

For and on behalf of the Chairman, Shri Mata Vaishno Devi Shrine Board, Shri Mata Vaishno Devi Institute of Medical Excellence (An institute established by SMVDSB), invites sealed tenders on the prescribed format, duly affixed with revenue stamps worth Rs.6/– (Rupees Six only) and accompanied with earnest money in the form of CDR / TDR (for an amount equal to 2% of the bid-value) pledged to the Accounts Officer, SMVDIME, Kakryal, Katra, from the eligible firms/ contractors for the following work:–

S.	Description of Work	Time allowed	CDR/ TDR
No.		for Completion	
		of work	
1	Supply, Installation, Testing & Commissioning	45 days from	2% of the bid-
	(S.I.T.C.) for the Electric Upgradation Work at Jhajjar Nallah.	the date of Order	value
	The Bill of Quantities (BOQ) of various items of this work is given in <b>Annexure-'A'</b> .		

The tenders complete in all respects should reach the office of the Chief Administrative Officer, SMVDIME, Kakryal, Katra by or before **11.08.2017 upto 3:00 P.M. IST.** The tenders will be opened on the same day or on a subsequent day convenient to the SMVDIME in the presence of such tenderers who may like to be present at the time of opening of the same.

The Tender Documents containing detailed terms and conditions can be obtained on any working day from the Office of the Chief Administrative Officer, SMVDIME, Kakryal, Katra against a payment of Rs. 500.00 (Non-transferable and non-refundable) in the shape of Demand Draft favouring Accounts Officer, SMVDIME and payable at Katra. The same can also be downloaded from the website <a href="www.maavaishnodevi.org">www.maavaishnodevi.org</a>. In case of downloaded Tender Form, the cost of the Tender documents in the shape of Demand Draft favouring Accounts Officer, SMVDIME must accompany the Tender.

Tenders complete in all respects must be sent to the Office of the Chief Administrative Officer, SMVDNSH, Katra through speed post/registered A.D. or be put in the sealed Tender Box available in Central Office, SMVDSB at Katra, by or before the due date/time.

No: SMVDIME/Elect./836/543

Dated: 18.07.2017

-sd-Chief Administrative Officer,

Shri Mata Vaishno Devi Institute of Medical Excellence



#### SHRI MATA VAISHNO DEVI INSITUTE OF MEDICAL EXCELLENCE, KAKRYAL (KATRA) – 182320

(An institute established by Shri Mata Vaishno Devi Shrine Board, Katra)

#### Detailed Terms and Conditions of NIT No: SMVDIME/Elect./836/543 Dated: 18.07.2017

- 1) For and on behalf of the Chairman, Shri Mata Vaishno Devi Shrine Board, Shri Mata Vaishno Devi Institute of Medical Excellence (An institute established by SMVDSB), invites sealed tenders in <a href="Two Bid Format">Two Bid Format</a> (Technical and Price bid), from eligible firms for the work namely "Supply, Installation, Testing & Commissioning (S.I.T.C.) for the Electric Upgradation Work at Jhajjar Nallah". The Bill of Quantities (BOQ) alongwith approved makes / brands of electrical components in this regard is specified in Annexure 'A' of the NIT.
- 2) The successful tenderer will be required to accept all the terms and conditions of the NIT and enter into an agreement with the Shrine Board within a period of 15 days from the date of award of the contract. All the conditions of this NIT (and anyother conditions as may be deemed necessary) shall form part of such agreement.
- 3) The tenderer shall have to submit Earnest Money Deposit of the specified amount in the shape of a Term Deposit Receipt / Call Deposit Receipt of any nationalized / scheduled bank pledged to the Accounts Officer, Shri Mata Vaishno Devi Institute of Medical Excellence. There shall be no relaxation/ concession to any Unit/ Agency whatsoever in regard to the amount of EMD to be paid. Any tender not accompanied by the EMD shall not be entertained and shall be outrightly rejected.
- 4) Tenderers shall submit their offers in two bid format, whereby two envelope detailed below shall have to be submitted in sealed covers, to be further enclosed in one large envelope thereafter:

# A. <u>ENVELOPE NO. 1</u> to be superscribed as "Techno-Commercial Bid" should contain the following:

- i) Background of the tenderer namely full name, postal address, contact number, authority letter for signing the tender documents.
- ii) Copy of Sale Tax / Income Tax Registration (PAN/TIN copies).
- iii) Earnest Money Deposit of the prescribed amount in the form of C.D.R/ TDR pledged in favour of the Accounts Officer, SMVD Institute of Medical Excellence, Kakryal, Katra.
- iv) Tender Document containing general conditions of Contract and other annexures each page of which shall be duly signed by the tenderer.
- v) Copy of Permanent Account Number (PAN) issued by the Income Tax Department.
- vi) Demand draft towards the cost of tender document if the tender document is downloaded from the website of SMVD Shrine Board.
- vii) Detailed specifications / mentioning of brands of the equipments/ tools to be used in the execution of 'work'.

- viii) The following are the <u>Eligibility Conditions</u> for the tenderers, failing with they may be considered to be disqualified technically & their Price Bid will not be opened:
  - <u>Total Business Turnover in relevant field</u>: Should be **not less then Rs. 1.00 crore** in any of the past 03 years (copies of CA attested P & L statements / IT Return to be attached as proof of turnover).
  - The tenderer should be a "A"-Class Electrical Contractor. A copy of the "A Class Electrical Contractor" License issued by local Inspection agency i.e. Director TTIC of JKPDD should be part of the techno-commercial bid.
  - <u>Business experience of similar nature</u>: Should be **not less than 05 years** (copies of relevant documents to be attached).
  - The experience of having executed atleast one single similar work valuing not less than Rs. 30.00 Lakh (or two separate similar works valuing more than Rs. 20.00 lakh each) during any one of the last three completed Financial Years (2014–15, 2015-16 & 2016-17). The Tenderer shall submit the Letters of Awards as also satisfactory Completion Certificates in this regard. Besides, the tenderer should also submit the list including details of major works in hand, if any.
- B. <u>ENVELOPE NO. 2 to be superscribed as "Price Bid" containing the "Price Bid" as per the format specified in Annexure-B.</u>
- C. <u>ENVELOPE NO. 3:</u> The Envelope-1 and Envelope-2 stated above shall be further put in a single big envelope and superscripted as "Tender for Supply, Installation, Testing & Commissioning (S.I.T.C.) for the Electric Upgradation Work at Jhajjar Nallah". The Name of the firm/contractor alongwith complete address submitting the tender should be clearly and boldly written on the top of the envelope.
- The Sealed tender addressed to the Chief Administrative Officer, Shri Mata Vaishno Devi Institute of Medical Excellence, Kakryal, Katra, Jammu & Kashmir should reach his office by or before the due date /time. The tenders complete in all respect can be sent through speed post/ registered AD/ Reputed Courier Service or be put in the sealed tender box available in SMVDIME, Kakryal so as to reach in the office by or before the due date and time. In case last date for submission of tenders is declared as holiday, the last date of submission of tender will be deemed as the next working day. The tenders received after the scheduled date and time shall not be entertained.
- 6) The Tenders received shall be opened in the office of SMVD Institute of Medical Excellence, Kakryal, Katra (J&K), by the Committee constituted for this purpose, in the following manner:
  - a) The Tenders shall be opened either on the same day at 1500 Hrs in presence of the tenderers or their authorized representative who may choose to remain present or on any other date convenient to the Committee which shall be intimated to the tenderers at their given contact number, as

