

OFFICE OF THE EXECUTIVE ENGINEER  
JAL SHAKTI (PHE) MECHANICAL DIVISION SOUTH AWANTIPORA.

E-MAIL ID:-xenphemechsouthawp@gmail.com Fax/phone. 01933-295537



Allotment Order No: 27 of 07/2023

M/S Srinagar Mechanical Works  
Prop: Shamima Bashir  
R/o: Wazirbagh, Srinagar.  
Head Office: Wazirbagh, Srinagar  
GST No: 01ALYPB5236A2ZK  
Cell No: 9419013353

AA Accorded vide Order No.	SE/Hyd/Spn/76 Dated: 27/01/2021
Tech. Sanction Accorded vide Order No.	EE/JSD/Mech/Awp/JJM/10 of 08/2022
Adv. Cost:	Rs. 15,00,000/-
Allotted Cost:	Rs. 13,65,803/-

**Subject:-** Supply, installation, testing and commissioning of electro-mechanical equipments at water supply scheme Udaipora Kanlibagh of Jal Shakti (PHE) Mechanical Division South Awantipora under JJM.

**Reference:-**

1. This office e-NIT No.: 71 of 2022-23 of 18/11/2022 issued under endorsement No.: JSD/PHE/MDSA/3797-3810 Dated: 18/11/2022 read with Corrigendum No.: JSD/PHE/MDSA/Camp/22-24 Dated: 01/01/2023
2. Superintending Engineer Hydraulic Circle Pulwama/Shopian [HQ] Shopian (Member Secretary JJM) Office Letter No.: SE/Hyd/Spn/DB/1622-24 Dated: 08-06-2023.
3. Acceptance of rates/extension of validity of your tender confirmed by you.

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Dear Sir,

For and on behalf of Lt. Governor of J&K U.T contract for execution of aforementioned job is hereby fixed with you on item rate basis. This is in response to your online bid and subsequent acceptance of rates, specifications, terms and conditions as contained in Annexure "A & B" of this allotment order.

Encl. 09 hrs

No.: MDSA/1135-42

Dated: 06/07/2023

Yours Sincerely

Executive Engineer  
Jal Shakti PHE Mechanical Division  
(South) Awantipora  
(Member JJM)

Copy to the:

1. Chief Engineer Jal Shakti (PHE) Department Srinagar for information.
2. District Development Commissioner (Chairman DJJM) Pulwama for information.
3. Superintending Engineer Jal Shakti (PHE) Mechanical Circle (South) Srinagar for information.
4. Superintending Engineer Jal Shakti (PHE) Hydraulic Circle Pulwama/Shopian for information.
5. Executive Engineer Jal Shakti (PHE) Division Awantipora for information.
6. Provisional Head, TPIA JJM Kashmir, (WAPCOS Limited) Corporate Office 76-C Institutional area Sector-18 Gurugram-122015 (Haryana) for information.
7. Assistant Executive Engineer Jal Shakti (PHE) Mech. Sub Division Pampore for information & necessary action. He will ensure execution of work strictly in accordance with the rates, specifications, terms / conditions & within the stipulated time, besides, the cost of work should not exceed beyond allotted cost. In case of any delay in completion of work, the reasons shall be justified.
8. File concerned.

Name of work: Supply, installation, testing and commissioning of electro-mechanical equipments at water supply scheme Udaipora Kanlibagh of Jal Shakti (PHE) Mechanical Division South Awantipora under JMM.

General Terms and Conditions:-

1. TIME OF COMPLETION: The scheme shall have to be completed/tested/commissioned within a period of 45 days from the date of issue of this allotment order.
2. AGREEMENT: A formal agreement deed shall be executed by the firm with the department within a period of 07 days from the date of issue of this allotment order after deposition of performance security @ 03% of allotted cost. However, non drawl of agreement will not prevent the contract from being enforced upon you.
3. PENALTY: In the event the contractor failing or delaying the work or a part thereof, & or non-complying with any of the terms and conditions of the contract, the NIT & the Agreement, the Department, without prejudice to the remedies available under the law in force in J&K UT, may terminate the contract after seven days' notice, and or recover the amount of loss caused by failure/delay or default of the contractor. The amount of such recoveries shall be determined by the Superintending Engineer PHE Mechanical Circle South Srinagar and or impose a penalty as the Government /Department may determine and or forfeit the performance security and or resort to any or all the remedial actions available under the law in force in the UT of J&K at the time of the dispute.
4. ARBITRATION: In case of any dispute arising at any stage between the contractor and the Department, the same shall be referred to the Superintending Engineer PHE Mechanical Circle South Srinagar /Govt. of J&K who may give a decision or nominate any other person of Government for arbitration. The decision to such arbitration shall be final and binding on both the parties.
5. PERFORMANCE SECURITY DEPOSIT: Soon after issuance of allotment order, the firm has to deposit performance security in the shape of CDR/FDR/BG valid for 18 months pledged to Executive Engineer PHE Mechanical Division (South) Awantipora within 07 days which shall be released after expiry of defect liability period/report of concerned AEE (After fulfillment of all contractual obligations). Failing to produce performance security, the firm is liable to be debarred for participation in future tendering in this Division and same shall be recommended to higher offices and other Govt. offices of UT of J&K.
6. JURISDICTION OF COURT: All disputes pertaining to this contract shall be subject to the jurisdiction of the Courts of J&K UT only.
7. TERMINATION OF CONTRACT: The department reserves the right to terminate the contract at any stage in case performance of the firm is found un-satisfactory in terms of any or all clauses of the NIT/Contract/Agreement in vogue.
8. ADVANCE PAYMENT: The Department shall in no case entertain any condition or request of making advance payment of any kind to the contractor during the execution of the work.
9. TAXES, DUTIES LEVIES etc:- The rates offered by the Department shall be firm and final. Payment of Income Tax/GST, Octroi, Toll tax, Entry tax, Cess service tax duties and other levies etc. of the central or the UT Government and incidental charges of any shall be the responsibility of the contractor/firm.
10. FORCE MAJEURE CLAUSE: Any failure or omission to carrying out the provision of the contract shall not give rise to any claim by the department or the contractor one against the other if such failure or omission arises from the Act of God which shall include all natural calamities such as fire, floods, earthquakes, hurricane strikes, riots, embargoes from any political or other reasons beyond the control of parties including the war whether declared or not civil war or a state of insurrection.
11. ENGAGEMENT OF LABOURS: The contractor shall not engage any workman below the age of 18 years. Firm/Contractor shall also comply with the provisions of labour laws and rules framed thereof and as prevalent in the UT of J&K. The contractor shall be responsible for any accident to the human life which may occur during the execution of work, compensation as shall be provided under law or any law will be payable by the contractor.
12. INSURANCE: The contractor shall insure all work-man at his own cost till the completion of work and take over by the department.
13. DEFECT LIABILITY PERIOD:- The defect Liability period shall be for a period of 12 Months which shall commence after the successful completion of Trial run, during the defects Liability period (DLP) the firm shall have to operate & maintain the scheme as it is required for its successful running & as per Standard Engineering Practices, to the full satisfaction of the department. The bidder shall be responsible to make good & remedy at

