TENDER DOCUMENT

SHRI VISHWAKARMA SKILL UNIVERSITY (SVSU) INVITES TENDERS *ONLY FROM PSUs/MULTINATIONAL CORPORATION (MNC)* FOR (24X7) DAY TO DAY OPERATION & MAINTENANCE with SPECIAL REPAIRS INCLUDING ALL ELECTRICAL WORKS, DG SETS, PASSENGERS AND GOODS LIFTS, ELECTRICAL INSTALLATIONS (INCLUDING ALL INTERNAL & EXTERNAL INSTALLATIONS), CIVIL WORKS, HVAC WITH CONTROLLER & SPLIT/WINDOW ACs, IT WORKS AND BMS SYSTEM, FIRE FIGHTING SYSTEM, FIRE ALARM, HOUSEKEEPING WORK OF SVSU CAMPUS, SOLAR SYSTEM, UPS SYSTEMS, WATER SUPPLY SYSTEM, SEWERAGE TREATMENT PLANT SYSTEM/NETWORK STP), SPORTS FACILITIES at VILLAGE - DUDHOLA, SVSU, PALWAL – 121102, FOR A PERIOD OF TWO YEARS

(TECHNICAL BID)

SHRI VISHWAKARMA SKILL UNIVERSITY

VILLAGE – DUDHOLA – PALWAL - 121102, Website : www.svsu.ac.in

NOTICE INVITING TENDER

Online tenders under two bids system are invited from **P S U s /Multinational Corporation (MNC)** f or providing services as listed under the scope of work in the tender documents. The key parameters are as follows: -

Sl. No	Description	Details
1.	**Name of work**	DAY TO DAY OPERATION & MAINTENANCE with SPECIAL REPAIRS INCLUDING ALL ELECTRICAL WORKS, DG SETS, PASSENGERS AND GOODS LIFTS, ELECTRICAL INSTALLATIONS (INCLUDING ALL INTERNAL & EXTERNAL INSTALLATIONS), CIVIL WORKS, HVAC WITH CONTROLLER & SPLIT/WINDOW ACs, IT WORKS AND BMS SYSTEM, FIRE FIGHTING SYSTEM, FIRE ALARM, HOUSEKEEPING WORK OF SVSU CAMPUS, SOLAR SYSTEM, UPS SYSTEMS, WATER SUPPLY SYSTEM, SEWERAGE TREATMENT PLANT SYSTEM/NETWORK STP), SPORTS FACILITIES at VILLAGE - DUDHOLA, SVSU, PALWAL – 121102, FOR A PERIOD OF TWO YEARS
2.	**Estimated cost period of two years**	**Rs. 8,52,19,136/-**
3.	**Period of Contract**	**2 Year** and extensible to max of 3 years based on performance review, feedback of the services.
4.	**Earnest Money**	**Rs. 17,04,382/- (Rupees only) to be deposited along with tender, through Demand Draft in favor Registrar, Shri Vishwakarma Skill University, payable at Gurugram. Bids received without EMD will be** summarily rejected.
5.	**Performance Guarantee**	10 % (Ten Percent Only) of contract value within 30 days from the issue of Letter of Award
6.	**Cost of Tender and Fees**	Rs. 1000 and 1180 (Non-Refundable)
7.	**Start date of Bid**	29/09 /2022 at 17:30 Hrs.
8.	**Date and Time for submission of Tender**	Up to 17:00 Hrs on 19/10/2022 at the online portal i.e. https://etenders.hry.nic.in and DNIT information can also download from www.svsu.ac.in
9.	**Date and Time for opening of Tender**	a. Technical Bid open on 21/10/2022 at 14:00 Hrs. b. The technical bids of tenders shall be opened through online portal of Haryana Government i.e. https://etenders.hry.nic.in c. Date of Presentation as per technical evolution process to pre-eligible bidders shall be inform through email id of the Bidders. d. Date of opening of financial bids of the eligible bidders shall be intimated to the Bidders who are found to be technically pre-qualified.
10.	**Date of Pre-Bid Meeting**	A pre bid meeting will be held on 11/10/2022 at Site 10:00 Hrs. at the SVSU Campus, Village- Dudhola-Palwal - 121102.
11.	**Tender Documents**	Tender documents can a l s o be Downloaded from the official website of SVSU i.e www.svsu.ac.in.
12	**Minimum Eligibility criteria**	(i) The PSUs/Multinational Corporation (MNC) should have minimum of seven years' satisfactory work experience as upto previous day of last date of submission of application in execution of similar works of Public Sector and Govt. Companies / Banks / Government Departments / Research Organizations/Institutional bodies/Commercial buildings. (ii) The agency should have executed at least: - (a) One completed similar work of value not less than Rs. 6,81,75,308 in the last seven years. or (b) Two completed similar works, each of value not less than Rs. 5,11,31,481 in the last seven years. or (c) Three completed similar works, each of value not less than Rs. 3,40,87,654 in the last seven years. **The bidders shall submit performance certificates issued from the clients concerned for whom they have worked.** **They should not have been debarred/blacklisted by any of the Govt. /PSUs /SVSU. A written statement on a stamp paper of Rs10/- be submitted in this regard.**