- mentioned in the Technical Bid. Envelope No. 1 (Technical Bid) shall only be opened first.
- b) After opening of the envelope No. 1 and assessing the submittals as per required conditions, the Tenderers, declared eligible by the committee, shall be informed separately for participation in the process of opening of Price Bids i.e. Envelope No. 2. It needs to be noted that the Price Bids of only such Tenderers shall be opened, who qualify as per the laid down Eligibility Criteria. The Price Bids of Tenderers who do not qualify in the Technical Bid shall not be opened in any case.
- c) The Tender/s received late on account of whatsoever reason(s) shall not be entertained.
- 7) In case of unsuccessful bidders, their TDR/ CDR shall be released after the culmination of NIT process. However, the TDR/CDR of successful bidder shall be retained by SMVDIME. The EMD of the successful tenderer shall be released only after the execution of work duly accepted by the Engineer Incharge of SMVDIME and handing over of the executed work along with all relevant documents to the client (SMVDIME).
- 8) Before offering the sealed tenders, the bidders are advised to visit the site to acquaint themselves about the condition of site, its surroundings terrain, climate, availability of labour, power, water, communication facilities etc. at their own cost and risk. Later on no claim or any excuse shall be entertained on any account.

#### 9) Prices

- i) The rates quoted shall be net and F.O.R. i.e. inclusive of all charges, transportation, taxes, loading and unloading etc. No payment over and above the quoted rates shall be paid to the successful firm.
- ii) Further, the tenderer shall also be compulsorily required to mention the rates applicable for the Annual maintenance Contract (AMC) for the next 5 years (year-wise) after the warranty period of one year. The comparison of offers received against this NIT shall made on the basis of 6 years of ownership of the Asset
- ii) Nothing extra shall be payable on account of carriage including mechanical transport / head load, loading / unloading of materials, clearance of the site etc.
- iii) The 'deductions' on account of Statutory Liabilities' such as TDS, WCT etc., as applicable, shall be made from the bills of the vendor, while releasing the payments.
- iv) In the event of no rate having been quoted against any item(s), leaving space between the figure(s), word(s) and if the amount is kept blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.
- 10) **Time period / Penalty:** The time of completion of the work in all respects indicated in the tender notice (45 days) shall be reckoned from the 7<sup>th</sup> day from the date of issuance of letter of award. For any delay, a penalty @1% (one percent) per week of unfinished work subject to a maximum of 5% of the cost of unfinished part of

work shall be levied at the discretion of Shrine Board. The assessment about the quantum of unfinished work shall be made by the Engineer Incharge of SMVDIME and shall have to be accepted by the vendor.

- 11) In case the successful tenderer fails to complete the work even after delaying the work beyond 5 weeks from the stipulated date of completion, his / her EMD shall be forfeited, and balance work shall be executed / got executed at the firm's risk and cost.
- 12) Incomplete / conditional tenders will not be accepted. Similarly, the tenderer are also not allowed to revoke or withdraw their tenders or vary or modify any of the condition originally contained in the Tender during the validity period of tender. In case of a tenderer revoking or withdrawing his tender or varying any term in regard thereof, the earnest money deposit of such tenderer shall be forfeited to SMVD Institute of Medical Excellence, Kakryal.
- 13) SMVD Institute of Medical Excellence, Kakryal reserves the right to reject or accept any tender in part or full without assigning any reason whatsoever at any stage.
- 14) SMVDIME reserves the right to negotiate the quoted rates, terms and conditions with the lowest tenderer or any of the other tenderer/s to ascertain the suitability of the acceptable offer.
- 15) The material quoted for should conform to the specifications / brands specified in the Bill of Quantities (BOQ). Similarly, the material supplied by the successful vendor shall be checked/ inspected by the quality cell/ inspecting team of Shrine Board and if found of inferior quality/defective, the same shall be rejected. The rejected material shall have to be lifted by the supplier at his own risk and cost within a week's time failing which storage charges per day as may be deem fit to the authority shall be levied.
- 16) **TESTING AND INSPECTION:** The Vendors shall carry out all the testings of the components, as specified in the applicable standard code. After completion of work at the manufacturer's works, the panels / switchboards shall be inspected and tests witnessed by the Purchaser's Representative or Third party inspection agency. The stage inspection may be carried out from time to time to check progress of work and workmanship. Vendors shall provide all facilities such as power supply, testing instruments and apparatus required for carrying out the tests. Required copies of test certificates for all the tests carried out along with copies of type test certificates and certificates from sub-vendor for the components procured from them are to be submitted before dispatch of the switchboards.

NOTE: All routine & acceptance tests as specified by the applicable standard code shall be conducted. Type test certificates for fault Level, certified by CPRI (Central Power Research Institute) Bhopal or by Electrical Research & Development Association, Vadodra of the major components such MCCB's should be submitted along with the bid The vendor shall also submit a list of guaranteed technical particulars with the bids.

- 17) **REGULATIONS AND STANDARDS:** The installation shall conform in all respects to Indian standard code of Practice for Electrical Wiring installation IS: 732-1963 and IS: 2214-1963 (Silver Nitrate Pure and analytical reagent). It shall also be in conformity with the current Indian Electricity, Rules, Indian Electricity Act, National Electrical Code and Regulations of the Local Electrical supply Authority in so far as these become applicable to the installation. Wherever this specification calls for a higher standard of material and/or workmanship than those required by any of the above regulations then this specification shall take precedence over the said regulations and standard. In general, the materials equipment and workmanship not covered by the above shall conform to the relevant Indian Standards. The electrical installation work shall follow Codes, Indian standard specifications and rules (Within the best meaning of the same) under this contract. The following list is given for general guidance only in addition to list given in each individual section, however all other latest editions of Codes, Indian standard specifications and Rules shall also be followed when it is required: -
  - I.S.:8623 Low voltage switchgear & control gear assemblies.
  - I.S.:10118 Code of practice for selection, installation and maintenance of switchgear and control gear.
  - I.S.: 4237 General requirement for switch gear and control gear for voltage not exceeding 1000 Volt a.c. or 1200 volts d.c.
  - I.S.: 13947 Low voltage switchgear and control gear.
  - I.S.: 9224 Low voltage fuses.
  - I.S.: 8828 Circuit breakers for out protection for household and similar installations.
  - I.S.: 12640 Earth leakage circuit breaker.
  - I.S.: 1248 Direct acting indicating analog electrical measuring instruments
  - I.S.: 2705 Current transformer.
  - I.S.: 4201 Application guide for voltage transformers.
  - I.S.: 6875 Control switches for voltage up to and indicating 1000V a.c. 1200 V d.c.
  - I.S.: 5578 Guide for marking of insulated conductors...
  - I.S. :11353 Guide for uniform system of marking and identification of conductors and apparatus transmission.
  - I.S.: 8197 Terminal markings for electrical measuring instruments and their accessories.
  - I.S.: 694 Specifications for PVC insulated cables for working voltages up to and including 1100 volts.
  - I.S.: 2551 Danger notice plates.