(Contd. On page...2<sup>nd</sup> ...)

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Executive Engineer

his own expense any defect in works which is noticed during the DLP. In case any defect remains unattended by the firm at the completion of DLP, the department may extend the DLP for such time as deemed fit for getting the defect rectified subject to a maximum ceiling of 6 Months.

14. TRANSIT INSURANCE: Prior to dispatch, the ordered equipment shall be insured through a Nationalized Insurance Company up to its final destination, against all transit risks. The firm should, therefore, take appropriate insurance policy in advance for covering the transit of the goods, charges for which shall be borne by the tenderer and shall be included in his quoted rates. The department shall pay no extra charges on this account.

15. SUBLETTING OF WORK: The bidder shall not sublet the whole or part of the work. The bidder shall not assign the work or any part thereof or any benefit or any interest thereon or any claim arising of the contract, without prior written consent of the allotting authority.

16. Liquidated Damages (LD): In the event of firm's/joint venture failing, declining, neglecting or delaying the supplies / works or in the event of any damage occurring or being caused by the firm/ joint venture or in the event of any default or failure by the firm in complying with any of the terms and conditions of the contract, the Department shall with or without prejudice to any other remedies available to it under any law for the time being enforce in the UT:

- a) Terminate the contract after 15 days' notice  
and/or
- b) Recover the amount of loss caused by damage, failure or default, as may be determined by the department.  
and/or
- c) Recover the extra cost, if any, involved in allotting contract to other party.  
and/or
- d) Impose Liquidated damages on account of delay beyond the schedule completion period to the tune of 0.5% of the delayed portion of contract every week but not exceeding 10% value of the contract.  
and/or

e) Forfeit the performance security and blacklist the firm.

17. THIRD PARTY MONITORING: The allotted works shall be subject to check by the third party monitoring agency appointed by the Department in Kashmir. The agency shall check the quality of works executed by the agencies, quality of materials used for construction and quality of machinery installed in each scheme. The TPIQM's role shall be that of an assistant to the Employer's Representative for the purpose of monitoring and evaluation of the performance of the Contract during the Contract Period.

18. STORAGE AT SITE: The bidder shall at his own cost make arrangements for proper storage especially towards Rain and Snow damages of the equipment/ materials at sites till its erection/completion. For the purpose the bidder shall, with the approval of Engineer in charge construct temporary storage accommodation for equipment/ material at site for which land shall be provided by the department near the site of work.

19. OPERATION AND MAINTENANCE MANUALS: The bidder shall supply, free of cost to the Department, six complete sets of operation and maintenance manuals for the Pumping Equipment. The delivery of these manuals shall be made by the bidder to the Engineer along with the supply of equipment. The manuals shall be appropriately bound in book form and shall contain all necessary instructions regarding operation, preventive maintenance, repairs, trouble shooting, overhauling etc.

20. OEM Certificate: The contractor shall produce all relevant test certificates of the manufacturer to the Engineer in-charge before start of the work. The test certificates of the equipment's on whole or all accessories/ attachments and mountings thereof shall be appended with the invoice at the time of submission of the claim to Divisional office. Failure to do so shall result in non-acceptance of invoice/bills by the Divisional office.

21. CLARIFICATION: If any clarification is required by the Firm/contractor in relation of technical specifications, the same shall be had from the office of the Assistant Executive Engineer concerned/ Executive Engineer PHE Mechanical Division South Awantipora before the date of start of work.

(Contd. On page 3<sup>rd</sup> -)

(Page 3<sup>rd</sup> -)

