

जा. क्र./१४५ /यांउसिविक्र.२/चंद्र/तां.शा.१/कोटगल/२०१५	कार्यकारी अभियंता, यांत्रिकी उपसा सिंचन विभाग क्र.२, बल्लारपुर रोड,बाबुपेठ, चंद्रपूर-४४२४०३ यांचे कार्यालय
☎ :- (०७१७२) २२७३८२	
फॅक्स :- (०७१७२) २२७३८२	
ई.मेल :- mlidn2@rediffmail.com	
	दिनांक :- १५/०४/२०१५

प्रती,

मा. अधिक्षक अभियंता (यां.),
यांत्रिकी मंडळ,
नागपूर.

विषय :- कोटगल उपसा सिंचन योजना जि. गडचिरोली
पंपींग यंत्रसामुग्री व संलग्न उपकरणांची बजेटरी ऑफर क्र. १ (सन २०१५-२०१६) यांत्रिकी संघटनेच्या संकेत
स्थळावर प्रसिद्ध करणेबाबत.

संदर्भ :- १) महाराष्ट्र शासन जलसंपदा विभाग, शासन परिपत्रक क्र. दरसुची २३१० (५४/१०) लपार/मंत्रालय मुंबई ३२
दि. ३०/०९/२०१३
२) आपले पत्र क्र.यांमनाग/तां२/उसियो/धा.क्र.५३/कोटगल/८८८/२०१५ दि. १२/०३/२०१५.

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महोदय,

उपरोक्त संदर्भित पत्राच्या अनुषंगाने, विषयांकित योजनेवर बसविण्यात येणाऱ्या ३७० अश्वशक्ती, दोन नग पंप व
संलग्न उपकरणांची या पत्रासोबत पाठविण्यात येत असलेली बजेटरी ऑफर क्र. १ (सन २०१५-२०१६) यांत्रिकी संघटनेच्या संकेत
स्थळावर (www.mahayamtriki.gov.in) प्रसिद्ध करण्याची कार्यवाही करण्याचे करावे ही विनंती.

कार्यालयाचे नाव व पत्ता	कार्यकारी अभियंता, यांत्रिकी उपसा सिंचन विभाग क्र. २, बल्लारशा रोड, बाबुपेठ, पोलिस चौकीजवळ, चंद्रपूर ४४२ ४०३ ई.मेल :- mlidn2@rediffmail.com
बजेटरी ऑफर प्रसिद्ध करण्याची अंतीम तारीख	दिनांक २०/०४/२०१५
बजेटरी ऑफर पाठविण्याचा कालावधी	जाहीरात प्रसिद्ध झाल्यापासून १५ दिवस

सहपत्र :- बजेटरी ऑफर क्र. १ (सन २०१५-२०१६)

एक प्रतीत

(ई. म. आत्राम)
कार्यकारी अभियंता,
यांत्रिकी उपसा सिंचन विभाग क्र.२,
चंद्रपूर

प्रत :- मा. मुख्य अभियंता, जलसंपदा विभाग (यां), नाशिक यांना माहिती व योग्य कार्यवाहीस्तव सविनय सादर.
सहपत्र - वरीलप्रमाणे

Budgetary Offer No.1/ 2015-2016

Name of Work: Design,Manufacturing,Supply,Errection,Testing and Commissioning of Forced Water Lubricated Verticle Turbine Pump - 2 Nos. with allied equipments at Kotgal L.I.S,
Dist.:- Gadchiroli.

Sr. No.	Qty	Unit	Description of Item	Rate	Amount	Remarks
1	2	No.	Item No.1 (A) – Vertical Turbine Pumps Providing, installing at site of works and giving test to full Capacity, vertical turbine pumps non-pull out type, complete with strainer, suction bowl, column assembly, Discharge head, Motor stools. Flexible coupling, sole Plates, base frame foundation, non reversible rotation Ratchet arrangement, etc. suitable for following duties, Specification a) Duty point discharge 845 LPS b) Duty point head 29.1 m c) Maximum rpm synchronous 750 rpm d) Efficiency 1. Bowl efficiency 91 % 2. Pump efficiency 89 % 3. Overall efficiency 85 % e) Head range 21.83 m to 32.01 m f) Lubrication system Forced water g) Discharge type Sub Surface h) No. of stages Single Stage only. i) Column pipe dia. Minimum (ID) 750 mm I) Motor floor level 202.83 m II) Sump Bottom Level 186.55 m j) Column pipe thickness minimum 5 mm k) Line shaft dia. Minimum 70 mm l) Sole plate thickness minimum 60 mm. m) Diameter of shaft enclosing tube (minimum) 105 mm suitable for item (k) above. n) Suspended length of column pipe =16 m Approx.			
2	1	Set	Item No. 1(B) – Forced Water Lubrication and Cooling System Providing, installing at site of works and giving satisfactory test of Forced water lubrication and cooling system with all piping arrangments. i) Pressure Filters (2 no.) ii) Booster pump 2no.:- (1 no working + 1 no stand-bye))			

Sr. No.	Qty	Unit	Description of Item	Rate	Amount	Remarks
3	2	No.	Item No. 2 Non Return Valve 700 mm Dia. Providing, installing at site of works and testing cast iron, non slam, double flanged type non return valve conforming to relevant IS5312 (Part-II) with by pass arrangement complete, suitable for following duties specification a) Diameter 700 mm b) P.N. rating 1.0 c) Working pressure 3 Kg/cm ² d) Differential working pressure 3 Kg/cm ² e) Maximum working pressure 6 Kg/cm ² f) Maximum rate of flow in LPS 1100 LPS			
4	2	No.	Item No. 3 : Butterfly Valve 700 mm Dia. Providing, installing at site of works and testing double flanged butterfly valves conforming to relevant IS/BS 5155 with electrical actuators with 415 volts A.C. Motors D.O.L. starting etc. complete, suitable for following duties, specifications and conforming to detailed specification under item no. 3 of detailed itemwise specification under vol. II. a) Diameter 700 mm b) P.N. rating 1.0 c) Working pressure 3 Kg/cm ² d) Differential working pressure 3 Kg/cm ² e) Maximum working pressure 6 Kg/cm ² f) Maximum rate of flow in LPS 1100 LPS			
5	2	No.	Item No. 5 : Kinetic Air Valve 150 mm Dia. Providing, installing at site of works and testing kinetic air valves of 150 mm dia. For releasing air from the delivery pipes, etc.			
6	75	Mtr.	Item No. 5 : Delivery pipelines 700 mm Dia. Providing and joining at site of works and testing delivery pipe lines including jointing of all in between valves and up to rising main/manifold complete. Suitable for following duties, specification (a) Diameter (NB) 700 mm (b) Wall Thickness 5 mm (c) Hydraulic test pressure 15.0 kg/cm ²			
7	2	No.	Item No. 6 : Rubber Expansion Joint 700 mm Providing, installing at site of works and testing of rubber expansion joints in pump delivery pipe line complete, suitable for following duties, specification (a) Diameter (NB) 700 mm (b) Internal test pressure 15.0 kg/cm ² (c) Vacuum test pressure in mm of Hg 760 mm			
8	2	No.	Item No. 7 : Supply, Installation and testing of Orifice plate / meter in the delivery pipe line with proper calibration.			

Sr. No.	Qty	Unit	Description of Item	Rate	Amount	Remarks
9	2	No.	Item No. 8 : H.T. Induction Motors 6.6 KV, 300 KW, 3 Phase, 750 rpm, 50 Hz. Providing, installing at site of works and testing to full capacity, solid shaft squirrel cage induction motors, CACW type, F Class insulation, suitable for operation on voltage mentioned below, 3 phase, 50 cycles per second with voltage variation of +/- 6% and frequency of +/-3%, suitable for direct coupling with pumps under Item no. 1(A) as per the latest revision of IS 325, IS 4722 and other relevant IS specification to meet the power requirement of pumps with 5% additional capacity over entire operating range suitable for following duties, specification (a) Operating voltage 6.6 KV (b) Minimum BHP (KW) rating of motor 300 KW			
10	2	No.	Item No 9: FCMA soft starter Providing and installing at site of work and testing of FCMA soft starter suitable for above motor mentioned in item No.8			
11	2	No.	Item No. 10 : Capacitor Cubicle 6.6 KV, 3 Phase, 50 Hz, 100 KVAR Providing, installing at site of works and testing of 6.6 KV, 3 phase, 50 cycles per second capacitor cubicles for the motors mentioned against Item no. 8 above, to improve the power factor to 0.95. The KVAR capacity of the capacitor cubicles should not exceed the magnetizing KVAR of motor.			
12	1	Set	Item No. 11 : H.T. Panel 6.6 KV, 3 Phase, 800 Amps Providing, installing at site of works and testing of sheet steel, dust and vermin proof, indoor floor mounting type H.T. Panel, completely assembled, wired tested, painted, conforming to relevant ISS, complete suitable for following duties, specification (a) Electrical System 6.6 KV, 3 Phase, 50 Hz, A.C. with fault level of 25 KA (b) Capacity 630 Amps. (c) Panel shall comprise of the following (i) 2 Nos. incoming breakers with following rating Current 630 Amps Minimum rupturing capacity 250 MVA (ii) 1 No. Bus coupler breaker with following rating Current 630 Amps Minimum rupturing capacity 250 MVA (iii) 3 nos. outgoing breakers with following rating Current 630 Amps Minimum rupturing capacity 250 MVA (1) Breakers for outgoing feeders for motors (2 No. + 1 Spare) with the following ratings. Current 630 Amps Minimum rupturing capacity 250 MVA			