- I.S.: 3043 Code of practice for earthing.
- I.S.: 5216 Guide for safety procedures and practices in electrical work.
- I.S.: 1646 Code of practice for fire safety of building: Electrical installation.
  - Indian Electricity Act as amended up to date.
  - Indian Electricity Rules as amended up to date.
  - Rules and Regulations of Bombay Regional Council of Fire Insurance & Association of India for Electrical wiring.
- 18) **VENDOR AND SHOP DRAWINGS:** The contractor shall prepare and submit to OWNER, for his approval, two sets of vendor detailed drawings of all panel boards, outlet boxes, special pull boxes, and other likewise material, equipment to be fabricated by the contractor, or other vendor within 15 days of signing of the contract. Before starting the work, the contractor shall submit to OWNER for his approval in the prescribed manner, the shop/execution drawings for the entire installation, specially the main connections and junctions, the route of conduits and cables, no. and size of wires drawn through the conduits, location of all the outlet points, and switch boards and distribution boards and any other information required by OWNER. OWNER reserves the right to alter or modify these drawings if they are found to be insufficient or not complying with the established technical standards or if they do not offer the most satisfactory performance or accessibility for maintenance.
- 19) **AS BUILT DRAWINGS:** At the completion of work and before issuance of 'Completion Certificate', the contractor shall submit to OWNER, three sets of asbuilt drawing drawn at appropriate scale indicating the complete wiring/ cabling system "as installed". These drawings must provide (in plan, folded elevation and section):
  - 6.1 Location and details of panels, busbar chambers, switchgear and other particulars.
  - 6.2 Location of all earthling stations, route and size of all earthling conductors, manholes etc.
  - 6.3 Route and particulars of all cables.
  - 6.4 Lighting layout plan for all the floors along with circuit distribution details.
  - 6.5 External Area Lighting Plan.
- 20) The successful bidder shall have to execute the job under strict supervision and to the best satisfaction of Engineer Incharge, SMVDIME.
- 21) The allotted rates shall be final and binding. No extra payment shall be made to the successful tenderer on account of any escalation of material cost, transportation / labour charges, taxes etc. during the period of execution.

#### 22) Labour

- a) The contractor shall deploy its skilled labour in sufficient numbers to maintain the required pace and quality to ensure workmanship of the degree specified in the contract and to the satisfaction of Engineer Incharge, SMVDIME.
- In connection with the execution of work, the contractor shall not deploy any person who has not completed eighteen years of age.
- c) All the workers / employees deployed by the contractor shall be considered as the contractor's liability in all manners and the SMVDSB / SMVDIME shall not be liable in any manner whatsoever to any claim / dispute arising in connection therewith.
- d) The contractor shall indemnify and keep indemnified the SMVDSB / SMVDIME against:
  - i) Any claim arising out of third party loss/damage to the life property caused during the execution of the work.
  - ii) Any claim arising out of loss/damage to the workmen engaged by the contractor during execution of the work.
- 23) The contractor shall provide proper and adequate, storage facilities to protect all the materials and equipments including those issued by OWNER against damage from any cause whatsoever.
- 24) <u>Completion Certificate</u>: On completion of the electrical installation (or an extension to an installation) a certificate shall be furnished by the contractor countersigned by the licensed supervisor, under whose direct supervision the installation was carried out. This certificate shall be furnished in the form as prescribed by the local inspection agency, Director TTIC JKPDD. The contractor shall be responsible for getting the electrical installation inspected and approved by the local concerned authorities.
- 25) <u>Handover requirements:</u> Upon successful Supply, Installation, Testing & Commissioning of the 'Work' and satisfactory completion of site performance trials, the created infrastructure / material components shall be handed over to the Engineer Incharge, SMVDIME in working condition along with all relevant documents. The handover / takeover shall be duly documented and recorded alongwith the inventory of materials handed over. It is to be noted here that the date of handover / takeover shall be considered as the date of completion of the 'work' and the warranty / defect liability period shall start from said completion date.
- 26) Variation of Quantities: The quantities indicated in the BOQ are only indicative and the same may actually increase or decrease (by no more than 15%). The successful tenderer to whom the 'work' is allotted, shall have no reservations to execute the lesser / greater quantities. The payment to the successful vendor shall be based on the actually executed quantities (within 15% of the BOQ) against certificate to be issued by the Engineer Incharge of SMVDIME.
- 27) <u>Cost of Tests</u>: In case of any doubt, it shall be upto the vendor to establish the quality of material used / workmanship. In case the contractor is not able to establish the same, the Engineer Incharge, SMVDIME may insist for appropriate tests to be conducted in any laboratory of choice before the final acceptance of

'work'. The cost of preparing samples and carrying out such tests will be borne by the vendor.

- 28) <u>Liability for damage Defects or imperfections and rectifications thereof:</u> If the contractor or his workmen or employees shall injure or destroy any part of the building, road, fence etc contiguous to the premises on which work or any part of it is being executed or if any damage shall happen to the work while in progress, the contractor shall upon receipt of the a notice in writing, make the same good at his own expense.
- 29) **Guarantee/ Warranty:** The contractor shall provide written guarantee / warranty as per the OEM's policy in vogue in respect of various components of material used by the contractor in the execution of the 'work'.
- 30) <u>Defect Liability period:</u> Irrespective of guarantee / warranty on individual components, the complete 'work' (with all equipments and accessories) shall carry a Defect Liability period (DLP) of 12 months from the date of handover of the same to the Engineer Incharge.
- 31) AMC: The tenderer shall also have to compulsorily quote the rates for providing the AMC (Annual Maintenance Contract) cover for a period of 5 years (to start after the end of DLP period of 12 months). The year-wise rates shall be required to be quoted for the AMC. The selection of the final contractor shall be based on comparison of the consolidated amount arrived at by adding the cost of AMC for 5 years to the initial cost quoted for the asset.
- 32) Warranty / Defect Liability period Obligations: All failure/break down/non-conformances etc during the warranty / DLP period shall be immediately attended by the contractor and made good. In the event of failure, the equipments shall be put back into operation within 48 hours of getting intimation from the Engineer Incharge of SMVDIME (at cost to the contractor). In case of non-compliance, the PBG of the vendor shall be forfeited without any notice in this regard.

#### 33) Validity of the offer

The offers submitted against this NIT shall be valid for a period of 90 days from the specified date of opening of the tenders.

#### 34) Terms of Payment: -

- 50% of the value of LOA (to be issued) shall be made against the supply of material at site, in good-condition, against certificate of the Engineer Incharge.
- ii) 40% of LOA value after successful completion of the work and its handing over to the Engineer Incharge, SMVDIME.
- iii) 10% of LOA value shall be released after the DLP period (of 12 months) subject to fulfillment of DLP obligations.

#### 35) Latest Hour for Receipt of Tender

i) The tender must reach the office of the Chief Administrative Officer, SMVDNSH, Shri Mata Vaishno Devi Institute of Medical Excellence not later than the specified date and time as stipulated in the NIT.