13	**TECHNICAL EVALUATION PROCESS:**	All responses including the proposed solution(s) received by SVSU shall be evaluated by an Evaluation Committee duly constituted by SVSU, on the basisof eligibility criteria mentioned in this document. The responders will present the solution before the Committee as per schedule published on website. **Criteria: -** **i. Turnover (Last Financial Year) (Max. 25 Marks)** a) More than 8 crores: 25 Marks b) 7-8 crores: 20 Marks c) 5-6 crores: 15 Marks d) 2-4 crores: 10 Marks e) Less than 2 crores: 0 Marks **ii.** Experience of work in a campus of 50 Acre or more **OR** in an office Establishment, commercial office of 45 Acre or more completed/executed in a Central/State Govt. Organization/Autonomous Body/ Central Public Sector Undertaking/Commercial buildings. **(Max 25 Marks)** a) More than 5 Work: 25 marks b) 4 to 5 Work: 15 marks c) 2 to 3 Work: 10 marks d) 1 Works: 5 Marks **iii. Experience in similar nature of work in number of countries. (Max 10 Marks)** a) More than 5 countries: 10 marks b) 4 to 5 countries: 8 marks c) 3 countries: 5 marks d) 1 - 2 countries: 3 Marks **iv. Average of Profit before Tax (Average of last 3 Financial year) also certified by CA. (Max 20 Marks)** a) More than 6 crores: 20 Marks b) 5-6 crores: 15 Marks c) 4 crores: 10 Marks d) 2-3 crores: 8 Marks e) Less than 2 crores: 05 Marks **v. Works in GRIHA rated buildings (Max 5 Marks)** Similar works in GRIHA Rated Buildings – 5 Marks **vi. Design Concept Presentation. (Max 15 Marks)** Emphasis on organization structure to manage the entire running operation maintenance contract with deployments of minimum manpower, plant machinery and equipment as proposed for all works need to be marked in the presentation as well. a) Presentation on operation and maintenance of Electrical Work I.e. Sub-stations, Internal and external installations, DG Sets etc. - Max. 03 Marks b) Presentation on operation and maintenance of Civil Work I.e. Furniture/RCC of Buildings etc. - Max. 03 Marks c) Presentation on operation and maintenance of IT Works and BMS System - Max. 03 Marks d) Presentation on Housekeeping work of Campus - Max. 03 Marks e) Presentation on operation and maintenance of Water Supply and STP - Max. 03 Marks **"Similar works" shall mean "Residential /Official/Commercial Complex in Annual operation & Maintenance of buildings includes Civil, Electrical, Mechanical, horticulture, Fire Fighting, Fire Alarm, Sanitary installations, Operation of Lifts, DG sets and STP, WTP and CAMC of Specialized equipment and UPS etc.** ***CRITERIA FOR SHORTLISTING THE BIDDERS FOR TENDER PROCESS: -*** **Only those bidders who have been found to be technically eligible i.e. Bidders with *Minimum Technical Prequalify Score of 70 marks and* above will be Prequalified to participate further in the tender process at SVSU. The SVSU will inform only on email communication to all shortlisted bidders. All other disqualified bidders cannot participate in further tendering process. Earnest money deposited by the disqualified agency shall b3e released after completion of tender process.**

