## Government of Maharashtra Water Resources Department

Office Of the Executive Engineer, Mechanical Lift Irrigation Division No.2, Babupeth, Chandrapur, - 442403

Phone No. - 07172 - 227382, Email - mlidn2@rediffmail.com

Budgetary Offer No. 1/2025 - 26

Budgetory offer in sealed envelope (Excluding of GST) are invited for estimation purpose for following mentioned by the Executive Engineer, Mechanical Lift Irrigation Division No.2, Babupeth, Chandrapur-442403 as per the guideline mentioned in Government Circular No.Darsuchi 2310/(54/10) Lapa-2/mantralaya, Mumbai-400032 Dt.03.06.2010. Support further details interested parties shall visit website http://wrd.maharashtra.gov.in

Sr.No.	Name of Work	Name of Office	Opening Schedule		
	Submerged centrifugal Pump - Irrigation Division		Publishing Date - 07 /07 /2025		
1		Executive Engineer, Mechanical Lift Irrigation Division No.2, Babupeth, Chandrapur,- 442403	Closing Date - 15 /07/20 <b>25</b>		
			Opening Date - 16 /07/2025		

## **Terms & Conditions:-**

- 1 Budgetory Offer has been invited for estimation purpose only.
- 2 Budgetory Offer rates should be exclusive of GST & valid for one year.
- 3 Budgetory Offer rates should be inclusive of transportation & damage charges.
- 4 Regunta Lift Irrigation Scheme is Located at Sironcha taluka, Dist. Gadchiroli which is 200 Km away from Gadchiroli

(S.S. pani)

Executive Engineer

Mech.Lift Irr.Division

Chandrapur

## SPECIFICATION FOR BUDGETORY OFFER

Budgetory Offer No. - 1/2025 - 26

Name of work :- Design, manufacturing, supply, erection, testing & commissioning of 03 Nos. Submerged centrifugal Pump - Vertically Mounted with motor for Reguntha Lift Irrigation scheme, Dist-. Gadchiroff.

r. No.	Description of Item	Estimated Qty	Unit	Rate (Rs)	Amount (Rs)
1	2	3	4	5	6
	Item No.1 – Submerged centrifugal Pump- Vertically Mounted with				
1	motor	5. 4			
	Providing, installing at site of works and giving test to full Capacity, Submerged centrifugal Pump- vertically Mounted with motor. Motor housing shall be confirming to IP- 68self frame Surface Water cooled (TESWC). Pump shall be suitable for 3 % floating sand. Pump casing & cover shall be of material grade FG260 or GS25 or EN-JL1040. Pump impeller shall be stainless steel CF8M, SS430- Shaft & Hardware shall be in SS 316. solid shaft squirrel cage induction motors, frequency of +/-3%, suitable with pumps as per the latest revision of IS 325, IS IEC 60034 Motor winding with class H insulation with temp. rise limited to class F. The motor works on 6.6 KV ± 10 %., 3 Phase, 50Hz, AC, Duty S1, supply with cable guard, thrust bearing, 2 RTD's for top & bottom bearing, 3 RTD's for Motor winding, water leak senors etc. The Pump set shall be suitable for direct coupling with with suction strainer & dischrage outlet as per manufacturer's design. The Pump shall be started on FCMA starter. Appropriate control system, protection& interlock should be provided for over temp, water leak, over load, low water level with fault annuciation & trip alarm and Pump monitoring unit. The pump shall be supplied with appropriate spares / accessories as per manufaturer's recommendations etc. complete for following duties, Specification and conforming to the detailed specification as per D.T.P.The Pump shall be supplied with autocoupling & Guide rail arrangement. The tolerances for rate of flow, total head and efficiency are as per 3B-ISO 9906-1999 to HI 14.6-2011/ISO 9906-2012	3	Nos		
9.1	a) Duty point discharge 0.453 m3/s				
	a) Duty point discharge 0.453 m3/s				
	b) Duty point head 44.03 m				
	b) Duty point head 44.03 m c) Maximum rpm synchronous 1000				
	b) Duty point head 44.03 m c) Maximum rpm synchronous 1000 d) Pump efficiency 79 % (minimum)				
1	b) Duty point head 44.03 m  c) Maximum rpm synchronous 1000  d) Pump efficiency 79 % (minimum)  e) Head range 33.02 to 48.43 m				
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	b) Duty point head 44.03 m  c) Maximum rpm synchronous 1000  d) Pump efficiency 79 % (minimum)  e) Head range 33.02 to 48.43 m  f) Application Raw water  g) Discharge type Surface  h) No. of maximum stages Max. One Stage Only				
	b) Duty point head 44.03 m  c) Maximum rpm synchronous 1000  d) Pump efficiency 79 % (minimum)  e) Head range 33.02 to 48.43 m  f) Application Raw water  g) Discharge type Surface  h) No. of maximum stages Max. One Stage Only  i) Submersible Motor cable Suitable length from motor to Breaker shall be				
	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages Max. One Stage Only i) Submersible Motor cable Suitable length from motor to Breaker shall be provided				
	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages Max. One Stage Only i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain  40 m				
	b) Duty point head  44.03 m  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m  f) Application Raw water g) Discharge type Surface h) No. of maximum stages Max. One Stage Only i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain 40 m k) Maximum no. of pumps working in parallel Upto 3 Nos.				
	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages Max. One Stage Only i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain 40 m k) Maximum no. of pumps working in parallel Upto 3 Nos. l) Supply Voltage 6600 V				
	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain 40 m k) Maximum no. of pumps working in parallel Upto 3 Nos. l) Supply Voltage 6600 V m) Pump HP 340 HP				
	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages Max. One Stage Only i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain 40 m k) Maximum no. of pumps working in parallel Upto 3 Nos. l) Supply Voltage 6600 V m) Pump HP 340 HP n) Motor kW 300 KW				
	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain 40 m k) Maximum no. of pumps working in parallel Upto 3 Nos. l) Supply Voltage 6600 V m) Pump HP 340 HP				
2	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages Max. One Stage Only i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain 40 m k) Maximum no. of pumps working in parallel Upto 3 Nos. l) Supply Voltage 6600 V m) Pump HP 340 HP n) Motor kW 300 KW	1	· No		
2	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages Max. One Stage Only i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain 40 m k) Maximum no. of pumps working in parallel Upto 3 Nos. l) Supply Voltage 6600 V m) Pump HP 340 HP n) Motor kW 300 KW Item No.2: Water Level Indicator. Providing, installing at site of works & testing c1 water level indicator, operating on 230 volts, 50C/s, AC supply conforming to the detailed specification	1	· No		
2	b) Duty point head  c) Maximum rpm synchronous d) Pump efficiency 79 % (minimum) e) Head range 33.02 to 48.43 m f) Application Raw water g) Discharge type Surface h) No. of maximum stages Max. One Stage Only i) Submersible Motor cable Suitable length from motor to Breaker shall be provided j) Lifting chain 40 m k) Maximum no. of pumps working in parallel Upto 3 Nos. l) Supply Voltage 6600 V m) Pump HP 340 HP n) Motor kW 300 KW  Item No.2: Water Level Indicator.  Providing, installing at site of works & testing c1 water level indicator, operating on 230 volts, 50C/s, AC supply conforming to the detailed	1	· No		

