

**NOTICE INVITING BUDGETORY OFFERS**

Name of Work	<b>Supply and laying of 3.5 core X 300 sq.mm aluminium armoured cable.</b>
Budgetary Quotation no:	CME/XEN (E-HR)/2026/H16/B3
Date of submission of budgetary quotation	On or Before <b>01/03/2026</b>
Address for communication:	Executive Engineer (E-HR), 2nd floor, Mechanical Engineering Department, Mormugao Port Authority, Admin. Building, Headland sada Vasco-de-Gama Goa - 403804
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**EXECUTIVE ENGINEER (E-HR)  
MORMUGAO PORT AUTHORITY**

## **TECHNICAL SPECIFICATION**

### **1. GENERAL**

MPA intends to lay two runs of 3.5 core x 300 sq.mm 1.1KV grade XLPE Aluminium armoured from the compact substation to all four feeder pillars at the Breakwater Berth and Mole Berth.

### **2. SCOPE OF WORK :**

- 2.1 The contractor shall supply new 3.5-core x 300 sq.mm, 1.1KV grade XLPE Aluminium armoured (Gal. Steel Round Wire Armour) cable as per the Technical specifications. The cable must provide to the site in undamaged condition and the test report must be submitted to the Site Engineer.
- 2.2 The contractor shall install the cable in the trench after removing the existing slabs, which are approximately 125x100x20 cm (LBW) above the cable supports. The cable supports will be placed on the cable trench. All old cable supports shall be replaced with newly fabricated supports. The fabrication of these supports will be done in accordance with site conditions, and the provided dimensions are for reference only. After fabrication, the supports shall be coated with one coat of primer and two coats of marine paint. Where necessary, the contractor should secure the cables to the wall using appropriately sized saddles, ensuring that the cables are installed at a minimum height of 1 meter above ground level.
- 2.3 The contractor shall supply GI pipes with a 4-inch diameter. These pipes shall be laid with cable running through them across berth from trench to feeder pillar. Before laying these pipes old pipes shall be removed along with the cable. After the cables are laid, the berth should be restored with cement concrete.
- 2.4 The contractor shall lay two runs each of 3.5-core x 300 sq.mm XLPE Aluminium armoured cable from the Compact Substation to all four feeder pillars at the Breakwater Berth and Mole Berth. The contractor must supply accurate cable length measurements to prevent the need for joints. The maximum cable length required, including the loop in the trench and at the

distribution panel, is approximately 800 meters. If the contractor determines that joints are unavoidable, the cost for jointing, including the jointing kit should be incorporated in the cable cost, the same will be the contractor's responsibility.

- 2.5 Upon completion of the cable installation, the cable trench must be covered with the original slabs. Additionally, the berth should be restored to its original condition by properly concreting the area. All damaged/broken slabs shall be replaced by the contractor. In case any slab gets damaged by the contractor during removal, the same shall be replaced at the contractor's own cost.
- 2.6 The contractor shall remove all old and damaged cables from the trench prior to laying of the new cables and the shall be shifted to MM section as directed by Engineer-in – Charge..
- 2.7 The cables must undergo insulation resistance (IR) testing. If the test results are satisfactory, the contractor shall terminate the cables at both ends using suitably sized lugs and glands. All materials including gland, lugs etc. required for the termination must be supplied by the contractor.
- 2.8 The contractor shall supply and replace all the switchgears of the feeder pillars. The old removed ACBs, MCCBs shall be returned to the Port. The details of switchgear of each feeder pillar is as below.

**Feeder Pilar 1 & 4**

Description	quantity
MCCB with rotary handle 630A, 4P, 36KA, with O/L and S/C	1 no.
MCCB with rotary handle 630A, 4P, 36KA, with O/L and S/C	2 nos
MCCB with rotary handle 200A, 4P, 36KA, with O/L and S/C	1 no.

**Feeder Pilar 2 &3**

Description	quantity
MCCB with rotary handle	1 no.

800A, 4P, 50KA, MP based O/L and S/C	
MCCB with rotary handle 630A, 4P, 36KA, with O/L and S/C	2 no.
MCCB with rotary handle 200A, 4P, 36KA, with O/L and S/C	1 no.