Executive Engineer

22. **CONSIGNEE/PAYING AUTHORITY:** The consignee/paying authority in respect of electromechanical component and associated civil works shall be the concerned Executive Engineer, Jal Shakti (PHE) Mechanical Division Awantipora. Besides, the supervision of the various components of the civil work shall be carried out by the concerned Division under the overall coordination of the concerned Superintending Engineer Hydraulic Circle.
23. **TERMS OF PAYMENT:** All payments to the contractor for fulfilling the contract will be made as per the unit rates of Price Schedule (BOQ). All payments will be made in Indian Currency and will be subject to deduction of Income tax, GST, Cess at source, on the rates as are in vogue at the time of release of payment:-
- 65% of the contract value shall be paid on receipt of the material at site (as per the BOQ) in full & verification thereof by the concerned Assistant Executive Engineer.
  - 15% of the contract value shall be released on installation of ordered equipment/material in full at site.
  - 10% of the Contract Value shall be released after successful testing and commissioning of the entire equipment on full load, commissioning and trial run.
  - 10% of the Contract Value shall be released after commissioning of the scheme and satisfactory performance of the equipment for the period as enunciated in warranty clause. However the balance amount can be released against furnishing of Bank Guarantee for an equivalent value valid for three months beyond the expiry of the warranty period of the contract.
24. **WARRANTY:-** The Firm/contractor shall be bound for satisfactory performance of equipment/work 12 months after the successful completion of trial run. If during warranty period, any malfunctioning/defect arises, the firm shall have to rectify the same within a period of ten days of receipt of intimation. In case of any failure on the part of the firm to remove the defect, the Department may get the defects rectified by any other agency and cost thereof shall be recovered from the firm and shall be recommended for further punitive action as governed under the relevant clause of contract including blacklisting.
25. **TRIAL RUN:-** After completion of work, the firm/contractor will have to make a trial run of the scheme for a period of 03 months during which the manpower required for operation shall be provided by the Department.
26. **EQUIPMENT MAKE:** The supplied material/equipments should confirm as per specification of the contract as well as make confirmed by the Firm/contractor.
27. The work done claim should be supported with Geo tagged photographs before, during and after execution of the job.
28. **SITE OFFICE:** - The Firm/Contractor has to maintain at his own cost a suitable site office at the site of work to which the Department sends communications/instructions.
29. **TRAINING OF DEPARTMENTAL STAFF:** - The bidder shall arrange at his own cost and risk to depute at least one competent Engineer of the equipment manufacturer to train up to twelve departmental representatives in the operation & maintenance of the equipment at site. This training shall be for duration of at least 04 consecutive months and shall commence from the date of successful commissioning of the equipment or as may be mutually agreed upon. To groups of Departmental Engineers shall also be deputed to bidders/manufacturers works for short duration to obtain training free cost in the operation & maintenance of the equipment.
30. **DRAWING & QUALITY ASSURANCE PLAN:** - The Firm/Contractor shall be necessarily furnish within two weeks of the date of placement of this order which shall be approved by the Department within two weeks from the receipt by the consignee:-
- Sectional drawing of pumps.
  - General Arrangement Drawings (GAD)/ layout of the equipment fully dimensioned for pumps, motors, starters, shunt capacitors, panels, delivery manifold, cables etc.
  - Detailed circuit diagrams of LT Panels, Starters, Shunt Capacitors etc.
- Quality assurance plan (QAP) of each piece of equipment to Third Party Inspection Agency (TPA) and Department for their approval.
- No manufacturing/fabrication activity shall be started by the Firm without approval of the drawings of each ordered equipments by the competent authority. Additional time consumed due to observations/summary rejection of QAP/GAD shall not be considered in the delivery period of the contract and the bidder shall be wholly and solely held responsible for the delay thus caused.

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(Page 4<sup>th</sup> ...)

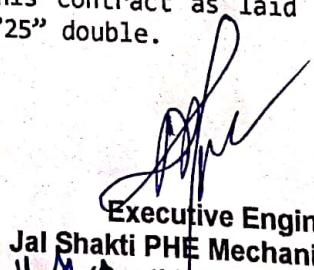
Executive Engineer  
*[Signature]*

**31. INSPECTION & TESTING:-** Before dispatch from the works of the OEM, the electro-mechanical equipment shall be inspected by a third party inspection agency i.e. M/S CEIL/Rites etc. New Delhi. However, the Firm (Bidder) shall make payment to the Inspection Agency (in case of 3<sup>rd</sup> Party Inspection) which shall subsequently be reimbursed by the Department. The successful tenderer shall intimate the Department and the Inspecting Agency/Authority in advance regarding the readiness of the equipment for dispatch and shall furnish test certificates. It shall be responsibility of the suppliers to tie up with the third party nominated for inspection and get necessary inspection of the material done within the delivery period. Any delay on the part of the third party shall not be entertained as an excuse for timely supply of material. The product/ material at site shall be inspected by Assistant Executive Engineer concerned or any other official(s) of the department designated by the concerned Executive Engineer. Any modifications to the works as specified in the specifications considered to be necessary for smooth and trouble-free operation of the equipment by the Department or the third-party inspection agency, the firm shall have to execute the same without any extra cost, to the best satisfaction of the department. The firm shall as such keep the department informed about arrival of material at site. It shall be obligatory on the part of the firm to rectify the defects pointed out by the AEE, if any, and also to incorporate any modification within the scope of work which may be deemed necessary for better performance/finish and workmanship. The supplier upon demand by the department or its representative shall rectify or replace defective unsuitable equipment. The Department reserves the right to nominate his representative for inspection of the goods at the works of the supplier/ manufacturers. As such the department at all reasonable times shall have access to the works and to the site and to all workshops and places where work is being executed and where material / manufactured articles and machinery is being obtained. In case of Sub-Station and power/feeder lines, the firm shall have to obtain a clearance certificate from the concerned inspection Division of the Power Development Department. The list of electromechanical equipment in which third party inspection from CEIL/RITES/WAPCOS is to carried on:-

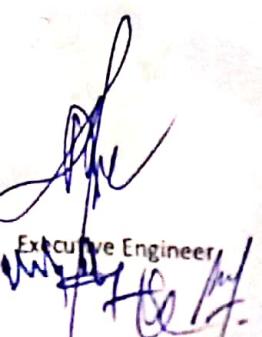
- 1) DG Set > 100 KVA.
- 2) Pumping Unit > 100 HP (Horizontal and Vertical)
- 3) Valves >300 mm
- 4) Pipe > 200mm dia
- 5) HT Transformers > 300 KVA
- 6) Voltage Stabilizers > 500 KVA
- 7) Iron Removal Plant

For items other than those manufacturers test certificate shall have to be provided. The HT transformers shall have to be got inspected from the corresponding wing of Power Development department and the necessary certificate shall be submitted along with the manufacturers test certificate.