. No.	Description of Item	Estimated Qty	Unit	Rate (Rs)	Amount (Rs)
	Item No.4– Sump model test of Pump House				
	Sump model test to ensure the vortex free and caviatation free operation of 3 no. submersible type centrifugal pumps of 340 HP each.	1	Job		
5	Item No. 5 – Testing, commissioning, trial, operation and training to Departmental Staff with P.G. test.	1	Job		
	Item No. 6 – FCMA soft Starter			4.1	
6	Providing and Installing at site of work and testing of FCMA soft starter suitable for above motor 300KW/408HP and conforming to the detailed specification.	3	Nos		2.11
7	Item No.7 –Capacitor Cubical 6.6 KV,3 Phase,50 Hz,150 KVAR  Providing, instaling at site of works and testing of 6.6 KV,3 phase,50 Hz. 150 KVAR capacitor cubicle for the motors mentiond against item no.7 above to improve the power factor to 0.95. The KVAR capacity of the capacitor cubicles should not exceed the magnetising KVAR of motor.	3	Nos		
8	Item No. 8 : H.T. Pannel 6.6 KV,3 Phase, 630A	3 10			
0	Providing, Installing at site of work & testing of sheet steel, dust and vermin proof, indoor floor mounting type H.T. pannel, complately assembled wire tested, pained, confirming to relevent IS, complate suitable for following duties, specification.				
	(a) Electrical system 6.6 KV,3 Phase,50 Hz,A.C. with fault level of 25 KA	. 1	Set		
•	(b) Panel shall comprise of the following (i) 2 Nos. incoming breakers & 1No. Bus coupler breaker with following rating		3.7		10 A
D	current 630 Amps	1			
<u>.</u> •	Minimum rupturing capacity 250 MVA	1			-0, -
	(ii) Breakers for out going feeders for motors (3+1) with the following ratings.	, of Asset			1 1 2 4
	current - 630 Amps .			i.	7 9
. 1	Minimum rupturing capacity - 250 MVA		1		
	Item No.9: L.T. Distribution panel 415 V, 3 Phase, 630 Amps.  Providing installing at site of work and testing of 415 volts,3 phase,50 c/s 630 amps.L.T. distribution panels comprising of following as per detailed specification  (i) 415 volt,630 amps.A.C.B.for auxiliary transformer incoming feeder 1 No.			1 3	
9	(ii) 415 volt,100 amps. H.R.C switch fuses unit 2 Nos.	1	Set		
	(iii) 415 volt,63 amps. H.R.C switch fuses unit 2 Nos.			10 92 10 22-3	Marie Same
	(iv) 415 volt,32 amps. H.R.C switch fuses unit 3 Nos.				
	(v) 415 volt,16 amps. H.R.C switch fuses unit 4 Nos. (vi) 3 Nos. electrical motor starter D.O.L. type reversible push button				
	operated suitable for B.F.valves under item no.3 above		_	-	
	Item No.10 –Batteries,Battery Charger & D.C.D.B.				
	providing installing at site of work and testing Batteries, Battery charger & D.C.D.B. complate unit conforming to the detailed specification				
*	i) Batteries - V.R.L - Valve Regulated lead acid dry type battery (2x55 cell 11 volts D.C 200 Ah hour Capacity along with all accessories.	0 1	Set		
10	ii) Battery charger 110 volts,30 Amp. For above Batteries comprising of flot charger Cum boost charger-02 No.complate with protective relay,etc.				
	iii) D.C.D.B comprising of two incoming double poleminiature circuit breake (MCB) 80 amps,2 nos., 10 amps.,10 nos. outgoing feeder with MCB or switch fuse unit,complate will all accessories.,etc				