14	**General Instruction**	All the documents are to be submitted by bidder should be self-attested photocopies, legible, signed and stamped by authorized signatory, otherwise the bid is likely to be rejected.
15	**Governing Law & Jurisdiction**	• This Tender shall in all respects be governed in accordance with the laws of India and the courts of New Delhi/Gurugram shall have the sole and exclusive jurisdiction to entertain any disputes that may arise hereunder. • The parties here to undertake to use their best efforts to resolve amicably any dispute arising out of or in connection with this Tender and the interpretation thereof through consultation in good faith and mutual understanding, provided that such consultation shall not prejudice the exercise of any right or remedy of either Party hereto by any such Party in respect of any such dispute. If the dispute doesn't resolve amicably then the same will be referred to the sole arbitrator to be appointed with the consent of both the parties. The decision of the arbitrator shall be binding on both the parties. The arbitration shall be concluded as per the provisions of ''Arbitration and Conciliation act 1996''
16	**Bid/Tender Validity**	The BId shall remain valid for 180 days from the date of opening of the Technical Bid.

INSTRUCTIONS FOR TENDERS

1. Bidders shall visit the site of work on any working day during office hours by contacting Administrative Officer/Engineers / Caretaker to acquaint themselves of the type, Quality, quantity & conditions of work to be executed, to assess various requirements of resources, etc.
2. Bidders shall study the tender documents in detail along with conditions of contracts, special conditions, scope of work, etc. before submission and seek any clarification in writing at least 3 days before the last dateof submission of tenders.
3. Tenders are invited in two bids system, both the parts shall be submitted Online at https://etenders.hry.nic.in with name of work, type of the bid (Technical and Financial) as per guidelines of Haryana Government e-procurement system.
4. Earnest money as indicated on NIT shall be submitted with the Technical bids. The EMD of unsuccessful Bidders shall be refunded within one month after the award of work to the successful Bidders.
5. All the pages of the tender documents shall be signed and stamped by the authorized signatory before submission.
6. Conditional tenders shall not be accepted.
7. Rates and tendered amount shall be quoted in both, figures and words. Corrections shall be avoided, but if any is done, it shall be neatly & legibly carried out. White fluid shall not be used for correction. Discrepancy in figure & words and rates versus amount shall be dealt as per Haryana State PWD/CPWD norms.
8. ***Last date of submission of tender is 19/10/2022 up to 17:00 Hrs.***
9. ***Pre-Bid melting date: 11/10/2022 at 10:00 Hrs.***
10. ***Date and time of opening of technical bids of tender is 21/10/2022 at 14:00 Hrs.***
11. The financial bid of the Bidders, who are declared qualified in the technical bid and technical evolution process with minimum 70 marks or above will be prequalified as mentioned in technical evolution process. For attend the opening of financial bid, a e-mail from the SVSU to Bidders before 2 days opening of financial bid will be sent to the Bidders.
12. In general, Haryana State PWD specification/CPWD specifications, HSR/DSR 2021 with all up-to-date correction slips shall apply unless otherwise is indicated in these tender documents.
13. All Bidders shall indicate their contact details, mobile no and email IDs to seek any clarification from them by SVSU.
14. All financial term /demand draft etc. should be submitted in the favor of Registrar, Shri Vishwakarma Skill University, Payable at Gurugram.
15. The tender for the work shall remain open for acceptance for a period of 90 days from the date of opening of the technical bid.
16. SVSU reserves the right to cancel the tender at any time for any reason.
17. ***The Competent Authority of SVSU, reserves the right to accept or reject any or all tenders or part of tender without assigning any reason whatsoever.***
18. Certificate of Financial Turn over: At the time of submission of tender, the Bidders shall upload Affidavit / Certificate from Chartered Accountant mentioning Financial Turnover of at last 3 years or for the period as specified in the tender document and further details if required may be askedf rom the Bidders after opening of technical tenders. There is no need to upload entire volum inous balance sheet. However, one page of summarized balance sheet (audited) and one page of summarized P & L (audited) for last three years ending on 31.03.2022 should be submitted.
19. In case of Lumpsum Rate Tender, Bidders must ensure to quote single quoted rate only.
    a. In case of item rate tender, price shall be entered against each item in the Bill of Quantities/Scheduled of Quantities. The cost of item against which the rates and prices of other items in Bill of Quantities/Schedule of Quantities and no payment shall be made for the quantities executed for items against which rate has not been quoted by the bidder.
    b. The Bidders if required may submit questions in writing (e-mail at tenders @svsu.ac.in)to seek clarifications latest by 09/10/2022.