32. The work is executed strictly in close supervision of AEE/JE/Supervisory staff concerned. However, the civil work if involved should be executed under close supervision of civil counterpart.
33. **WATCH & WARD OF WORKS:** The Firm shall in connection with the work provide and maintain at his own cost all lights, guards, fencing and watching, when and where necessary or required by the Department for the protection of the work or safety and convenience of the Public etc.
34. All other terms and conditions shall be the part of this contract as laid down in e-NIT/SBD/GFR-2017/e-procurement manual 2019 and PWD form "25" double.

  
Executive Engineer  
Jal Shakti PHE Mechanical Division  
(South) Awantipora  
(Member J.M.)

No.	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Allotted/ Accepted Rate	Amount
1.00	<b>Electro-Mechanical Equipments of WSS Udaipora Kanlibagh</b> <p>Supply, Installation, Testing &amp; Commissioning of 12.5 HP, non clog Pumping Unit as per IS 5600 at Raw Water Stage</p> <p><b>PUMP - Discharge :</b> 8000 GPH    <b>Head :</b> 40 Mtrs</p> <p>Type of pump = non-clog, Open well Submersible Vertical Pump</p> <p>Solid Handling Capacity 20mm (Minimum)</p> <p>Quality of water = Raw water to be handled</p> <ul style="list-style-type: none"> <li>• <b>MATERIAL OF CONSTRUCTION:</b></li> <li>• Pump Casing = Cast Iron    Impeller = Stainless Steel</li> <li>• Pump Shaft = Stainless Steel    Motor Body = Cast Iron/SS</li> <li>• Sealing = Dual mach seal</li> <li>• The bowl plate shall be provided with name plate depicting all specifications</li> </ul> <p><b>MOTOR -</b></p> <ul style="list-style-type: none"> <li>• Type = Squirrel Cage 3-Phase Induction Motor</li> <li>• Method of starting = Star – Delta/DOL (as specified)</li> <li>• Frequency = 50Hz + 3%    Voltage = 415 ± 6%, - 15% 3 phase</li> <li>• Class of insulation = F</li> <li>• Sealing = Dual mach seal. Provided with thermal and overload protection.</li> </ul> <p>The motor shall be made of corrosion resisting materials to resist corrosion under normal conditions and the motor shall have a name plate depicting all specifications</p> <p>Dual Mechanical Seals (01 No) and Bearings (02 No) for the pumping unit must be provided as spare parts for preventive maintenance by the firm, for each pumping unit.</p> <p>Note: Test certificate having the Serial No. of the Pumping Unit along with the performance curve in duplicate from the Manufacturer must be produced on delivery of the item and pumping unit is to be approved from the concerned Sub Divisional office before procuring</p> <p>(Make: KSB/Kirloskar/Wilo)</p>				
2.00	<p>Supply, Installation, Testing &amp; Commissioning of 15 HP Submersible Pumping Unit as per IS 8034 with following specification are as under :</p> <p><b>PUMP : Discharge :</b> 6500 GPH    <b>Head :</b> 75 Mtrs</p> <p><b>Efficiency :</b> Not less than 50%    <b>Speed :</b> 2900 Rpm</p> <p><b>Type of pump :</b> Mixed flow.    <b>Type of fluid to be handled :</b> Clear Water</p> <p><b>MATERIAL OF CONSTRUCTION:</b></p> <p>Impeller = Stainless Steel    Pump Shaft = Stainless Steel SS 410.</p> <p>Pump Casing = Cast Iron/Stainless steel</p> <p><b>IMPELLER:</b></p> <p>Impeller is of the enclosed or semi – enclosed type and properly balanced. Enclosed Impellers equipped with seal rings on their hubs.</p> <p><b>COUPLING:</b></p> <p>A suitable coupling arrangement provided with pump set.</p> <p><b>Non Return Valve:</b> -</p> <p>Non Return Valve of the suitable size provided above the pump discharge case.</p> <p><b>MOTOR:- Rating:</b> 15 HP</p> <p>Method of starting = Star – Delta    Speed = 3000 (Sync).</p> <p>Frequency = 50 ± 3 % Hz    Working Voltage = 380-415 ± 15% V, 03 phase    Efficiency = Not less than 90%    Class of insulation = F</p> <p>Submersible motor should be water filled water lubricated squirrel cage type having capacity for above pumping parameters and working on 3 phase; AC supply ranging from 380 to 415 volts, 50Hz. The motor should be sealed by radial rings to avoid mixing of well water with motor filled water.</p> <p>a) The job includes providing and fitting of interlocking arrangement against any failure of coupling. It must be fabricated out of MS strips of suitable size and length.</p> <p>b) The job includes providing and fitting of appropriate size MS nipple 2 feet long threaded on one end and welded to same size MS flange of thickness (as per Table-17) at other end for 80 mm diameter column pipe as per site requirement. The threaded portion should be as per size of pumping outlet for proper fixing.</p> <p>The job includes providing and fitting of R. I. cloth joints/rubber washers with nuts, bolts and washers for all joints of column pipe. The job also includes lowering of pumping unit in the well then proper testing and commissioning of pumping unit on full load at site.</p> <p>Note: Providing of test certificate &amp; Characteristic Curve of pumping equipment is compulsory and pumping unit is to be approved from the concerned Sub Divisional office before procuring.</p> <p>(Make: KSB/Kirloskar/Mather Palte/Wilo)</p>	2.00	Job	99960.00	199920.00
3.00	<p>Providing and fitting of Ductile Iron double flanged, Slanted seat swing check valve (NRV) as per IS 5312. The body shall be of ductile cast iron with fully encapsulated vulcanized EPDM rubber (Approved for drinking water). The valve shall be compatible for buried applications and shall be safe to install in both horizontal and vertical positions.</p> <p>It shall have electrostatic epoxy coating (approved for drinking water) both inside and outside of the valve.</p> <p>Cost on account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work.</p> <p>The job includes providing and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable to the inbuilt flanges of the valve which shall be fitted with Rising main of the pumping unit at appropriate spots as per site requirement. The job includes the cost on account of P/F of nuts, bolts and gasket required for the job.</p> <p>Size: 100mm    PN: 1.6/16    (Make: Sigma Flow/Tallis/VAG/Sachdeva/Kirloskar)</p>	1.00	Job	92169.00	92169.00
4.00		1.00	Job	18000.00	18000.00



