors/Contractors.

#### 5.10 EXTENSION OF TIME

- (i) The Contractor shall commence the works on site within the period indicated in the tender after the receipt of an order in writing to this effect from the Engineer and shall proceed with the same with due expedition and without delay except as may be expressly sanctioned or ordered by the Engineer or be wholly beyond the control of the Contractor.
- (ii) The Contractor shall maintain the rate of progress required as per schedule. If the progress of work is held up owing to circumstances, which in the opinion of the Engineer are beyond the control of the Contractor such as war, stormy weather and for other reasonable causes in the opinion of the Engineer, the Engineer may at his discretion, grant to the work extension of time as he considers reasonable for the completion of the work. In such circumstances, the Contractor shall apply for extension of time within fifteen days of the hindrance on account of which he desires such extension as aforesaid.
- (iii) The execution of the work during the extended period also, shall be only under the conditions and at the rates specified in the contract.

(iv) No claim shall be made by the Contractor on the grounds of executing the work beyond the completion period stipulated in the contract.

#### 5.11 Other terms and conditions

- i) All tools and tackles and logistics involved in the work shall be arranged by the Contractor at their own cost. The transportation cost, if any, shall be borne by the contractor.
- ii) The Bidders are advised to visit the site and get acquainted with the quantum of the work involved and site conditions before quoting for the works.
- iii) The tenderer shall be deemed to have satisfied himself before submitting the tender as to the correctness and sufficiency of his tender for the work and of his price stated in the schedule as to cover his entire obligation under the contract for completion of the work.
- iv) The scope of work and bill of quantities at "ANNEXURE-1" to be read in conjunction to ensure the actual supply and works involved.
- v) Necessary Entry passes shall be obtained by the Contractor at their own cost with prior approval of the Port Officials on Duty.
- vi) The watch and ward and storage of materials will be tenderers responsibility. The Trust will not be responsible for any loss or damage to the materials/ tools/plants engaged by the contractor/bidder during storage, the work at site or transportation.
- vii) The Contractor shall take utmost care during the execution of the work, if any damage caused to the Port property, the cost of the damage shall be recovered from the Contractor's running A/c bill or may be recovered by the Board as deemed fit.
- **viii)** The power supply shall be provided by the Port free of cost for execution of the work; however, the Contractor shall take power supply from the nearest source by making suitable arrangements at their own cost and risk.
- **ix)** Any work not mentioned herein above but necessary for overall completion of the work shall be deemed to be included in the scope of work without any additional financial implications to the Port, whatsoever.
- under any circumstances, if the work is abandoned by the contractor for whatever reasons, the same shall be executed for successful commissioning 'thro' the external agency to be engaged by the Port at the risk and cost of the contractor. The expenditure incurred by the Port in this regards shall be recovered from the monies due to the contractor / security deposit or as deemed fit by the Board.
- xi) The works shall be carried out with due regard to safety standards prevailing in the Port.
- **xii)** All the workmen shall be covered under a suitable insurance policy. Accidents, if any, fatal or otherwise at site shall be the sole responsibility of the contractor. The Port should not be held liable for compensation in whatsoever manner under any circumstances.
- **xiii)** Address for communication and submission of bid: Executive Engineer (E-HL), Engineering Mechanical Department, Mormugao Port Trust. 1<sup>st</sup> Floor, Administrative Office, Mormugao Goa 403802. Contact no: 0832-2594241.

Further amendments if any, visit our Website <a href="www.mptgoa.gov.in">www.mptgoa.gov.in</a>.

#### CHIEF MECHANICAL ENGINEER

## **ANNEXURE-1**

## **BILL OF QUANTITIES**

Sr. No.	Description	Unit	Qty	Rate / Unit in (Rs.)		GST in %	Amount (Rs)
				In figure	In words	/0	
1	Supply and installation of 11KV GOAB switch, 11KV, 200Amps as detailed at Technical specifications.						
	a) Supply	No	01				
	b) Installation Testing & Commissioning	No	01				
2	Supply and installation of 11KV HG Fuse unit, 200Amps as detailed at Technical specifications.						
	a) Supply	No	01				
	b) Installation, Testing & Commissioning	No	01				
3	Supply and installation of 11KV lightning arrestor as detailed at Technical specifications.						
	a) Supply	No	01				
	b) Installation, Testing & Commissioning	No	01				
4	Supply and installation of 11KV disc insulator as detailed at Technical specifications.						
	a) Supply	No	06				
	b) Installation testing and commissioning	No	06				
5	Supply & Installation of ACSR weasel conductor for line jumper & earthing as per technical specifications.						
	a) Supply	Mtr	35				
	b) Installation, testing and commissioning	Mtr	35				

Sr.	Description	Unit	Qty	Rate / Unit in (Rs.)		GST in %	Amount (Rs)
				In figure	In words	111 70	
6	Supply and spreading of trap metal of 50mm aggregate						
	a) Supply	Cu.m	04				
	b) Spreading	Cu.m	04				
7	Painting the members of Double pole structure (Excluding poles). ISMC of size 75 x 40 x 6 mm-08 nos. as per Technical specifications.	No	01				

(In Words Rupees	only).
Date:	Signature:
Place:	Name:
	Address:
	Office seal of firm:

#### Note:

- 1. The bidder shall quote the price exclusive of GST. Applicable GST shall be paid on the quoted price. The bidder shall indicate the applicable GST rate on the goods/services in the price bid.
- 2. Evaluation will be done only on the basic price.

## **BANK DETAILS FOR ECS PAYMENT**

1.	Name of the Bank and Branch :	
2.	Account Number :	
3.	MICR Number :	
4.	Type of Account :	
5.	IFSC Number :	
6.	Copy of PAN Card :	
7.	G.S.T Regn. No.:	
8.	EPF No. :	
9.	ESI Regn. No.	
		Firm's Sign and Seal
Diago		
Place:		
Date:		

## **APPENDIX - II**

	MORMUGAO PO	ORT TRUST, GOA.			
1	Income Tax PAN No.	AAALM0293P			
2	GST TIN (Provisional ID Number)	30AAALM0293P1ZY			
	Vendor G	ST Details			
1	Business Name				
2	Constitution of Business				
3	Name of Proprietor/Partners/Directors				
4	Principal Place of Business				
5	Name of Responsible Person				
6	Email				
7	Telephone Number				
8	Mobile				
9	Additional Place of Business				
(i)	Email				
(ii)	Telephone Number				
(iii)	Mobile				
10	Income Tax PAN No.(Attached Certified Copy)				
11	GST ID No./Provisional ID No.(Attached Certified Copy)				
I, Mr. Mrs (Proprietor/Partner/Director) of M/s do certify that the information given above complete and correct.					
		Signature (Name: )			
Plac	e:				

Date: