

“जलसंपदा विभागाच्या संकेतस्थळावर कृपया भेट द्या -<https://wrd.maharashtra.gov.in>”

जा.क्र. / ७४७ /उसियांविक्र.२चंद्र / ताशा-२ / धा.क्र.४४ / ब.ऑफर / २०१७	कार्यकारी अभियंता यांत्रिकी उपसा सिंचन विभाग क्र.२, बाबुपेठ, चंद्रपुर - ४४२४०३ यांचे कार्यालय
☎ :- (०७१७२) २२७३८२	
फॅक्स :- (०७१२) २२७३८२	
ई मेल :- mlidn2@rediffmail.com	दि. १२/०४/२०१७.

प्रति,

मा. अधिक्षक अभियंता  
यांत्रिकी मंडळ , नागपुर

**विषय :-** गुरुकुंज मोझरी उपसा सिंचन योजनेच्या व्ही.टी. पंपींग यंत्रासामुग्रीच्या यांत्रिकी व विदयुत घटक भागाचे संकल्पन,निर्मिती, पुरवठा , उभारणी,चाचणी व कार्यान्वितीकरण कामाची बजेटरी ऑफर संकेतस्थळावर प्रसिध्द करणेबाबत.

महोदय,

या पत्रासोबत गुरुकुंज मोझरी उपसा सिंचन योजनेच्या व्ही.टी. पंपींग यंत्रासामुग्रीच्या यांत्रिकी व विदयुत घटक भागाचे संकल्पन,निर्मिती, पुरवठा , उभारणी,चाचणी व कार्यान्वितीकरण कामाची बजेटरी ऑफर क्रं. १ / २०१७-१८ (GST चा अंतर्भूत करुन ) यांत्रिकी संघटनेच्या संकेतस्थळावर ([www.mahayantriki.gov.in](http://www.mahayantriki.gov.in)) प्रसिध्द करण्यात यावी हि विनंती.

कार्यालय	कार्यकारी अभियंता, यांत्रिकी उपसा सिंचन विभाग क्र.२, चंद्रपुर
बजेटरी ऑफर प्रसिध्द करण्याची अंतिम तारीख	दि. १७.४.२०१७
बजेटरी ऑफर स्विकारण्याची अंतिम तारीख	दि. २६.४.२०१७.

सबब आपले माहीती व पुढील योग्य कार्यवाहीस्तव सविनय सादर.

सहपत्र :- बजेटरी ऑफर क्र. ०१/२०१७-१८ — १ प्रत

कार्यकारी अभियंता  
यांत्रिकी उपसा सिंचन विभाग क्र.२  
चंद्रपुर

**Budgetory Offer No. 1 / 2017-2018**

Name of Work: Design with Quality Assurance plan at all stages ,Manufacturing, Supply, Erection, Testing and Commissioning of Vertical Turbine Pump – 3 Nos. with allied equipments at **Gurukunj Mozri L.I.S**, Th. Tivsa Dist.:- Amravati.

Sr. No.	Qty	Unit	Description of Item	Rate	Amount
1	3	No.	<b>Item No.1 (A) – Vertical Turbine Pumps :-</b> Providing, installing at site of works and giving test to full Capacity, Vertical Turbine Pump non Pull out type , complete with strainer, suction bowl, Column Assy , Discharge Head , Motor Stools , Flexible Coupling , Sole plate , Base frame foundation, Non Reversible rotation ratchet arrangement, etc. suitable for following duties, Specification		
			a) Duty point discharge - 650 LPS		
			b) Duty point head - 61.31 mtr		
			c) Maximum rpm synchronous - 750 rpm		
			d) Efficiency 1. Bowl efficiency - 91 % 2. Pump efficiency - 89 % 3. Overall efficiency of pump - 85 %		
			e) Head range - 46 m to 68 m .		
			F) Discharge type - Sub Surface		
			g) No. of stages - Double Stage only.		
			h) Column pipe dia. Minimum (ID) - 650 mm		
			i) Column pipe thickness minimum - 10 mm		
			j) Line Shaft Diameter - 85 mm		
			k) Sole Plate Thickness - 100 mm I) Motor floor level 323.70 mtr II) Sump Bottom Level 313.30 mtr.		
			l) Suspended length of Column pipe = 9.0 mtr. Approx.		