Executive Engineer  
H. B. Patel

Annexure 'B' to this Office Allotment Order No. \_\_\_\_\_ of 07/2023 for WSS Udaipora Kanlibagh

	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Allotted/Accepted Rate	Amount
5.00	<p>Providing and fitting of Ductile Iron double flanged, non-rising spindle soft seated glandless gate valves as per IS14846 for regulating the water supply outside the pumping units. The body and bonnet of the valve shall be of ductile iron, wedge with fully vulcanized EPDM rubber (Approved for drinking water) and NBR seal. The Gate/Blade valve shall be compatible for buried applications and shall be safe to install in both horizontal and vertical positions. It shall have electrostatic epoxy coating (approved for drinking water) both inside and outside of the valve. The valve shall be supplied along with hand wheel.</p> <p>Cost on account of Nut, bolts, gaskets, etc required for the job is included in the scope of work.</p> <p>The job includes providing and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable to the inbuilt flanges of the valve which shall be fitted with rising main of the pumping unit at appropriate spots as per site requirement. The job includes the cost on account of P/F of nuts, bolts and gasket required for the job.</p> <p>Size: DN 100 PN 1.6/16 (Make: Sigma Flow/Tallis/Sachdeva/Kirloskar)</p>	1.00	Job	17500.00	17500.00
6.00	<p>Fabrication: Providing and fitting of MUG-20 Modular Control Panel of appropriate size fabricated out of 14 SWG sheet having required openings/vents and protection Class IP-55 &amp; fitted with accessories as under:</p> <p>a) Bus bar Chamber:</p> <p>The bus bar chamber shall be fitted at the top of the panel horizontally throughout the length. There shall be 3 Nos. of phase bus bar and 1 No neutral bus bar and 1 No earthing bus bar. The bus bars shall be air insulated and made-up of high conductivity COPPER with current density of suitable rating for 100/200 Ampere. All panel compartments shall be provided with suitable cable alley and vertical bus bar alley. Suitable segregation shall be provided in between bus bar chamber and adjoining compartments. The bus bar shall be PVC sleeved with color strips of red, yellow, blue and black and the same be arranged in accordance with IS-375 specs. Electrical clearances shall be maintained between phases, neutral and body as per standards.</p> <p>b) Main Circuit Breaker (Incomer MCCB):</p> <p>Qty = 02</p> <p>No. of poles = 4 Pole</p> <p>Current Rating = 100 Amp</p> <p>Rated operational voltage = 415 V + 15 % Rated frequency = 50 +/- 3%Hz Ambient temperature = 40C°</p> <p>Ultimate S.C Breaking Cap</p> <p>at (415V AC, 50 Hz) = As per requirement Type of release = Thermal-Magnetic Overload protection = 0.8 – 1.1kA adjustable Short-circuit protection = 6-10xIn adjustable.</p> <p>Current rating = 100 Amp</p> <p>c) Change over Switch:</p> <p>Qty = 01 No.</p> <p>Rating = As per requirement</p> <p>Type = Front operated, on load, 4 pole, 400 +15%V, 50 + 3%Hz.</p> <p>d) Motor Back-up Protection MCCB:</p> <p>Qty = 2 No No. of poles = 3P</p> <p>Current Rating = As per requirement Rated operational voltage = 415 V +15 % Rated frequency = 50 + 3% Hz</p> <p>Ambient temperature = 40C°</p> <p>Ultimate S.C Breaking Cap</p> <p>at (415V AC, 50 Hz) = As per requirement current rating = 200 A</p> <p>e. Submersible starters:- Fully automatic star delta/DOL starters.</p> <p>Capacity = 20 HP</p> <p>Power Specs = 3 Φ, 415 + 15% V, 50 + 3 % Hz.</p> <p>Relay range = 20-32 A. Coil Voltage = 380 v</p> <p>Protection = single phasing , phase Reversal, phase unbalance (<math>55 \pm 5</math> V),</p> <p>Rated insulation voltage = 690V</p> <p>Terminal capacity = 120 Sq. mm with lug Or above Conformity to standard = IS/IES 60947-4-1</p> <p>Qty. = 2 No's</p> <p>f) Auxiliary MCCB for Heating/Lighting: Circuit Breaker = MCCB (Outgoing)</p> <p>Qty. = 1 No.</p> <p>No. of poles = 4P</p> <p>Current Rating= 63 Amp. Rated operational voltage = 415 V + 15 % Ultimate S.C Breaking Cap.</p> <p>at (415V AC, 50 Hz) = As per requirement</p> <p>g) Motor Protection Relay:</p> <p>Digital Motor Protection Relay with LCD Display for 3-phase supply with following protections suitable for the Modular Control Panel:-</p> <p>Protections = Thermal Overload with pre-alarm, Short Circuit, Phase Loss, Unbalance, Phase reversal, Under Current, over current, Prolong starting, Locked Rotor, Under voltage, over voltage &amp; Earth fault.</p> <p>h. M-power module for mobile starter for submersible motor 1P/3P 3 wire IVRS Languages – English , Hindi, Suitable Region- North India</p> <p>i) The panel shall be provided with phase indicators (03 NO) and digital ammeter of range 0-60 A, digital voltmeter of range 0-500 V, and digital frequency meter (01 No for each starter). The enclosure of the panel shall be of excellent fit and finish, corrosion resistant and powder coated gliding hinges for smooth and noiseless movement of windows and advanced locking arrangements.</p> <p>MUG 20 Modular Panel Details/Description item wise</p> <ul style="list-style-type: none"> <li>i) Bus bar size( 10 mtrx .02 mtrx 0.003 mtr x)8960 kg/m3 = 5.38 kgs @ 1000/100A</li> <li>ii) D-sine MCCB 4 pole (DZ1 160N, 108-160, 50KA)</li> <li>iii) Change over switch 100A</li> <li>iv) D sine MCCB 3 pole DNO 100D, 80-100, 36KA</li> <li>v) Mug x 2 (Mug20, 20-32A Relay)</li> <li>vi) Auxiliary MCCB 63Amp 4 Pole</li> <li>vii) MM 10 of L@T (Motor Protection)</li> <li>viii) Module for mobile starter</li> <li>ix) Meter,(Ammeter &amp; voltmeter) 2No. each and Freq Meter</li> <li>x) Indicators LS</li> <li>xi) Over load and Under Voltage Minlec</li> </ul> <p>(Change Over &amp; MCCB Make: L&amp;T/Havells)</p>	1.00	Job	174612.00	174612.00

