

KERALA WATER AUTHORITY

No. D1-516/2021

Office of the Executive Engineer,
P.H.Dn., Irinjalakuda, Dt.: 25-02-2021

From

The Executive Engineer

To

M/S National Electrical works,
Chengamanadu,
Ernakulam Dt, Ph.9847514062

Sir,

Sub:- JJM – Eriyad and Edavilangu panchayath – Common components – Source improvement of 15 MLD Water Treatment plant- Supplying, erection and commissioning of 140 HP motor pump set at 15 MLD Water Treatment Plant and Supplying, erection and commissioning of 75 HP Vertical Turbine Motor pump set at Raw water pump house in Vynthala.

Ref:- This office E-Tender No. 49/EE/ PHD/ IJK/2020 -21 due date 11.02.2021.

With reference to the above, the Contractor **M/S National Electrical Works, Chengamanadu** **Sri. M.P. Shajan, Maliparambil House, P.O. Palazhi** is here by informed that his tender for the above work has been accepted at **Rs 3979316.44/- ie 8.8% above the Estimate rate** less cost of all departmental materials specified to be supplied and recovered at the rates given in the conditions of contract quoted by him. He is directed to attend this office on or before **01.03.2021** with required stamp paper (0.1% of accepted PAC) Stamp fee of Rs. 4000/- and **Post office time deposit Pass Book/National Savings Certificate** for the security mentioned below and execute an agreement and start the work with in a week, after getting necessary instructions from the Sub Divisional Officers.

1. Before executing the Agreement on stamp paper, the contractor should submit a security deposit of **Rs.1,19,400/-** for the fulfillment of the contract. The E.M.D. will be released on production of Deposit Receipt. **The 50% of security deposit and Performance guarantee must be Treasury saving deposit compulsory & balance of Security Deposit and Additional Performance Guarantee as Treasury deposit/post office saving deposit/NSC deposit from nationalized bank for the fulfillment of the contract.**

2. Any failure in this directions will be liable to result in forfeiture of his special and permanent Earnest Money and the cancellation of the proposed contract and the contractor shall be liable to pay the Govt. the entire loss that may be caused to Govt. by the retender or re-arrangement of the work or otherwise consequent on the contractor's failure to execute the agreement for the work as provided for the clause-2 of the Notice inviting tenders and all such loss shall be recovered from him under the provisions of the Revenue Recovery Act or otherwise.

3. It must be understood that on no account the rates once fixed will be increased.

4. The work should be completed in **3 month.**

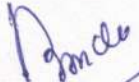
5. All the terms and conditions of the Notice inviting tenders and tender shall be binding on the contractor.

6. The accepted PAC will be limited to estimate rate if revised AS is not received from DWSM.

All terms and conditions of the Notice Inviting Tenders and tender shall be binding on the contractor. You are directed to submit MOU from licensed plumber of KWA before executing the agreement. Since there is a direction from Hon'ble High Court that the functional household tap connections shall be carried out only through the KWA licensed plumbers. Also you are hereby informed that the accepted amount will be limited to the AS amount of the work (approved by DWSM) if proposal for revised AS is rejected, since the quoted rate is above sanctioned AS.

Yours faithfully

EXECUTIVE ENGINEER


Copy to the Asst. Exe. Engineer, PH Sub Dn. **Irinjalakuda**." Asst. Engineer, PH Section, **Cherpu, Kozhikode**

" Agreement/original/duplicate.

DESPATCHED

25/2/2021

KERALA WATER AUTHORITY P.H. DIVISION IRINJALAKUDA

ACCEPTED SCHEDULE

JJM - Eriyad and Edavilangu panchayath - Common components - Source improvement of 15 MLD Water Treatment plant- Supplying, erection and commissioning of 140 HP motor pump set at 15 MLD Water Treatment Plant and Supplying, erection and commissioning of 75 HP Vertical Turbine Motor pump set at Raw water pump house in Vynthala