- ii) The technical bid of the tender will be opened at the date and time specified in the NIT and price bid (of only such tenders who qualify in the Technical stage) shall be opened subsequently after evaluation of the technical bids.
- iii) The tenderers or their authorized representatives are at liberty to be present at the time of opening of the tender.

#### 36) Right of Acceptance

- i) The competent authority of SMVDIME does not bind itself to accept the lowest or any tender in full and reserves the right of accepting the whole or any part of the tender or portion of the quantity offered and the bidder shall execute / supply the same at the quoted rate.
- iii) The Shri Mata Vaishno Devi Institute of Medical Excellence reserves the right to reject or accept any tender without assigning any reason what so ever and also reserves the right to re-tender at its sole discretion.

#### 37) Force Majeure

If during the currency of contract, there is any out break of war, which whether financially or otherwise affect the execution of the contract, the tenderer unless contract is terminated under provision of this clause shall make his / her best efforts to complete the contract. However after outbreak of such war, Shri Mata Vaishno Devi Institute of Medical Excellence shall be entitled to terminate the contract at any time by giving notice in writing. Force Majure is hereby defined as a clause which is beyond the control of SMVDSB / Tenderer and which consequently affects the performance of the contract.

- 38) <u>Arbitration:</u> Any dispute or difference what so ever arising between the parties relating to the work shall be submitted for arbitration to an arbitrator to be nominated by Chief Executive Officer, Shri Mata Vaishno Devi Shrine Board, Katra. The venue of the Arbitration shall be at Jammu.
- 39) <u>Jurisdiction:</u> All disputes arising out in any way connected with this NIT / tender shall be deemed to have arisen at Kakryal, Katra and only courts in Katra/ Reasi shall have jurisdiction to determine the same.

-sdChief Administrative Officer,
SMVDIME

Sig. of Tenderer



### SHRI MATA VAISHNO DEVI INSITUTE OF MEDICAL EXCELLENCE, KAKRYAL (KATRA) – 182320

(An institute established by Shri Mata Vaishno Devi Shrine Board, Katra)

### Annexure - 'A'

# **Bill of Quantities (BOQ)**

Name of Work:- "Supply, Installation, Testing & Commissioning (S.I.T.C.) for the Electric Upgradation Work at Jhajjar Nallah."

	'0' QTY ITEMS TO BE COMPULSORILY QUOTED C OF THE FOLLOWING WITH ALL MATERIAL, LABOUR, LOADIN	NG. UN	LOADIN	G. TRANSP	ORTATION
ETC	COMPLETE IN ALL RESPECTS AT SITE	· 1		, T	1
Ю	Description	Unit	Qty	Rate	Amount
Α	S.I.T.C. [supply , installation, testing & commissioning ]of 14/16 swg CRCA fabricated & powder coated after 7 tank process , compartmentalised panel with air ventilation & dust/vermin proof , free standing floor mounted on100 mm rigid 'C' MS base supported on concrete base with anchor fasteners. Panels to be top / bottom entry & accessible from front & rear side or as required by consultant & site conditions. GA to be made by contractor & approved by consultant Prior to fabrication with respect to SLD & specks. Busbar to be of electrolytic Alu. with current density of 1.0 amp per sqmm or as mentioned for copper Panel shall confirm to all applicable IS standards. All MCCB shall be with microprocessor based release & RHOM . Below 25 KA thermal magnetic can be used. APFC panels to have D curve mcb All internal wiring to be done in pvc insulated copper wires Out going from MCCB to be terminated in bus bars/ panel connecteors in cable alley. All terminations to have BI-Metallic strip as required . All MCCB to have spreader links MCB DB. ALL DB's to be IP43. SITC of DB'S ready made or fabricated as per design & site conditions or consultants requirements. TPN DB shall have 3 nos separate neutral links with internal wiring done as required with copper wire & cable sockets Internal terminations & wiring to be neatly dressed up in a systematic manner. All MCB to be 'C' & 'D' curve as mentioned & indicators to be LED All MCB & DB to be approved by consultant before procurement. DB to be fixed surface or recessed as per requirements. All motors to have type 2 coordination.				
	MAIN L.T PANEL	-			
	630 A , 4p ,36 ka ,microprocessor release MCCB 1 nos	1			
	400 A , 4p ,36 ka ,microprocessor release MCCB 1 nos	]	_		
l	LED RYB indicators with mcb protection 1 sets	Nos	1		
	APFC CT 1 set				
	Ammeter with switch & CT , voltmeter and frequency meter with switch 1 set				
	4 pole alumnium bus bar 2 set				

	C20 a 4n an line shanne aver switch 4 act	1	ĺ	İ	I
	630 a , 4p, on line change over switch 1 set.				
	400 a , 4p, on line change over switch 1 set.	-			
	400 A 4P 25 KA MCCB 2 nos	-			
	200 A 4P 25 KA MCCB 1 nos	-			
	C 63 A 4P 10 KA MCB 4 nos	-			
	C 40 A 4P 10 KA MCB 3 nos	-			
	315 A 4P 36 KA MCCB 2 nos				
	100A 40 16 KA MCCB 2 nos				
	160 KA , TVSS , ASCO make 330 series 1 set				
	ammeter with selector switch and CT 5 set				
	APFC PANEL [100 KVAR ] compartment [current & contactor based] consisting of the following.				
	200 a 4 p mccb 25 ka, RHOM , E/F, O/C, S/C, U/V, 1 nos				
	Auto / manual ,APFC 6 step meter 1nos (APFC miroprocessor based with pf from .8 to .98 to be improved ) (LT, Siemens,ABB, Schnider , Legrand , Equivalent)				
	Gas filled 440 v capacitor 20 kvar X 4 steps with 7% reactors				
	Gas filled 440 v capacitor 10 kvar X 2 steps with 7% reactors				
	A/M switch , phase indication lamps with mcb tp for protection , 4 p aluminium bus bar with colour coded HSS as per capacity 30 sec delay timing for manual operation ,power contactors ,auxiliary contactors , illuminated start stop push buttons with elements , TPMCB for power contactors , phase indication lamps , Digital amp meter , with CT , digital voltmeter with selector switch , on / off indication lamps for capacitors All contactors to be capacitor duty. Detuned reactor filters to be used.				
	All 'D' curve mcb to be used for Capacitors to be placed in separate compartments with small continuous rating ventilation fans. All MCCB to have spreader links with RHOM sensing CT to be included				
	DUG WELL PANEL				
	c 63 a 4 p 10 ka mcb 1 nos				
3	LED RYB indicators with mcb protection 1 sets	Nos	1		
	aluminium 4 p bus bar 1 set.				
	c 25a 4 p 10 ka mcb 4 nos				
	ammeter with selector switch and CT 2 set				
	BOREWELL PANEL				
	c 40a 4 p 10 ka mcb 1 nos				
4	LED RYB indicators with mcb protection 1 sets	Nos	3		
7	aluminium 4 p bus bar 1 set.	1103	3		
	25 a 4p 100 MA ELMCB 2 nos				
	25 a 2p 100 MA ELMCB 3 nos				
	MCB DB TYPE 1				
	C 32 A 4 P 10 KA MCB 1 Nos				
6	25 A 2 P 100MA RCCB 3 Nos	Nos	1		
	C 6 - 32A SP MCB 10 KA - 18 nos	]			
	8 WAY TPN MCB DB IP43 1 Nos	]			
	MCB DB TYPE 2				
-	C 25 A 4 P 10 KA MCB 1 Nos	1			
	0 = 0 / 1				
7	25 A 2 P 100MA RCCB 3 Nos	Nos	1		
,		Nos	1		