Sr. No.	Qty	Unit	Description of Item	Rate	Amount
2	3	No.	<p><b>Item No. 2 Non Return Valve 600 mm Dia. ( Cast steel Class 150 )</b></p> <p>Providing, installing at site of works and testing. Non slam, double flanged type non return valve conforming to relevant IS5312 (Part-II) with by pass arrangement complete, suitable for following duties specification .</p> <p>a) Diameter 600 mm</p> <p>b) P.N. rating 1.6 / Class 150</p> <p>c) Working pressure 6.2 Kg/cm2</p> <p>d) Differential working pressure 6.2 Kg/cm2</p> <p>e) Maximum working pressure 20.0 Kg/cm2</p> <p>f) Maximum rate of flow in LPS 845 LPS</p>		
3	03	No.	<p><b>Item No. 3 : Butterfly Valve 600 mm Dia. ( Cast steel Class 150 )</b></p> <p>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 .</p> <p>a) Diameter 600 mm</p> <p>b) P.N. rating 1.6 / class 150</p> <p>c) Working pressure 6.2 Kg/cm2</p> <p>d) Differential working pressure 6.2 Kg/cm2</p> <p>e) Maximum working pressure 20.0 Kg/cm2</p> <p>f) Maximum rate of flow in LPS 845 LPS</p>		
4	03	No.	<p><b>Item No. 4 : Kinetic Air Valve 150 mm Dia. – PN -1.6 ( Tampered proof )</b></p> <p>Providing, installing at site of works and testing kinetic air valves of 150 mm dia. For releasing air from the delivery pipes, etc.</p>		
5	75	Mtr.	<p><b>Item No. 5 : Delivery pipelines 600 mm Dia.</b></p> <p>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</p> <p>(a) Diameter (NB) 600 mm</p> <p>(b) Wall Thickness 10 mm</p> <p>(c) Hydraulic test pressure 15.0 kg/cm2</p>		

Sr. No.	Qty	Unit	Description of Item	Rate	Amount
6	03	No.	<p><b>Item No. 6 : Dismantal Joint 600 mm</b>  Providing, installing at site of works and testing of Dismantal joints in pump delivery pipe line complete, suitable for following duties, specification.</p> <p>(a) Diameter (NB) 600 mm  (b) Internal test pressure 15.0 kg/cm<sup>2</sup></p>		
7	03	No.	<p><b>Item No. 7 : Supply, Installation and testing of Orifice plate / meter in the delivery pipe line with proper calibration.</b></p>		
8.	03	No.	<p><b>Item No. 7 : H.T. Induction Motor 6.6 KV, 480 KW , 3 Phase , 750 rpm , 50 Hz.</b>  Providing , Installing at site of works and testing to full capacity , solid shaft squirrel cage induction motor . CACW type , F Class insulation , suitable for operation on voltage metioned 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.</p> <p>a) Opearting Voltage – 6.6 Kv  b) Minimum BHP ( KW) rating of motor – 480 KW.</p>		
9.	03		<p><b>Item No 8 : FCMA soft starter</b>  Providing and installing at site of work and testing of FCMA soft starter suitable for above motor mentioned in item No. 1</p>		
10.	03	No.	<p><b>Item No. 9 : Capacitor Cubicle 6.6 KV, 3 Phase, 50 Hz, 140 KVAR</b>  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.</p>		