Name of work:-

Sl No.	Qty	Description of work	Unit	Rate in		Amount
				Figures	In Words	
1	140.000 Hp	<p>SUPPLY AND ERECTION OF 140 HP MOTOR PUMP SET AT CLEAR WATER PUMP HOUSE</p> <p>1. PUMP SET :- Supply, erection testing and commissioning of KWA pre-qualified reputed make centrifugal pump set 140 HP with bronze/SS impeller, SS shaft and CI pump casing with suitable type base plate with coupling, coupling guard foundation bolts & nuts etc. complete suitable for coupling the pump and motor above the base plate etc. complete including providing suitable concrete foundation including cost of cement sand and metal and dismantling RCC for laying Suction pipe etc. complete. The duty condition is as follows.
Discharge - 157 LPS,
Total head - 45 Mtrs
Suction head - 3.4 Mtrs
Length of Suction Pipe - 12.0 Mtrs Up to Motor
2.Speed1500rpm MOTOR:- Supply, erection, testing and commissioning of KWA pre-qualified reputed make Horizontal solid shaft foot mounted TEFC squirrel cage induction motor suitable for the above pump working 3 phase 50 Hz AC supply, working voltage 415 V/3300V (select the suitable). The motor shall confirm to EEFI/IS 325 including providing suitable concrete foundation including the cost of cement sand and metal etc. complete For 3300V motors digital motor protection relay shall be included in starter as per present IE rules. Flexible coupling shall be used for coupling of pumps and motors.
3. STARTER:- Supply, erection, testing and commissioning of suitable rating (Fully Automatic starter with air break contact for less than 100 HP and for above 100 HP FCMA soft starters to be used.) starter suitable for the above motor with over voltage and under voltage protection, single phase preventer, overload relay with motor protection relay with main contractor and bypass contactor as per IE rules and code of practice etc.complete.
4.PANEL BOARD:- (suitable) for operating two pump sets but one pump set at a time) Supply, erection, testing and commissioning of cubical type floor mounted MS fabricated dust and vermin proof common control panel board consisting of 1 No. suitable capacity MCCB as incomer and 2 Nos of suitable capacity MCCB as outgoing (The two MCCBs are interlocking with each other) providing suitable size Aluminium bus bar interconnect the above MCCBs and fitted with 3 Nos of indicator lamps, 1 No. voltmeter with selector switch, 1 No. Ammeter with selector switch, Change Over Switch, etc. Complete and provided with a common earth bus for the entire panel and interconnect with the MCCBs as per IE rules and code of practice. The panel shall be fitted on a common base frame on a</p>				

	<p>suitable foundation.

5. CABLING WORK: -Supply, laying, testing and commissioning of suitable size (150 sq. mm or More) XLPE cables for the above pump set from panel board to starter and from starter to motor, considering energy conservation.

6.EARTHING:- Supply of all materials and providing suitable earthing by using suitable size pipe/plate earthing GI/copper strip buried in the ground and giving double earthing to the motor, starter, panel board, etc. as per IE standards.

7. CAPACITOR:- Supply, erection, testing and commissioning of heavy duty APP capacitor with ISI for the motor to get a power factor above 0.95. The capacitor shall conform to IS 2834-

8. VALVES:- Supply of suitable size best quality heavy duty ISI marked CI double flanged sluice valve and Non-return valve with suitable pressure rating. Fitting of valves shall include proper RCC support especially for Non-return valves, in case of positive suction pump set sluice valve should be in suction as well as delivery sides for easy repair works.

9. SUCTION AND DELIVERY PIPE CONNECTIONS:- Supply and fitting of suitable size best quality MS /CI pipe of a thickness not less than 8 mm for Required Length. Suitable for the above pump set and suitable size foot valve and connection the suction pipe and valve with suitable flanges, nut and bolts IR sheet, etc. complete and connection the delivery side of the pump with the valves and suitable specials to connect with the pumping main. It the dia of the suction pipe is 150 mm CI pipes, bends & specials shall be provided.

10. TRAIL RUNNING AND COMMISSIONING: - The Motor was Trail run as per the direction of Departmental Officer

11.INSPECTION PF PUMP/MOTOR/STARTER/PANEL BOARD FOR PUMP SETS

12.MAINTENANCE DURING A PERIOD OF TWO YEAR

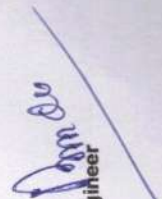
Overall efficiency. 70%.For CF pump sets the rate is inclusive of 2 yr mace period.</p>	<p>nos</p> <p>16995.50</p>	<p>Rupees Sixteen Thousand Nine Hundred Ninety Five And Paise Fifty Only</p> <p>2379370.00</p>
2	<p>Fixing connected Mechanical Components</p>		
2.001	<p>Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge.In cement mortar</p> <p>1.704 cum</p>	<p>nos</p> <p>1104.44</p>	<p>Rupees One Thousand One Hundred Four And Paise Forty Four Only</p> <p>1881.97</p>
2.002	<p>Supplying and fixing 250x125 mm ISMB Rolled steel I section across the Pump house including all cost for labor,light crane,scaffolding etc complete</p> <p>2.000 No</p>	<p>meter</p> <p>21848.57</p>	<p>Rupees Twenty One Thousand Eight Hundred Forty Eight And Paise Fifty Seven Only</p> <p>43697.14</p>
2.003	<p>supply and fixing chain pulley (chain block) with the capacity of 5 T, length of the chain required is as per the site condition</p> <p>1.000 No</p>	<p>cum</p> <p>7230.81</p>	<p>Rupees Seven Thousand Two Hundred Thirty And Paise Eighty One Only</p> <p>7230.81</p>