1	6 WAY TPN MCB DB IP43 1 Nos			
	MCB DB TYPE 3			
	C 25 A 4 P 10 KA MCB 1 Nos			
8	25 A 2 P 100MA RCCB 3 Nos	Nos	0	
	C 6 - 20A SP MCB 10 KA - 6 nos			
	4 WAY TPN MCB DB IP43 1 Nos			
9	25 a 2 p mcb 10 ka with enclosure	Nos	2	
10	63 a 4 p mcb 10 ka with enclosure	Nos	2	
11	400a 36 ka 4p mccb with rhom in enclosure	Nos	1	
12	45 kw motor pump soft starter with enclosure and top and bottom entry box. Make L&T CSXi digital soft starter or equivalent. Inbuilt by pass contactor, soft stsrt, soft stop, adjautable current limit. Protections against overloading, single phasing, phase sequence reversal, unbalanced current ,abnormality in supply.	Nos	2	
13	7.5 kw motor pump DOL starter with enclosure and top and bottom entry box	Nos	2	
14	7.5 kw motor pump star delta starter with enclosure and top and bottom entry box	Nos	0	
15	110 kw motor pump soft starter with enclosure and top and bottom entry box. Make L&T CSXi digital soft starter or equivalent. Inbuilt by pass contactor, soft stsrt, soft stop, adjautable current limit. Protections against overloading, single phasing, phase sequence reversal, unbalanced current ,abnormality in supply.	Nos	2	
	TOTAL FOR PANELS AND DB'S			
В	EARTHING / PITS / L.A.			
	Chemical maintenance free earthing pits, high condivity carbon based backfill compound, 3 mts long, high tensil low carbon steel rod conductor with molecurly bonded 250 micron copper or clad copper on the outer surface with polyplastic earth pit chamber.[extra earth pits to be added if required to form a grid to reduce resistivity](suggested make Jef Techno or equivalent)			
1	transformer body 2 nos			
<b>"</b>		Noc	24	
1	•	Nos	24	
	transformer neutral 2 nos main panel 2 nos	Nos	24	
-	transformer neutral 2 nos	Nos	24	
-	transformer neutral 2 nos main panel 2 nos	Nos	24	
-	transformer neutral 2 nos main panel 2 nos 250 kva stabilizer 2 nos	Nos	24	
	transformer neutral 2 nos main panel 2 nos 250 kva stabilizer 2 nos GOD 2 nos DG 4 nos suctions pump rooms 4 rooms x 2 nos == 8 nos	Nos	24	
	transformer neutral 2 nos main panel 2 nos 250 kva stabilizer 2 nos GOD 2 nos DG 4 nos suctions pump rooms 4 rooms x 2 nos == 8 nos Lighetning arrestor 2 nos			
2	transformer neutral 2 nos main panel 2 nos 250 kva stabilizer 2 nos GOD 2 nos DG 4 nos suctions pump rooms 4 rooms x 2 nos == 8 nos Lighetning arrestor 2 nos S/F of 25 x 3 mm bare flat strip G.I. earthing	Mts	400	
3	transformer neutral 2 nos main panel 2 nos 250 kva stabilizer 2 nos GOD 2 nos DG 4 nos suctions pump rooms 4 rooms x 2 nos == 8 nos Lighetning arrestor 2 nos S/F of 25 x 3 mm bare flat strip G.I. earthing S/F of 25 x 6 mm bare flat strip G.I. earthing	Mts Mts	400 100	
3 4	transformer neutral 2 nos  main panel 2 nos  250 kva stabilizer 2 nos  GOD 2 nos  DG 4 nos  suctions pump rooms 4 rooms x 2 nos == 8 nos  Lighetning arrestor 2 nos  S/F of 25 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 3 mm bare flat strip G.I. earthing	Mts Mts Mts	400 100 0	
3 4 5	transformer neutral 2 nos  main panel 2 nos  250 kva stabilizer 2 nos  GOD 2 nos  DG 4 nos  suctions pump rooms 4 rooms x 2 nos == 8 nos  Lighetning arrestor 2 nos  S/F of 25 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 6 mm bare flat strip G.I. Earthing	Mts Mts Mts Mts	400 100 0	
3 4 5 6	transformer neutral 2 nos  main panel 2 nos  250 kva stabilizer 2 nos  GOD 2 nos  DG 4 nos  suctions pump rooms 4 rooms x 2 nos == 8 nos  Lighetning arrestor 2 nos  S/F of 25 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 6 mm bare flat strip G.I. Earthing  S/F of 50 x 3 mm bare flat strip G.I. Earthing	Mts Mts Mts Mts Mts	400 100 0 0	
3 4 5 6 7	transformer neutral 2 nos  main panel 2 nos  250 kva stabilizer 2 nos  GOD 2 nos  DG 4 nos  suctions pump rooms 4 rooms x 2 nos == 8 nos  Lighetning arrestor 2 nos  S/F of 25 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 6 mm bare flat strip G.I. Earthing  S/F of 50 x 3 mm bare flat strip G.I. earthing  S/F of 50 x 6 mm bare flat strip G.I. earthing	Mts Mts Mts Mts Mts Mts Mts	400 100 0 0 100 10	
3 4 5 6 7 8	transformer neutral 2 nos  main panel 2 nos  250 kva stabilizer 2 nos  GOD 2 nos  DG 4 nos  suctions pump rooms 4 rooms x 2 nos == 8 nos  Lighetning arrestor 2 nos  S/F of 25 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 6 mm bare flat strip G.I. earthing  S/F of 32 x 6 mm bare flat strip G.I. Earthing  S/F of 50 x 3 mm bare flat strip G.I. earthing  S/F of 50 x 6 mm bare flat strip G.I. earthing  S/F of 50 x 10 mm bare flat strip G.I. earthing	Mts Mts Mts Mts Mts Mts Mts Mts Mts	400 100 0 0 100 10	
3 4 5 6 7 8 9	transformer neutral 2 nos  main panel 2 nos  250 kva stabilizer 2 nos  GOD 2 nos  DG 4 nos  suctions pump rooms 4 rooms x 2 nos == 8 nos  Lighetning arrestor 2 nos  S/F of 25 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 6 mm bare flat strip G.I. Earthing  S/F of 50 x 3 mm bare flat strip G.I. earthing  S/F of 50 x 10 mm bare flat strip G.I. earthing  S/F of 50 x 10 mm bare flat strip G.I. earthing  S/F of 55 x 3 mm bare flat strip G.I. earthing	Mts	400 100 0 0 100 10 0	
3 4 5 6 7 8	transformer neutral 2 nos  main panel 2 nos  250 kva stabilizer 2 nos  GOD 2 nos  DG 4 nos  suctions pump rooms 4 rooms x 2 nos == 8 nos  Lighetning arrestor 2 nos  S/F of 25 x 3 mm bare flat strip G.I. earthing  S/F of 32 x 6 mm bare flat strip G.I. earthing  S/F of 32 x 6 mm bare flat strip G.I. Earthing  S/F of 50 x 3 mm bare flat strip G.I. earthing  S/F of 50 x 6 mm bare flat strip G.I. earthing  S/F of 50 x 10 mm bare flat strip G.I. earthing	Mts Mts Mts Mts Mts Mts Mts Mts Mts	400 100 0 0 100 10	