Sr. No.	Qty	Unit	Description of Item	Rate	Amount
11	1	Set	<p><b>Item No. 10 : H.T. Panel 6.6 KV, 3 Phase, 800 Amps</b>  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, pained, 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 40 KA  (b) Capacity <b>800 Amps.</b>  (c) Panel shall comprise of the following  (i) <b>2</b> Nos. incoming breakers with following rating  Current <b>800 Amps</b>  Minimum rupturing capacity <b>250 MVA</b>  (ii) <b>1</b> No. Bus coupler breaker with following rating  Current <b>800 Amps</b>  Minimum rupturing capacity <b>250 MVA</b>  (iii) <b>4</b> nos. outgoing breakers with following rating  Current <b>400 Amps</b>  Minimum rupturing capacity <b>250 MVA</b>  (1) Breakers for outgoing feeders for motors  <b>(3 No. + 1 Spare)</b> with the following ratings.  Current <b>400 Amps</b>  Minimum rupturing capacity <b>250 MVA</b></p>		
12.	1	Set	<p><b>Item No. 11 : L.T. distribution Panel 415 V, 3 Phase, 500 Amps.</b>  Providing, installing at site of work and testing of 415 volts, 3 phase, 50 c/s <b>500</b> amps. L.T. distribution panels comprising of following  (i) <b>415</b> Volt, <b>500</b> amps. A.C.B. for auxiliary transformer incoming feeder 1 no.  (ii) 415 Volt, 100 amps. H.R.C. switch fuses unit 3 nos.  (iii) 415 Volt, 63 amps. H.R.C. switch fuses unit 4 nos.  (iv) 415 Volt, 32 amps. H.R.C. switch fuses unit 3 nos.  (v) 415 Volt, 16 amps. H.R.C. switch fuses unit 5 nos.  2 nos. electrical motor starter D.O.L. type reversible push button operated suitable for B.F. valves under Item no. 2 above.</p>		
13.	1	Set	<p><b>Item No. 12 : Temperature Scanner Panel</b>  Providing, installing at site of work &amp; 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
14	1	Set	<p><b>Item No. 13 : Batteries, Battery charger &amp; D.C.D.B.</b>  Providing, installing at site of work &amp; testing Batteries, battery chargers &amp; 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 pole miniature circuit breakers (MCB) 30 Amps. 2 Nos., 55 amps., &amp; 13 nos. 10 amp. outgoing feeder with MCB or switch fuse unit, complete will all accessories, etc</p>		
15.			<p><b>Item No. 14 : Preparation of cable schedule and Supply, Installation and Testing of cable as below.</b>  Providing, installing at site of work &amp; testing of suitable cables &amp; wires complete as per requirement of pump house as given below</p> <p>a) 95 sq.mm X 3 core, 6.6 KV AL XLPE armoured cable, (From H.T Pannel to Capacitor).</p> <p>b) 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>c) 6 sq.mm x 4 core, 1.1KV PVC armoured Insulated AL cable L.T.Panel to BFV actuator.</p> <p><b><u>Control Cable</u></b></p> <p>e) 4 sq.mm X 3 core, 1.1 PVC Insulated copper conductor cable</p> <p>f) 6 sq.mm X 4 core, 1.1 KV PVC Insulated copper conductor cable</p> <p>g) 1.5 sq.mm X 4 core, 1.1 KV PVC Insulated copper conductor cable</p> <p>h) 2.5 sq.mm X 7 core, 1.1 KV PVC Insulated copper conductor cable</p> <p>i) 1.5 sq.mm X 27 core, 1.1 KV PVC Insulated copper conductor cable</p>		
	200	Mtr			
	300	Mtr			
	250	Mtr			
	125	Mtr			
	125	Mtr			
	250	Mtr			
	300	Mtr			
	200	Mtr			

Sr. No.	Qty	Unit	Description of Item	Rate	Amount
16	1	LS	<b>Item No. 15: Earthing</b> Providing, installing at site of work earthing comprising of adequate no. of earth sttions, earth bard and individual double earthing to all electrical equipment.		
17	1	No	<b>Item No. 16 : Water Level Indicator.</b> Providing, installing at site of work & testing of water level indicator, operating on 230 volts, 50 C/s.AC supply		
18	1	Set	<b>Item No. 17: Remote Control Panel</b> Providing, Installing at site of work & testing of sheet steel floor mounted vermin proof and powder coated and tropicalized remote control panels with control switches, ammeter, annunciation facia windows, indication lamps etc. for control & monitoring of breakers, pump/motor ancillary equipment/panels, etc. (a) Incoming breakers/Bus couplers 3 nos. (b) Pump motor breakers 4 nos. (c) Butterfly valves 3 nos. (d) Water level indicators 2 nos. (e) Capacitors 3 nos.		
19	1	Lot	<b>Item No.18: Spares &amp; tools</b> Providing at site of works tools and spares complete. as per list attached		
20	1	Job	<b>Item No. 19: Testing, Commissioning, Trial operation &amp; Training to Department staff</b> Testing, Commissioning, Trial operation of the complete equipment and performance tests and training to department staff		
21	1	Job	<b>Sump Model Test</b>		

Note :- The Quated Rates are inclusive GST .

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