1.705	sqm	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground within 50 meters lead:	meter	360.15	Rupees Three Hundred Sixty And Paise Fifteen Only	614.06
2.832	sqm	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work	meter	102.75	Rupees One Hundred Two And Paise Seventy Five Only	290.99
3		SUPPLYING,ERECTION AND COMMISSIONING OF 75 HP RAW WATER PUMP HOUSE				
3.001	75.000 Hp	<p>Pump:-Supplying of new vertical turbine Motor pump set with Bronze/stainless steel impeller and new motor KWA pre qualified reputed make vertical solid shaft mounted TEFC squirrel cage Vertical induction motor suitable for the above pump working 3 phase 50 Hz AC supply, working voltage 415 V/3300V(select the suitable).Motor:- The motor shall confirm to EEF/IS 325 including providing suitable concrete foundation including cost of cement sand and metal etc. complete. For 3300 v motors digital motor protection relay shall be included in starter as per present IE rules. Flexible coupling shall be used for coupling of pumps and motors.suitable for the above pump with speed 1475 rpm as per IE/KSEI specifications with non reversing arrangements which designed for 181.16 lps against a head of 22 meter.STARTER:-Supply, erection,testing and commissioning of suitable rating (Fully Automatic starter with air break, contact for less than 100 HP and for above 100 HP FCMA starters to be used) Starter suitable for the above motor over voltage and under voltage protection,single phase preventer, over load relay with motor protection relay with main contractor and bypass contractor as per IE rules and code of practice etc.complete. Auto transformer starter 1 No. and 1 No change over switch for working one pump set at a time and suitable heavy duty N/R valve with D/F valve PN No-1.6 and supplying ,Pressure Gauge and floor mounting type MS fabricated cubical panel board (L&T)with following accessories such as capacitors switches, interlocking arrangements,copper bus bar distribution, cubical type TPN switches, fuse unit(Havells/Seimens/L&T) Volt meter with selector switches, phase indicator lamp and other required components and fittings conforming to IE rules and IS specifications suitable for the above motors.
The panel board shall have facilities and capacity for operating 2 Nos. of motors of 80 HP capacity. Supplying suitable gauge PVC insulated copper cable suitable size and cable termination materials such as cable socket, cable box for working 75 HP motor as per IE/KSEI/KSEB specifications including capable for bearing starting load for connecting meter board to panel board and panel board to starter and starter to motor
and supplying column pipe and delivery pipeline for connecting existing delivery line required length and size as per site conditions and earthing materials, good quality power capacitor of reputed make (L&T Shreem) with ISI mark for the motors to maintain a power factor more than 0.95 which</p>				

	<p>suitable for 75 HP motor

Erection of pump set, motor with column pipe and all other items supplied, including all labour charges for the erection of pump set, fixing the motor providing cable connections from meter board to panel board, panel board to starters, starter to motor, earthing all electrical equipment's as per IE rules and regulations and electrical inspectorate specifications; fixing power capacitor and fabricating y type delivery pipeline and connecting to two numbers pump delivery pipeline if it is necessary including all welding charges etc. and dismantling , for the satisfactory commissioning of the pump set, including all civil works such as providing foundation with foundation bolt in CC 1 : 1/2 : 3 using 20 mm metal, plastering etc. including cost of cement & steel etc-cleaning and resetting 1 nos existing sluice valve and all civil works such as dismantling the existing unused pump set if it is required and making good the dismantled and all incidental works satisfactorily completion of works etc. complete and taking trial run. The rate including 2-year warranty
</p>	Hp	16325.00	Rupees Sixteen Thousand Three Hundred Twenty Five Only	1224375.00
			Tendered PAC Rs		3657459.96
			Tender 8.8% above		321856.48
			Total Accepted PAC Rs		3979316.44
Rupees Thirty Nine Lakh(s) Seventy Nine Thousand Three Hundred Sixteen And Paise Forty Four Only					

Contractor


Executive Engineer