13	S/F of 12 swg GI earth	Mts	0		
14	S/F of 8 swg GI earth	Mts	200		
15	S/F of 8 swg CU earth	Mts	50		
16	S/F of earth bus bar 25 x 6 copper with ms enclosure	Nos	0		
17	S/F of earth bus bar 50 x 6 mm G.I. with ms enclosure	Nos	2		
18	S/F of 6 sqmm x1c pvc insulated green color coded wire in pvc conduit	Mts	0		
19	S/F of 10 sqmm x1c pvc insulated green color coded wire in pvc conduit	Mts	0		
20	S/F of 16 sqmm x1c pvc insulated green color coded wire in pvc conduit	Mts	0		
21	S/F of 25 sqmm x1c pvc insulated green color coded wire in pvc conduit	Mts	0		
22	LIGHTINING ARRESTOR				
а	Supply of level one protection Early Streamer Emission type Lightning Protection complete with the Lightning Air Terminal - Configured as a Spheroid which is comprised of separate electrically isolated 4panels surrounding an Earthened Central Finial. The upper section of the central finial shall be rated to withstand 200KA. The Insulation material used to electrically isolate the panels shall be comprised of base polymer which shall provide high Ozone & UV resistance with a di-electric strength of 24-38KV/mm & ESE terminal shall withstand a minimum Switching Impulse Voltage of 500KV tested as per NFC 17-102 & IEC Test Standard - IEC60-1:1989. Design to co ordinated with the supplying vendor . Supply of Mounting Pole. The mounting pole used to support the lightning air terminal shall either be a supporting mast or Free standing mast at a minimum height of 5 metres above to be area protected or as per required level of protection. The mounting pole and supports shall be securely fixed with brackets and guy wires where it is required to withstand maximum locally recorded wind velocity. Mounting Pole shall be non corrosive. The down conductor shall pass through the centre of the pole for the entire length of the pole. Supporting Guyed Mast: 5Mtr Lightning Strike recorder( 6 digits Display) of non-resettable type in an IP 67 enclosure with the minimum sensitivity of 1500 A & maximum capacity of 220 KA ( 8/20 micro sec wave form) tested as per IEC 60-1:189. ( these specks are considering a specific make, equivalent can be used) The product to be used shall be coordinated by the manufacturers engineer for their expertise	Nos	1		
b	S/F of 70 sqmm x 1 core pvc insulated flexible copper conductor .The down conductor should be fixed via conductive mounting clamps.The down conductor should be fixed via conductive mounting clamps	Mts	50		
	TOTAL FOR EARTHING/PITS/L.A.				
С	CABLING / WIRING & TERMINATIONS				
				•	•

				1
	SITC of Armoured copper & aluminium , XLPE, cabling to be			
	laid in trenches, cable trays, walls, floor, ceiling, with labelling			
	as required ,with saddle , spacers , well dressed manner as			
	required as per site conditions & consultant / architect .All cables			
	shall be XLPE. Wires shall be pvc insulated FRLS.			
1	Aluminium Armoured cables			
	400 sqmm x 3.5 c	Mts	0	
a b	300 sqmm x 3.5 c	Mts	0	
	240 sqmm x 3.5 c	Mts	90	
C	•	Mts		
d	185 sqmm x 3.5 c		0	
e f	150 sqmm x 3.5 c	Mts	70	
	120 sqmm x 3.5 c	Mts		
g	95 sqmm x 3.5 c	Mts	0	
h	70 sqmm x 3.5 c	Mts	0	
i	50 sqmm x 3.5 c	Mts	0	
j	35 sqmm x 3.5 c	Mts	0	
k	25 sqmm x 3.5 c	Mts	90	
	16 sqmm x 4 c	Mts	220	
2	Copper armoured cables	8.44	-	
a	1.5 sqmm x 2 c copper armoured cable	Mts	0	
b	1.5 sqmm x 4 c copper armoured cable	Mts	0	
С	2.5 sqmm x 2 c copper armoured cable	Mts	0	
d	2.5 sqmm x 3 c copper armoured cable	Mts	0	
е	2.5 sqmm x 4 c copper armoured cable	Mts	0	
f	2.5 sqmm x 6 c copper armoured cable	Mts	0	
g	4 sqmm x 3 c copper armoured cable	Mts	20	
h	4 sqmm x 4 c copper armoured cable	Mts	50	
i	6 sqmm x 2 c copper armoured cable	Mts	0	
j	6 sqmm x 3 c copper armoured cable	Mts	0	
k	6 sqmm x 4 c copper armoured cable	Mts	0	
I	10 sqmm x 4 c copper armoured cable	Mts	0	
m	10 sqmm x 2 c copper armoured cable	Mts	0	
n	S/F of 6 sqmm x 1 c copper multistranded pvc wire in pvc	Mts	0	
	conduits			
0	S/F of 10 sqmm x 1 c copper multistranded pvc wire in pvc	Mts	0	
	S/F of 16 sqmm x 1 c copper multistranded pvc wire in pvc			
р	conduits	Mts	0	
	S/F of 25 sqmm x 1 c copper multistranded pvc wire in pvc			
q	conduits	Mts	0	
r	S/F of 35 sqmm x 1 c copper multistranded pvc wire in pvc	Mts	0	
	conduits	IVILO	J	
s	S/F of 50 sqmm x 1 c copper multistranded pvc wire in pvc	Mts	0	
	conduits S/F of 70 sqmm x 1 c copper multistranded pvc wire in pvc			
t	conduits	Mts	0	
3	Double compression TERMINATIONS to Aluminium			
	Armoured cables(single compression gland below 3/4 ")			
а	400 sqmm x 3.5 c	Nos	0	
b	300 sqmm x 3.5 c	Nos	0	
С	240 sqmm x 3.5 c	Nos	12	
d	185 sqmm x 3.5 c	Nos	0	