. No.	Description of Item	Estimated Qty	Unit	Rate (Rs)	Amount (Rs)
	Item No.11: Preparation of cable schedule & supply, instalation & testing of cable as below. (including cable tray)				
	Providing, installing at site of work & testing of suitable cables & wires complate as per requirement of pump house as given below conforming to the detailed specification as per D.T.P.				
	a) 50 sq.mm X 3 core, 6.6 KV X.L. P.E. AL armored earthed cable H.T. Panel to Motor,soft starter and Capacitor.	100	mtr		
	b) 10 sq.mm X 3.5 core,1.1 KV armoured PVC insulated / L cable , L.T.Panel to Battery charger.	50	mtr		
w w	Control Cable				
	d) 2R X 20C X 1.5 sqmm 1.1 PVC Insulated copper conductor cable	50	mtr		
Ÿ	d) 4 sq.mm X 3 core, 1.1 PVC Insulated copper conductor cable	100	mtr		
11	e)1.5 sq.mm X 4 core, 1.1 KV PVC Insulated copper conductor cable	100	mtr		
E	f) 2.5 sq.mm X 7 core, 1.1 KV PVC Insulated copper conductor cable	100	mtr		
8	g) 1.5 sq.mm X 27 core, 1.1 KV PVC Insulated copper conductor cable (if required)	300	mtr		
	h) Supplying and erecting under floor junction box of size 300mm x300mm x55 mm.with flush finish powder coated appearance having knock outs for UPVC duct entry of size 60x25 mm and 95x35 mm ducts complete as per specification no. WG-MA/UFB .(If required)	3	Nos		
	i) 2Rx(15Cx1.5mm) + 2Rx(12Cx1.5mm )+ 1Rx(3x35+3x25/3)cable from pump to HT panel	100	mtr		- 10 TH 10
12	Item No.12: Earthing  Providing, installing at site of works earthing comprising of adequate no. of earth station, earth bars & individual double earthing to all electrical equipment conforming to the detailed specification	1	LS		
1 1 2	GI earth strip				
	Item No.13:Temperature Scanner Panel and Remote Control Panel (i)Providing, Installing at site of work & testing of temperature scanner panel comprising of 3+1 nos. microprocessor temperature scanners having 10 points each to monitor H.T. motor winding and bearings temperature, complete detailed specification				
13	(ii)Providing, installing at site of work & testing of sheet steel floor mounted vermin proof and powder coated and tropicalized remot control panels with control awitches, ammeter, annunciation facia windows, indication lamps etc suitable for following items and conforming to the detailed specification	State of the state	Set		
	a) incoming breaker/Bus coupler 2+1Nos. b) nump motor breaker 3+1 Nos.				
	b) pump motor breaker 3+1 Nos. c) Auxiliary transformer breakers 1 No.				
	e)Butterfly valves 3 Nos.		e series in		
	f) Water level indicators 1Nos.				
	h)Capacitors 3 Nos.				

Note- 1) Regunta LIS is Located at Sironcha taluka, Dist. Gadchiroli which is 200 Km away from Gadchiroli City .

2) Rate quoted Should be Excluding of GST

(S.S. Clani)

Executive Engineer

Mechanical Lift Irrigation Division No.2

Chandrapur