Executive Engineer

Description of Work / Item(s) with technical specifications		No. of Qty	Units	Allotted/Accepted Rate	Amount
7.00	Earth work in bulk excavation by mechanical means in trenches for foundations, ditches, pipes, cables etc (not exceeding 1 m in width and 1 m in depth), walls, cesspits and the like not exceeding 10 sqm on plan. Including dressing of sides and working of bottom upto 1.5 m. Including getting out excavated earth and disposal of surplus excavated earth as directed. (All kinds of soil - 00 meter from cutting edge)	29.00	cu.m	360.00	10447.20
8.00	Fitting of departmental 200 kg, 12 Nos.; Ø 100mm dia flanged pipe. To replace the existing 60 mm rising main from raw water to raw settling tank. The job includes providing fitting of nuts, bolts, washers and all required labour etc. complete. The rising main is to be test as per the instructions of the site Incharge.	78.00	Mtr	200.00	15600.00
9.00	Fabrication of gantry mechanism by way of providing structural steel in built up sections, brackets and framed work, including cutting, welding, fitting in position and applying a priming coat of approved steel primer at complete welding. The drawings and Dimensions for Gantry/C/SI Shed will be provided by Site In Charge at the time of execution of job.	662.00	Kg	100.00	66200.00
10.00	Providing, installation and testing of manual type triple snout gear chain pulley block along with monorail gear, travelling trailer having following features: Gears : The hoist shall have precision machine case Hardened alloy steel gear mounted on bearings and housed in a dust proof gear box. The lubrication of gears should be of high viscosity and temperature for longer life of gears. Load Chain : The load chain be made of high tensile alloy steel having wear resistance and greatest mobility. The chain should be accurately calculated, tested and have adequate in built factor of safety for safer operation. Load chain wheel : The load chain well should be double ball bearing supported and Specially designed, perfectly machined wheel providing correct grip of load chain to makes the hoist most safe and reliable against any failure. The main specifications of C P Block are given below:  Make = Pull Lift/Globe Capacity = 2 ton No. Of load chain falls = 2 or above Min. Height of lift = 6 M  Manufacturers Test Certificate to be appended.	1.00	Job	44000.00	44000.00
11.00	Providing, fitting, testing and commissioning of 40 kva voltage stabilizer as per specifications below: Type of voltage controller : Manually operated copper wound, 3-phase, AC power supply multi step. Type of Regulator : Double plate type with electrolytic copper contacts. Input voltage : 175-400 volts (3 phase) Output voltage : 400 ±10% volts Windings : Electrolytic grade copper of adequate section, vacuum impregnated and oven-dried. Insulation : Fiber glass insulation to tested parameters. Cooling : Naturally, Oil cooled Temp. Rise (Max) : 30°C above ambient Correction rate : 30 volts per step Enclosure : MS sheet enclosure in pressed CGR Sheet powder coated with radiators. Core laminates : High grade, low eddy loss, grain oriented silicon steel laminations. Load : Three phase induction motor load. Load Amperes (continuous) : Overload in 24-hours operation: 10% above continuous Ampere rating. The voltage stabilizer shall have T-oil level indicator gauge preferably glass type tube or otherwise visible to naked eye. The top of the container to have a display panel for housing 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of neon indicators for incoming and outgoing phases (06 No's). Insulating media (T. Oil) of 11 KVA grade to be provided and filled upto top level, with dielectric strength of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barrels and filled at site upto top level. The voltage Stabilizer shall be accepted with manufacturers duly stamped test certificate and shall have name plate with specifications.	1.00	Job	89303.00	89303.00
12.00	Removal of choked filter media from 5000/ 6000 GPH pressure filter vessel. The job includes all loads and lifts, disposal of choked media to dumping site outside the premises of the plant within a lead of 5 km. The vessel needs to be cleaned properly and dried before laying of fresh media.	1.00	Job	6900.00	6900.00
13.00	Providing and laying of filter media of specific size and grade (preferably from sindh Nallah Ganderbal) to be laid in 5000/6000 GPH Pressure vessel duly washed, free from dust, dirt, loam and any other inorganic material or suspension, the job includes carriage of filter media from Ganderbal to site including all loads and lifts required on the site condition. The media is to be laid in different layers of specific size and grade from bottom to top over the filter bed plate. The bottom layer is to be laid without tilling/damaging the pressure nozzles	1.00	Job	14600.00	14600.00
14.00	Providing and fitting of 12 mm dia. Fine threaded PVC nozzles auxiliary type to be fitted on filter bed plate of pressure vessel.	550.00	Job	200.00	110000.00
15.00	Providing and fitting of 29 inch. dia. rubber washers/gaskets for manhole and inspection chamber and opening of pressure filter vessel.	2.00	Job	1000.00	2000.00
16.00	Providing and fitting of 3"x5/8" nuts and bolts.	15.00	Kg	100.00	1500.00
17.00	Painting with synthetic enamel paint two or more coats of approved brand and bor pressure clarifier pressure filter vessel, fittings and complete piping after cleaning of dirt by kerosene oil and application of steel primer of specific grade.	1.00	Job	5000.00	5000.00
18.00	P/I/T/C of horizontal monoblock pumping equipment of following parameters; a) Discharge :- 6000GPH, b) Head: 30 meters. c) Speed: 1440 rpm The pump & motor should be mounted on a suitable size MS base frame . The Job also includes P/F of foundation bolts. (Make: KSB/Kirloskar/Wilo/CG)	1.00	Job	48000.00	48000.00