е	150 sqmm x 3.5 c	Nos	0		
f	120 sqmm x 3.5 c	Nos	8		
g	95 sqmm x 3.5 c	Nos	0		
h	70 sqmm x 3.5 c	Nos	0		
i	50 sqmm x 3.5 c	Nos	0		
j	35 sqmm x 3.5 c	Nos	0		
k	25 sqmm x 3.5 c	Nos	10		
I	16 sqmm x 4 c	Nos	18		
4	Double compression TERMINATIONS to Copper armoured cables (single compression gland below 3/4 ")				
а	1.5 sqmm x 2 c copper armoured cable	Nos	0		
b	1.5 sqmm x 4 c copper armoured cable	Nos	0		
С	2.5 sqmm x 2 c copper armoured cable	Nos	0		
d	2.5 sqmm x 3 c copper armoured cable	Nos	0		
е	2.5 sqmm x 4 c copper armoured cable	Nos	0		
f	2.5 sqmm x 6 c copper armoured cable	Nos	0		
g	4 sqmm x 3 c copper armoured cable	Nos	10		
h	4 sqmm x 4 c copper armoured cable	Nos	10		
i	6 sqmm x 2 c copper armoured cable	Nos	0		
j	6 sqmm x 3 c copper armoured cable	Nos	0		
k	6 sqmm x 4 c copper armoured cable	Nos	0		
I	10 sqmm x 4 c copper armoured cable	Nos	0		
m	10 sqmm x 2 c copper armoured cable	Nos	0		
n	S/F of 6 sqmm x 1 c copper multistranded pvc wire	Nos	0		
0	S/F of 10 sqmm x 1 c copper multistranded pvc wire	Nos	0		
р	S/F of 16 sqmm x 1 c copper multistranded pvc wire	Nos	0		
q	S/F of 25 sqmm x 1 c copper multistranded pvc wire	Nos	0		
r	S/F of 35 sqmm x 1 c copper multistranded pvc wire	Nos	0		
S	S/F of 50 sqmm x 1 c copper multistranded pvc wire	Nos	0		
t	S/F of 70 sqmm x 1 c copper multistranded pvc wire	Nos	0		
5	CIRCUITS				
а	S/F of 2.5 sqmm x 3 wire circuit in pvc conduits	Mts	25		
b	S/F of 2.5 sqmm x 5 wire circuit in pvc conduits	Mts	25		
С	S/F of 4 sqmm x 3 wire circuit in pvc conduits	Mts	10		
d	S/F of 4 sqmm x 5 wire circuit in pvc conduits	Mts	10		
е	S/F of 6 sqmm x 3 wire circuit in pvc conduits	Mts	10		
f	S/F of 6 sqmm x 5 wire circuit in pvc conduits	Mts	10		
	TOTAL FOR CABLING / WIRING & TERMINATIONS				
<u>D</u>	LIGHT WIRING [ LHSFT MMS PVC CONDUITS ]				

	SITC of light / fan point / circuit wiring direct to mcb db or switch board as mentioned in respective drawings including circuits from switch board & lights to mcb db with 1.5 / 2.5 / 4 sqmm or as mentioned with FRLS copper wires in conduits with all terminations in copper cable sockets/ lugs, using modular switch accessories including chasing & recementing for recess boxes & conduiting as required. Modular switches for quote to be considered. Wiring to be done in if already laid ceiling cable trays and to be extended with conduits to the exact location of point. Switch board to switch board looping & sub circuit from DB shall be 2.5 sqmm x 3 wire. Switch board to primary & secondary point wiring shall be 1.5 sqmm x 3 wire, DB to direct				
1	Primary & secondary point wiring shall be 2.5 sqmm x 3 wire  Primary light point wiring controlled from LDB with 1.5 sqmm x 3 wire for lighting, ceiling fans, exhaust etc. Including 2.5 sqmm x 3 wire circuit from MCB DB.	Pts	10		
2	Secondary light point 1.5 x 3, wiring looped to above primary light point	Pts	10		
3	16 amp 3 pin top anchor roma make	Nos	5		
4	6 amp 3 pin top anchor roma make	Nos	7		
5	S/F of 6 a universal socket with face plate & enclosure for exhaust fans . Anchor roma make.	Nos	2		
6	ceiing fan step regulators, roma, with box and face plate	Nos	2		
7	S/F of 6 a universal switch socket with face plate & enclosure including all connecting wiring & terminations. Anchor roma make.	Nos	12		
8	S/F of 6 /16 a universal switch socket with face plate & enclosure including all connecting wiring & terminations. Anchor roma make.	Nos	12		
9	2.5 sqmm x 3 core copper armoured cable from MCB DB to all external light fixtures and gate lights	Mts	250		
10	1.5 sqmm x 3 core wire from 6"x 4" JB to light fixtures	Mts	100		
11	6"x 4 " IP55 box for external lights	Nos	25		
12	Ceiling fan hooks with dual expansion fastners	Nos	2		
	TOTAL FOR LIGHT WIRING	1122			
E	<b>LIGHT FIXTURES</b> light with all connectors, connecting wires, required supports, brackets, terminations, suspension arrangements etc.All fixtures with lamps.				
1	1 x 36W batten type tube light fixture , surface, wipro , WDF 9140	Nos	12		
2	Ceiling fans, 48", 3 leaf white. Crompton, orient.	Nos	2		
3	Exhaust fans, 12" industrial heavy duty crompton make including making opening in walls and making it good	Nos	2		
4	post lamps on gate,.wipro, FPP 21123, 23 watts CFL. With all brackets pipes etc.	Nos	2		
5	20/26 watts LED light fixtures on exterior of walls of all rooms with pipe or brackets as required. Identical to installed in Hospital residential area inner roads	Nos	25		

	TOTAL FOR LIGHT FIXTURES				
		1 1		1	
F	S/F of perforated cable trays, without cover,16 SWG, bolted				
2	type ,cable tray ,with hanger support , tee, bends, coupler ,cross pieces ,reducers ,Z section all accessories etc complete in all respects . hot dip galvanized, 90 microns.microns. All Cable trays to be branded make .				
а	1000mm wide x 50mm deep	Mts	0		
b	750mm wide x 50 mm deep	Mts	0		
С	600mm wide x 50 mm deep	Mts	0		
d	450mm wide x 50 mm deep	Mts	0		
е	300mm wide x 40 mm deep	Mts	10		
f	200mm wide x 25 mm deep	Mts	10	1	
g	150mm wide x 25 mm deep	Mts	10	1	
h	100mm wide x 25 mm deep	Mts	10	1	
3	S/F of ALU 16 swg box section to be laid on floor with all excavation, recementing & refinishing civil works to make good in line with the existing floor level. Respective junction box to be fabricated in 16 swg GI sheet with cut out as required for terminating the box sections				
а	65 x 40 mm	Mts	5		
b	100 x 40 mm	Mts	5		
С	150 x 150 x 50 mm MS Junction box with cover & cut outs	Nos	1		
d	200 x 150 x 50 mm MS Junction box with cover & cut outs	Nos	1		
е	250 x 150 x 50 mm MS Junction box with cover & cut outs	Nos	1		
4	S/F of heavy duty PVC conduits to be laid on floor with all excavation, recementing & refinishing civil works to make good in line with the existing floor level. Respective junction box to be fabricated in 16 swg GI sheet with cut out as required for terminating the box sections				
а	1 x 25mm	Mts	25		
b	1 x 32mm	Mts	10		
C	1 x 40mm	Mts	10		
d	1 x 50mm	Mts	5		
е	150 x 150 x 50 mm MS Junction box with cover & cut outs	Nos	1		
f	200 x 200 x 50 mm MS Junction box with cover & cut outs	Nos	1		
g	250 x 250 x 50 mm MS Junction box with cover & cut outs	Nos	1	ļ	
5	S/F of heavy duty PVC trunking with cover and all accessories to complete in all respects				
а	75 x 75 mm	Mts	5		
b	100 x 75 mm	Mts	5		
С	100 x 100 mm	Mts	5	<u> </u>	
	TOTAL FOR CABLE TRAY/JUNCTION BOX/FLOOR COND	UITS			
Н	INVERTER				

