

NOTICE INVITING BUDGETORY OFFERS

Name of Work	NAME OF WORK "Providing remote control arrangement for Fire Fighting system at MPA Hospital"
Date of submission of budgetary quotation	on or Before 08/11/2023 at 1500 Hrs.
	Executive Engineer (E-HR),
	2nd floor, Mechanical Engineering Department,
	Mormugao Port Authority,
Address for	Admin. Building,
communication:	Headland sada
	Vasco-de-Gama
	Goa - 403804
	Phone : (0832) 2594207/2594253/2594271
Contact Details	Email: mohamed.shaik@mptgoa.gov.in
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EXECUTIVE ENGINEER (E-HR)
MORMUGAO PORT AUTHORITY



CME/XEN(E-HR)/HL03/2023/0370

31.07.2023

Sub: "Providing remote control arrangement for Fire Fighting system at MPA Hospital"

Ref: Budgetary Quotation No. CME/XEN(E-HR)/HL03/03

Mormugao Port Authority intends to carryout work of "Providing remote control arrangement for Fire Fighting system at MPA Hospital."

As such, it is requested to kindly furnish budgetary quotation for the same (Scope of work, technical specifications are enclosed at Annexure-I and Price Schedule enclosed at Annexure-II).

Your budgetary quotation should reach to this office on or before 08.11.2023 at 1500 Hrs.

Thanking you,

Yours sincerely,

EXECUTIVE ENGINEER (E-HR)



ANNEXURE-I

TITLE OF WORK: "Providing remote control arrangement for Fire Fighting system at MPA Hospital"

TECHNICAL SPECIFICATIONS

1. GENERAL

Mormugao Port Authority proposes to carry out the work of "Providing remote control arrangement for Fire Fighting system at MPA Hospital". The work includes supply, laying, testing and commissioning of remote starter panel and control cables as per the relevant IS standards.

2. SCOPE OF WORK

- I. There are 03 nos. of pumps at MPA Hospital of which 02 nos. are 45KW and 01 no. is 11KW. These pumps are installed exclusively for fire-fighting purpose. The starter panel for these motor are located in the pump room. The proposed remote ON/OFF panel is required to be installed at a desired location in hospital premises.
- II. The contractor shall supply Cu armoured control cable of size 8C X 2.5sqmm of length 500 metres.
- III. Cable trench of 145 metres has to be excavated for laying of the control cables from main starter panel at 800 m3 tank to designated location in hospital premises.
- IV. The contractor shall lay 3 runs of 8C X 2.5 sqmm Cu armoured cable in the excavated trench and through the 6 inch Hume pipes at road crossings. One cable each for carrying control signals of pump motor.
- V. A length of 20mtrs cables will have to be saddled on wall at designated location in MPA hospital and at 800m3 tank pump room.
- VI. Terminating the ends of the above cable has to be done by providing suitable lugs, glands and connecting the same on both ends in panels. The gland shall be properly grounded to ensure safety.
- VII. The contractor shall Design, Manufacture, Supply, Install, test and commission Remote ON/OFF control panel at designated area in MPA Hospital in co-ordination with the Engineer-in-charge.
- VIII. All labours, materials, tools plants, machinery, equipment and any other things required for execution for work shall be arranged by the contractor at his own cost.

3. Applicable Standards:



I. The following shall be the Reference Standards for the work:

Code No. Title

i. IS 7098 Specification for PVC sheathed cables

4. DETAILED TECHNICAL SPECIFICATION

I. <u>SUPPLY, LAYING and TERMINATION of 8C X 2.5sqmm Cu armoured cable by</u> excavation.

i. Supply of 8C X 2.5sqmm Cu armoured cable

Supply and laying of 8C X 2.5sqmm copper LT underground cable of 1.1KV voltage grade, single layer of strip armoured, over all PVC sheathed conforming to IS standards with latest amendments with ISI mark.

ii. Excavation of cable trench in hard rock/ cement flooring/ bituminous road.

Excavation of cable trench of length 145 metres, size 40cm width x 75 cm depth in hard rock/ cement flooring and 100cm depth at bituminous road crossing. The excavated soil shall be backfilled in the trench and made good in original condition with cement concrete at road crossing.

iii. Laying of 8C X 2.5sqmm Cu armoured cable.

The cable shall be laid in the excavated trench and through 6 inch Hume pipes at road crossings, from main starter panel at MPA firefighting pumps near 800 m³ tank to a designated location in MPA Hospital to facilitate remote ON/OFF operation. The cables shall be saddled on walls at both the ends. The cables are to be laid as per IS: 1255. The trench shall be covered/backfilled with excavated soil and making it in original condition with cement concrete at road crossing. The Hume pipes shall be laid at an angle to avoid sharp cable bends at the point of entry and exit. At every 30mtrs a route marker has to be grouted for identification of the cable.

iv. Termination of 8C X 2.5sqmm Cu armoured cable.

The end termination of the cables shall be carried out by glanding the cable to the gland plate and crimping lugs confirming to relevant IS specification. All the control cables shall be labelled with ferrules at both the ends and a drawing indicating the same shall be handed over after work is completed. All the cables cores have to be terminated in connectors inside the remote control panel before being connected to lamps or push buttons.