Executive Engineer

Annexure 'B' to this Office Allotment Order No. \_\_\_\_\_ of 07/2023 for WSS Udaipur Kambalagh

Description of Work / Item(s) with technical specifications	No. of Qty	Units	Allotted Accepted Date	Amount
16.00 Providing, fabrication and fitting of standard M/S wire mesh (15.50 sq. mtr) and 1.40mm wire dia for filter screening to the C/S Pressure Filter House.	120.00	sqft	15.00	2000.00
20.00 Replacement of 25 mm dia 40 NPS (Ball valves Reputed make) The job includes providing and fitting of nuts and bolts and washers with allied mechanical works. The job includes Providing, fitting of 25mm dia G. A. mtr with necessary fittings as per requirement.	1.00	unit	5000.00	5000.00
21.00 Replacement of 80 mm dia butterfly valve with pressure	4.00	unit	4000.00	16000.00
22.00 Replacement of 60 mm Butterfly valves	2.00	unit	3000.00	6000.00
23.00 Providing and fitting 80 mm dia M/S flanged pipe to be lead pumping unit at PSL to filter vessel (item no. C)	12.00	unit	1400.00	16800.00
24.00 Providing, installation, testing and commissioning of area lighting 120 Watt LED (Street Light Type) on top of octagonal pole (Make: Philips/Globe/Havells) Having following specs Input: AC 240 V 50 Hz Power Factor >0.9 Colour Temperature: 4K - 6.5K Beam Angle: 120 - 170 Lumens: >12000 Operating Temperature: -20 C to 50 C The LED is pressure die cast aluminum housing with powder coated finish and having Ingress Protection up to IP-65. The LED is properly fitted on the arm of the pole and connected to the copper wire as provided in the high mast pole.	2.00	unit	7000.00	14000.00
25.00 Replacement of agitator in alum solution holding tank fabricated out of wetted parts in stainless speed 20-30 intermediate bearing type twin blades free standing type	1.00	unit	17000.00	17000.00
26.00 Providing & Fitting of Dosing pump to dose required quantity of alum/Chlorine in the system. The capacity of the dosing units shall be 12-20 LPH capacity Dosing pumps shall be provided with all required accessories including 200 ltrs PVC tank and cable for connection. Each pump shall be provided with 20 mtrs. Cable as per required specification.	1.00	unit	15000.00	15000.00
27.00 Providing and fitting of pressure gauges with adductors to replace damaged ones these pressure gauges should be in the range of 0-50 kg/cm <sup>2</sup> and be reputed make.	3.00	unit	7500.00	22500.00
28.00 P/N/T/C of 5 H.P. DOL starter	3.00	unit	3000.00	9000.00
29.00 Supply, installation, erection of 3 mtrs long H.T pole of specifications ST-410 (sp-23). The job further includes drilling of holes for installation of various accessories, wherever required the job further includes G.I. wire earthing of pole as per REC standard.	2.00	Nos	2000.00	4000.00
30.00 Supply, Installation, Testing and commissioning of Polymeric Gang operated Air break switch, outdoor type, triple pole, suitable for vertical installation, single break provided with locking arrangement at both ON and OFF position consisting of HT post double insulator, copper or copper alloy high pressure heavy contact assembly, rod with bearings, operating handle and 2 length of 32mm dia. GI pipe conforming to IS 1513 1961. 06 Nos. of insulators, rated voltage 11KV 200A complete as per IS specs.	1.00	unit	3900.00	3900.00
31.00 Providing and fitting G.I Channel /Angle/ Flat of sizes including clamps	300.00	Kg	110.00	33000.00
32.00 Supply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable for vertical installation.	1.00	unit	3700.00	3700.00
33.00 Supply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With polymer housing, Station Type.	1.00	unit	6500.00	6500.00
34.00 Supply and fitting of 11 KV polymeric composites pin insulator 12 KV, 5KN, Lighting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm	6.00	unit	337.00	2022.00
35.00 Providing and fitting of ACSR as per IS 398 (part-2) 1998 for 50 sq.mm ACSR (Galvanised steel reinforced) for fitment of various accessories	45.00	Mtr	55.00	2475.00
36.00 Painting of poles with Red oxide	2.00	Litre	290.00	580.00
37.00 Painting of poles with Aluminum paint	2.00	Litre	400.00	800.00
38.00 P/F of Galvanized nuts, bolts of various sizes as per site requirement.	5.00	Kg	125.00	625.00
39.00 Providing and fitting of 12mm thick ply board as roofing to operators room as per instructions of Site Engineer. The job includes P/F of nails, labour, carriage etc, complete in all respects	144.00	sqft	95.00	13680.00
40.00 Providing and Fitting of single-Core, copper pvc insulated Cable, XLPE armoured conforming to IS: 7089 part 1st for internal connections crimping, taping etc. NOTE:- The cable terminal ends for connection to switchgear at various requisite points shall be Al. Thimbles and of appropriate size and connected by hydraulic crimp tool only. Single core PVC insulated 25sqmm (Make: Finolex/Gloster/Havells)	60.00	Mtr	335.00	20100.00
41.00 Providing and fitting of 3-Core flat submersible copper cable conforming to IS: 694 (Part 1st) – 1964 & IS: 694 (Part 2nd) - 1964 for Submersible Pumping Unit and other electrical Equipments . The cable connections terminal shall be fitted with copper thimbles of required size. Size: 16 sq.mm (Make: Finolex/Gloster/Havells)	120.00	Mtr	586.00	70320.00
42.00 Providing and Fitting of 3.5-Core, XLPE Armoured Aluminium Cable conforming to IS: 7089 part 1st as service line from the HT transformer to control panel including necessary thimbles, crimping, taping etc. NOTE:- The cable terminal ends for connection to switchgear at various requisite points shall be Al. Thimbles of dwel's make and of appropriate size and connected by hydraulic crimp tool only. i) 50 sqmm, 3.5 core (Make: Finolex/Gloster/Havells)	50.00	Mtr	395.00	19750.00