Sr. No.	Qty	Unit	Description of Item	Rate	Amount	Remarks
13	1	Set	<p>Item No. 12 : L.T. distribution Panel 415 V, 3 Phase, 800 Amps.</p> <p>Providing, installing at site of work and testing of 415 volts, 3 phase, 50 c/s 800 amps. L.T. distribution panels comprising of following</p> <p>(i) 415 Volt, 630 amps. A.C.B. for auxiliary transformer incoming feeder 1 no.</p> <p>(ii) 415 Volt, 100 amps. H.R.C. switch fuses unit 3 nos.</p> <p>(iii) 415 Volt, 63 amps. H.R.C. switch fuses unit 4 nos.</p> <p>(iv) 415 Volt, 32 amps. H.R.C. switch fuses unit 3 nos.</p> <p>(v) 415 Volt, 16 amps. H.R.C. switch fuses unit 5 nos.</p> <p>2 nos. electrical motor starter D.O.L. type reversible push button operated suitable for B.F. valves under Item no. 2 above.</p>			
14	1	Set	<p>Item No. 13 : Batteries, Battery charger & D.C.D.B.</p> <p>Providing, installing at site of work & testing Batteries, battery chargers & D.C.D.B. complete unit comprising of following</p> <p>i) Batteries 2 X 55 cell 110 volts D.C. 200 AH Hour capacity along with all accessories.</p> <p>(ii) Battery charger 110 volts, 30 Amp. For above batteries comprising of one float charger and one boost charger respectively complete with protective relays, etc.</p> <p>(iii) D.C.D.B. comprising of two incoming double poleminiature circuit breakers (MCB) 50 Amps. 2 Nos., 55 amps., & 13 nos. 10 amp. outgoing feeder with MCB or switch fuse unit, complete will all accessories, etc</p>			
15	1	Set	<p>Item No. 14 : Temperature Scanner Panel</p> <p>Providing, installing at site of work & testing of temperature scanner panel comprising of 3 nos. microprocessor temperature scanners having 12 points each to monitor H.T. motor winding and bearings temperature,</p>			

Sr. No.	Qty	Unit	Description of Item	Rate	Amount	Remarks
16			<p>Item No. 15 : Preparation of cable schedule and Supply, Installation and Testing of cable as below. Providing, installing at site of work & testing of suitable cables & wires complete as per requirement of pump house as given below</p> <p>300 Mtr a) 50 sq.mm X 3 core, 6.6 KV X.L. P.E. AL armored earthed cable H.T. Panel to H.T. Motor</p> <p>200 Mtr b) 35 sq.mm X 3 core, 6.6 KV AL XLPE armoured cable, (From H.T Pannel to Capacitor).</p> <p>300 Mtr c) 50 sq.mm X 3.5 core, 1.1 KV armoured PVC insulated AL cable L.T. Panel to E.O.T. and LT Panel to Booster Pump,</p> <p>250 Mtr d) 6 sq.mm x 4 core, 1.1KV PVC armoured Insulated AL cable L.T.Panel to BFV actuator.</p> <p>Control Cable</p> <p>125 Mtr e) 4 sq.mm X 3 core, 1.1 PVC Insulated copper conductor cable</p> <p>125 Mtr f) 6 sq.mm X 4 core, 1.1 KV PVC Insulated copper conductor cable</p> <p>250 Mtr g) 1.5 sq.mm X 4 core, 1.1 KV PVC Insulated copper conductor cable</p> <p>300 Mtr h) 2.5 sq.mm X 7 core, 1.1 KV PVC Insulated copper conductor cable</p> <p>200 Mtr i) 1.5 sq.mm X 27 core, 1.1 KV PVC Insulated copper conductor cable</p>			
17	1	LS	<p>Item No. 16: Earthing Providing, installing at site of work earthing comprising of adequate no. of earth sttions, earth bard and individual double earthing to all electrical equipment</p>			
18	1	No	<p>Item No. 17 : Water Level Indicator. Providing, installing at site of work & testing of water level indicator, operating on 230 volts, 50 C/s.AC supply</p>			
19	1	Set	<p>Item No. 18: Remote Control Panel Providing, Installing at site of work & testing of sheet steel floor mounted vermin proof and powder coated and tropicailized remote control panels with control switches, ammeter, annunciation facia windows, indication lamps etc. for control & monitoring of breakers, pump/motor ancillary equipment/panels, etc.</p> <p>(a) Incoming breakers/Bus couplers 3 nos.</p> <p>(b) Pump motor breakers 2 nos.</p> <p>(c) Booster pumps 2 nos.</p> <p>(d) Butterfly valves 2 nos.</p> <p>(e) Water level indicators 2 nos.</p> <p>(f) Capacitors 2 nos.</p> <p>(g) Cooling system 2 nos.</p>			
20	1	Lot	<p>Item No.19: Spares & tools Providing at site of works tools and spares complete as per list attached</p>			

Sr. No.	Qty	Unit	Description of Item	Rate	Amount	Remarks
21	1	Job	Item No. 20: Testing, Commissioning, Trial operation & Training to Department staff Testing, Commissioning, Trial operation of the complete equipment and performance tests and training to department staff			

Executive Engnieer,
Mechanical Lift Irrigation Dn. No.2,
Chandrapur.