а	S/F of 1.5 KVA sine wave inverter with batteries, 24 volt system for 3 hrs plus back up. Makes - sukam, microteck or equivalent makes. MS fabricated stand to be provided for inverter and battery.	Nos	1	
	TOTAL FOR INVERTER			
ı	MISC JOBS			
а	Disconnection & removal of all switchgears, wiring, accessories, MS brackets, starters, conduits, stabilizer, light fixtures etc and make good the existing wall by plastering. Material to be kept at clients shown place with all loading unloading and transportation.	Job	1	
b	Servicing, disconnection, & reconnection of 250 kva existing stabilizer including minor repairs and replacement of transformer oil. Extended copper bus bar to be provided to the out going of stabilizer.	Job	1	
С	Replacement of graphite gland packing for4 motors	Job	1	
d	Cleaning , derusting , applying red oxide and painting of 45 KW motors pumps , pump frames pipes and HT poles .	nos	2	
е	Repairs to existing 45 KW pumps ( prior site inspection required before quoting)	Job	2	
f	Reloaction of DG set with crane etc to the new location as directed. Inclusive of disconnection and reconnection with all required terminations. (Prior inspection required before quoting)	Job	1	
	TOTAL FOR MISC JOBS			
J	HT SECTION			
а	S/F of G.O.D with required 2 pole structure, drop out fuse and foundation etc to be complete in all respects.Inclusive of all overhead wiring, cabling etc.	Job	1	
b	Disconnection and dismantelling of all cables and terminations on poles	Job	1	
	TOTAL FOR HT JOBS			
	NOTES			
1	All existing good condition switchgears, starters, accessories etc to be used and the benefit to be passed on to the client.			
2	Contractor to approve all GA dwgs before fabrication			
3	Contractor to provide all shop dwgs prior to installation			
4	Contractor to provide all as built dwgs [ soft copy & 6 sets of hard copies ]after completion			
5	Contractor to execute in coordination with all vendors, consultants & Architect			
6	Any items not covered & required to be executed shall be done with prior approval of PMC and shall be paid as per prevaling market rates			

7	Vendor to maintain clean site with debris management, failing to do so the client shall do the same and deduct from the vendor along with penalty.					
8	Contractor to certify the site by the local electrical inspector					
9	All existing starters to be tested for use before new procurement					
	SUMMARY					
Α	TOTAL FOR PANELS / MCB DB'S / SWITCHGEARS					
В	TOTAL FOR EARTHING / PITS / L.A.					
С	TOTAL FOR CABLING / WIRING & TERMINATIONS					
D	TOTAL FOR LIGHTING WIRING					
Е	TOTAL FOR LIGHT FIXTURES					
F	TOTAL FOR TRUNKING AND TRAYS					
G						
Н	TOTAL FOR INVERTER					
ı	TOTAL FOR MISC JOBS					
J	TOTAL FOR HT SECTION					
			SUB T	OTAL		
			VAT	TAX		
		SI	ERVIC	E TAX		
		FI	NAL	TOTAL		
Rup	ees in Words :-	I			ı	

-sd-Chief Administrative Officer, SMVDIME

Signature of Tenderer



### I MATA VAISHNO DEVI INSITUTE OF MEDICAL EXCELLENCE, KAKRYAL (KATRA) – 182320

(An institute established by Shri Mata Vaishno Devi Shrine Board, Katra)

# List of Approved makes / Brands for Electrical Major Electrical Components

	APPROV	VED MAKE LIST FOR ELECTRICAL
s.NO	MATERRIALS DESCRIPTION	NAME OF MAKE
1	MCCB/RCCB	L&T, Schinder, Siemens, Legrand, L&T
2	MCB/RCBO	Legrand, L&T, Hager, Siemens, L&T
3	DB/ETPN DB/VTPN DB	Legand, Schnider, Hager, L&T
4	LED Indicators	Technik, C&S, GE
5	Digital Meters	AE, Conzerve
6	SFU, FCU	L&T, Schnider, Siemens
7	FRLS Cables	Polycab, Finolex,
8	FRLS Wires	Polycab, Finolex, KEI
9	Lugs/Cable Sockets	Comet, Dowell
10	Glands	Comet, Universal
11	LHSFT PVC Conduits	Precision, AKG/BEC, Dianond, Asian
12	Modular Switches/Socket	Havels/ Cabtree, Legrand
13	PVC Trunking	Precision, AKG/BEC, Modi, Legrand
14	Cat-6 Wire & Cat-6 I/O	AMP/TYCO, D-Link, Systemax
15	Tag Block	Krone
16	Metal Clad Plug Socket	Legrand, L&T, Siemens, Crompton
17	TPN/DP Switchs/Isolators	Legrand, L&T, Siemens, Legrand
18	MS Black Conduit	AKG/BEC, Universal
19	Capacitor for Motive Power	Crompton-Greaves, L&T, SIEMENS
20	Maintenance Free Earth	Universal, Earth Plus or as per specification, JEF TECHNO
21	Early Streamer Emmission LA	ABB, Satelit
22	ATS	ASCO, Schnider, As per specification
23	BUS DUCT	Schnider, L&T, C&S
24	Change Over Switch	L&T, Schnider Siemen
25	Cable Tray	City Stelage, Indiana
26	ESE Lightening Arrestor	Satelit, ABB
27	Transformer	Universal, Voltamp Baroda
28	PSS	ABB, SCHINDER, C&S

-sd-Chief Administrative Officer, SMVDIME



## I MATA VAISHNO DEVI INSITUTE OF MEDICAL EXCELLENCE, KAKRYAL (KATRA) – 182320

(An institute established by Shri Mata Vaishno Devi Shrine Board, Katra)

Duine Did	<u>Annexure - 'B'</u>
<u>Price Bid</u>	
Name of Tenderer:	
Amount of CDR with number and date:	
То	
The Chief Administrative Officer, Shri Mata Vaishno Devi Institute of Medical Excelle Kakryal, Katra.	ence,
Sir,	
l,	from M/s
	hereby submit my tender for
the "Supply, Installation, Testing & Commissioning	g (S.I.T.C.) for the Electric
Upgradation Work at Jhajjar Nallah" for a total	price consideration of Rs.
/- (Rupees	
	),
as per the (duly filled BOQ) sheet attached to my tender.	
I further affirm that I have read and fully understoo	od the tender Notice and agree
to abide by all the terms and conditions laid herein, which	ch are being signed in token of
my acceptance. In case, I fail to abide by the conditions of	r to carry on the contract to the
entire satisfaction of the Shrine Board, I will be liable to	the penalties mentioned in the
terms and conditions.	
	Yours faithfully,
Signature	
Name of Tenderer	
M/S	