II. DESIGN and SUPPLY of Remote ON/OFF control panel

 Design, Manufacture, Supply, Installation, testing and commissioning of Remote ON/OFF control panel Outdoor. The panel shall be designed to be IP 66 compliant/degree of protection dust, damp, vermin and weather proof fabricated from



SS-316 grade Sheet. It shall be provided with, single door type (Right side door hinge) with cam lock door sealing Gasket.

- ii. The panel shall be spacious for easy maintenance and shall be provided with following operations.
 - a. All three phase indications.
 - Remote ON and OFF control arrangement through push buttons for all 3 nos. pumps individually to enable remotely switch ON and OFF firefighting pumps installed at 800 m³ tank.
 - c. ON and TRIP indications, of all three pumps.
 - d. Labelling to be done on the control panel along with pump capacity to specify controls and indications of each pump individually.
- iii. Connecting cable shall be mounted in the Panel by means of suitable anti-corrosive hardware (nuts, bolts shall be of stainless steel). The Panel shall be complete in all respects with cable glands, lugs for incoming and outgoing cables.
- iv. Removable 2 mm thick SS gland plates shall be provided at the bottom for bringing in the external cables. The gland plate shall have provision for terminating the required cables.
- v. The minimum thickness of SS sheet used for the panels shall not be less than 2 mm for as per the relevant standards. All sheet metal work shall be pre-treated adequately for the removal of oil, grease, dirt and rust by cleaning and pickling method and then two coats of primer/zinc chromate shall be given after phosphating.
- vi. The panel shall be fixed on the wall using fasteners of 12mm dia. All the components shall be panel mounting type and stainless steel hardware and shall be provided with 2 Nos. SS terminals for Earthing.
- vii. The Earthing strip shall run through the length of the panel and nut bolt arrangement shall be made to connect the nearest earth pits.
- IX. The base frame of suitable size of the panel shall also be made up of stainless steel SS 316.
- X. The panel shall comply with all the latest IS standards for LT panel and in general and for all the components used within it.
- XI. The technical features specified are indicative. However, the contractor shall provide any other feature/accessories as found necessary for proper functioning of panel.



III. Installation, Testing and commissioning of Remote ON/OFF control panel

The contractor shall install control panel on the wall and secure it with fasteners at 1 meter height from the ground. After the panel has been wired as per the design, the entire system has to be tested at load in the presence of EIC.

5. OTHER TERMS AND CONDITIONS

- I. The contractor is advised to visit the site and get acquainted regarding the nature of the work involved at site conditions before quoting the offer.
- II. The Technical Specification "Annexure-I" and Schedule of Prices & Quantities "Annexure-II" to be read in conjunction to ensure the actual works involved.
- III. The contractor should engage skilled service personal with the relevant required tools and instruments for commissioning the same.
- IV. The Contractor personnel engaged in the work shall follow all safety, security and General Rules enforced by Mormugao Port Authority (MPA) and the Contractor will only be responsible for the same.
- V. MPA will not be responsible for any loss or damage of the men / materials / tools / plants engaged by the Contractor during the work at site / transportation.
- VI. The Contractor should indicate the GST No.
- VII. No advance payment will be made.
- VIII. Final payment will be made only after handing over the entire system with good working condition.
- IX. Power Supply will be provided free of cost by the Port. However, the Contractor should make his own arrangements to take power supply from the nearest source of supply.
- X. For any clarifications, the firm may contact the 'Executive Engineer at 2nd floor of the Administrative Office, Ph.0832-2594207/4253/4271.



ANNEXURE-II

PRICE SCHEDULE (BILL OF QUANTITIES)

Sr. No.	Description of work	Qty	Unit	Rate Per Unit (Rs)	Amount (Rs)
1 1	Supply of 8C x 2.5 sq. mm Copper armoured Cable. (as per technical specifications).	495	Mtrs.		
2	Excavation of cable trench in hard rock/ cement flooring/Bituminous road for laying of 8C x 2.5 sq. mm Copper armoured Cable 0.8 meter deep and 0.4 meter wide and backfilling the trench (as per technical specifications).	145	Mtrs.		
	Laying of 3 runs of 8C x 2.5 sq. mm Copper armoured Cable in trench (as per technical specifications).	145	LS		
4	Providing end terminations to cable with suitable copper lugs and connecting the cable in panels. (as per technical specifications).	1	Mtrs.		
1 7	Saddling the cable on wall at Pump room and near control panel.	60	Mtrs.		
- n	Design and Supply of remote ON/OFF control panel. (as per technical specifications).	1	No.		
_ /	Installation, testing and commissioning of remote ON/OFF control panel. (as per technical specifications).	1	LS.		
1 ×	Supply and installations of RCC Hume pipes of size 6 inch dia. and length 2 meters. (as per technical specifications).	8	Nos.		
9	Supply and Installation of LT cable route markers along the route of the cable at an interval of 30 meters. (as per technical specifications).	5	Nos.		
1111	Miscellaneous items such as fasteners, cable ties, connectors, etc. required to complete the work.	1	LS		
	TOTAL (Rs)				

(In Words Rup	es	only).	
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Note:

1. The rates quoted shall be inclusive of transportation, lodging and boarding, but exclusive of GST. GST shall be paid extra as applicable.