Executive Engineer  
J. C. H.

No.	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Allotted/Accepted Rate	Amount
43.00	<p><b>TOOL KIT For Maintenance - (Make: Taparia/Jeevan/Indra)</b>  The Tool Kit for maintenance shall comprise of the following and all the items as mentioned below shall be of Providing of tool kit consists of following items:</p> <ul style="list-style-type: none"> <li>i. Double ended Spanner (Chrome plated) 02 sets complete</li> <li>ii. Double ended Ring spanners chrome plated 02 sets complete</li> <li>iii. Allen key set black finish 02 sets complete</li> <li>iv. S-16 MKL S-16 H X L Socket Set (19 sockets + 6 Accessories) - 01 No.</li> <li>v. Combination Pliers insulated with thick C.A sleeve size in mm 165, 210, 265 each - 02 No</li> <li>vi. Long nose plier insulated with thick C.A sleeve size in mm 165, 205 each - 02 No</li> <li>vii. Side cutting plier insulated with thick C.A sleeve size in mm 165, 205 make - 02 No</li> <li>viii. Insulated screw Drivers  Blade Blade Tip Quantity length in dia. in dimensions  mm mm in mm</li> <li>50 3 1 6 x 0.4 02</li> <li>75 3 1 6 x 0.4 02</li> <li>100 3 3 x 0.4 02</li> <li>125 3 5 3.5 x 0.5 02</li> <li>150 3 5 3.5 x 0.5 02</li> <li>200 4 4 x 0.6 02</li> <li>300 5 5 x 0.8 02</li> <li>ix. Hammer with handle weight - 110 mg, 340 gm, 600 gm -each - 1No.</li> <li>x. Heavy duty pipe Wrench length in mm - 200, 300, 600 each - 01 No.</li> <li>x. Electric Multimeter = 1No</li> <li>xii. Digital multimeter - 1No.</li> <li>xiii. Digital Clamco tester capable to measure up to 400A - 1 No.</li> <li>xiv. Hack saw frame with hack saw blade - 01 No</li> <li>xv. iv. S-16 MXL S-16 H X L Socket Set (19 sockets + 6 Accessories) - 01 No.</li> </ul>	1.00	Job	28000.00	28000.00
44.00	Supply, installation, Testing & commissioning of 1000VA Full Sine wave power inverter (Make: Microtek/Luminous/Exide) including Providing / Installation of 12V, 180AH Tubular inverter Battery with trolley and cover (Make: Luminous/Amaron/Exide) with 2-core 6mm <sup>2</sup> Cu wiring as per site requirement along with other accessories like SS-Combine (02 No's), 3-pin plugs etc of reputed make for proper fitment and installation of the item.	1.00	Job	33000.00	33000.00
45.00	<p>Providing, installation, testing and commissioning of area lighting 120 Watt LED (Street Light Type) on top of octagonal pole (Make: Philips/Bajaj/Havells)</p> <p>Having following specs:</p> <p>Input: 90-240 V 50 Hz</p> <p>Power Factor: &gt;0.9</p> <p>Colour Temperature: 4K - 6.5K</p> <p>Beam Angle: 120° - 170°</p> <p>Lumens: &gt;12000</p> <p>Operating Temperature: -20°C to 60°C</p> <p>The LED is pressure die cast aluminum housing with power coated finish and having Ingress Protection up to IP-68.</p> <p>The LED is properly fitted on the arm of the pole and connected to the copper wire as provided in the high mast pole.</p>	2.00	Job	7950.00	15900.00
46.00	Providing, Installation and testing of 2KVA fully automatic voltage stabilizer with input voltage 70-240 V and output 220 V. The stabilizer shall be installed and connected to the electric circuit as per location provided by site in charge.	1.00	Job	6500.00	6500.00
47.00	Providing and installation of Junction Box with DP 32 A MCB to serve as Main switch for LED Lighting. The job includes making of electric connection to the circuit.	1.00	Job	2100.00	2100.00
48.00	Providing & Fitting of lighting points in 1.5 mm Sq. multi strand PVC wire as conductor to be laid /carried in PVC channel/conduit as per site requirement. The Job also includes Providing and fitting of 5 Amp. Switch Button /angle holders to be fitted with 15 watt LED inside the Pump house.	5.00	Job	1100.00	5500.00
49.00	Providing & fitting of heating points in 2.5 sq. multi stand conductor to be laid & carried in PVC channel/Conduit as per site requirement. The job includes providing and fitting of 16 Amp. Switch socket of approved make.	2.00	Job	1450.00	2900.00
<b>Total in Figures:</b>		<b>1365803.200</b>			
<b>Total in Words: Rupees Thirteen Lac, Sixty-Five Thousand, Eight Hundred &amp; Three only.</b>					

Executive Engineer  
Jal Shakti (PHS) Mechanical Division  
South Awantipora

Executive Engineer