**Note:** Any additional work required for fixing these breakers shall be carried out by the contractor at its own cost.

### 3. Technical specifications of cable:

- **Cable Size:** 3.5 Core x 300 sq.mm
- **Conductor:** Stranded Aluminium, Class-2, 300 sq.mm, conforming to IS 8130
- **Insulation:** Cross-Linked Polyethylene (XLPE) as per IS 7098 (Part-1), suitable for damp and wet conditions
- **Voltage Grade:** 1.1 kV (1100 Volts)
- **Armouring:** Galvanized Steel Round Wire Armour (GSWA) conforming to IS 3975, suitable for underground and coastal installations
- **Inner Sheath:** Thermoplastic / PVC, Type ST-2, providing additional moisture barrier
- **Outer Sheath:** Heavy-duty PVC, Type ST-2, water-resistant, UV-resistant and suitable for outdoor and saline atmosphere
- **Standards:** IS 7098 (Part-1): 1988 and relevant IS amendments
- **Operating Temperature:** 90°C (continuous), 250°C (short-circuit)

### 4. MINIMUM ELIGIBILITY CRITERIA

- i. Only Electrical contractors possessing a valid Electrical license to work on minimum 1.1KV lines issued by the licensing board shall be eligible to quote for the enquiry.
- ii. The Bidder shall have successfully completed one Similar Work during last 7 (Seven) years ending last day of month previous to the one in which quotations are invited.

**Note:** Similar works means "Laying of H.T/L.T Electrical power cables at Central Govt. / State Govt. / Port Sector / PSU or any reputed organization".

### 5. SPECIAL TERMS AND CONDITIONS

- i. The Contractor shall commence and complete the work as per the BOQ and technical specifications. The work and quantity is to be carried out as per the site conditions and relevant IS standards.
- ii. The Contractor shall complete the work in all respect to the satisfaction of the Engineer-In-Charge or his representative.
- iii. The work should be carried out with utmost safety precaution with minimum possible disruption of power supply. The contractor has to ensure that that cables are disconnected on both the sides.
- iv. Necessary gate passes for workmen or machinery shall be taken by the contractor at his own cost.

**6. Completion Period:**

The entire work shall be completed within **120 days** from date of issue of Letter of Award (LOA) / PO.

**7. Guarantee Period:**

The Contractor shall guarantee the subject work for a period of one year from the date of satisfactory completion of work and acceptance by Port. If any defect is observed during the guarantee period, the same shall be rectified by the Contractor, free of cost under guarantee obligations.

**PRICE SCHEDULE (BILL OF QUANTITIES)**

**Supply and laying of 3.5 core X 300 sqmm aluminium armoured cable.**

Sr. No.	Description of work	Qty	Unit	Rate Per Unit (Rs)	GST %	Amount (Rs)
A	B	C	D	E	F	G=ExC
1	Supply of 3.5 core x 300 sq.mm XLPE Aluminium armoured cable. (Gal. Steel Round Wire Armour)	4400	M			
2	Supply of GI pipe of diameter 4 inch	250	M			
3	Fabrication of MS cable support as per the drawing by using MS angle 50x50x5mm & MS angle 100 x 100 x 6mm. Support shall have one Coat of Primer and 2 coats of marine paint.	400	No.			
4	Installation of cable supports on trench at site.	400	No.			
5	Laying of 3.5-core x 300 sq.mm 1.1 KV XLPE Aluminium armoured cable: 2 runs from Compact Substation to all four feeder pillars at the Breakwater Berth and Mole Berth					
5. a	Laying through 4-inch GI pipe (cost should include groove cutting in concrete berth and restoring the berth with proper concrete post-laying)	250	M			
5.b	Clamping on wall (cost should include saddles and nails required for clamping)	400	M			
5.c	Through RCC trench (cost includes removing and re-fixing slabs after cable laying)	3750	M			
6.	Providing end Termination of LT 3.5 core x 300 sq.mm cables by providing suitable glands and lug.(All the material required for termination including gland lugs shall be supplied by contractor)	16	Nos.			
7	Removal of old damaged cable from the trench	4500	mtr.			
8	Casting of RCC trench slabs of size 125 x 100 x 20 cm (L x B x W), including provision of two lifting hooks and placement of the slabs over the trench.	50	no			
9a	Supply of MCCB with rotary handle , MCCB rating 800A, 4P, 50KA, MP base O/L, S/C & E/F	2	No.			

9b	Installation of above 800A MCCB in existing panel	2	Nos.			
10a	Supply of MCCB with rotary handle , MCCB rating 630A, 4P, 36KA, with O/L and S/C	10	Nos.			
10b	Installation of above 630 A MCCB in existing panel	10	Nos.			
12a	Supply of MCCB with rotary handle , MCCB rating 200A, 4P, 36KA, with O/L and S/C	4	Nos.			
12b	Installation of above 200A MCCB in existing panel	4	Nos.			
<b>TOTAL (Rs)</b>						

(In Rupees \_\_\_\_\_ Words 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. The quantity specified in BOQ is indicative, however, payment will be made as per actuals.
3. The BOQ shall be read in conjunction with Scope of work.

Cable support drawing