20. It is mandatory to submit copies of all the documents such as service tax registration/ VAT registration/ Sales Tax registration/EPF registration/ESI registration, PAN no. with their latest returns / challans etc. as stipulated in the tender document. On award ofwork, if the Bidder is not having DVAT registration, then he has to get DVAT registration within 30 days' time from the date of LOA. Further, Bidder also should have valid electrical contractor license.

21. The tenders shall be submitted tender Online at https://etenders.hry.nic.in and visit for if any query at Shri Vishwakarma Skill University, Plot no. 147, Sector-44, Gurugram – 122003. Bid details in as noted here under: -

    a) Envelope-I superscribed as Earnest Money and Tender Fees which is contain EMD and cost, Prequalification cum Technical Bid, Documents/required information for Technical evolution process which contains all the documents asked for the Prequalification along with DNIT with Technical Bid (Scope of Work, Special Conditions of Contract, General Conditions of Contract.

    b) Envelope-II superscribed as Price Bid which contains Bill of Quantities and Quoting Rate Sheet of Lump sum rate only.

    The price/financial bid of only those bidders shall be opened who qualify in Pre-qualification cum Technical Bid and Technical evolution process.

Shri Vishwakarma Skill University
(A Statutory Body of the Govt. of Haryana)
Village-Dudhola-Palwal -121102
Email:idc@svsu.ac.in

DAY TO DAY (24X7) OPERATION & MAINTENANCE with SPECIAL REPAIRS INCLUDING ALL ELECTRICAL WORKS, DG SETS, PASSENGERS AND GOODS LIFTS, ELECTRICAL INSTALLATIONS (INCLUDING ALL INTERNAL & EXTERNAL INSTALLATIONS), CIVIL WORKS, HVAC WITH CONTROLLER & SPLIT/WINDOW ACs, IT WORKS AND BMS SYSTEM, FIRE FIGHTING SYSTEM, FIRE ALARM, HOUSEKEEPING WORK OF SVSU CAMPUS, SOLAR SYSTEM, UPS SYSTEMS, WATER SUPPLY SYSTEM, SEWERAGE TREATMENT PLANT SYSTEM/NETWORK STP), SPORTS FACILITIES at VILLAGE - DUDHOLA, SVSU, PALWAL – 121102, FOR A PERIOD OF TWO YEARS

SCOPE OF WORK

Day to Day (24X7) Operation & Maintenance with Special Repairs Including All Electrical Works, DG Sets, Passengers and Goods Lifts, Electrical Installations (Including All Internal & External Installations), Civil Works, HVAC with Controller & Split/Window Acs, It Works and BMS System, Fire Fighting System, Fire Alarm, Housekeeping Work of SVSU Campus, Solar System, Ups Systems, Water Supply System, Sewerage Treatment Plant System/Network STP), Sports Facilities.

Exclusions from Scope: All parts/materials except Housekeeping work/material which are not mentioned in the BOQ items or Major Systems/items, shall be procured by SVSU either from OEM/market or as may be deemed fit by it.

The details of the complex are as under:
PART(A)-SITE OF WORK:

The site of SVSU campus is located in Village-Dudhola Palwal, Haryana - 121102 having total area of approximately 82 Acres. The details of Campus built up area/buildings are as under:

S.No	Buildings	Area in Sq. M	No. of Blocks	No. of Stories	Ground Coverage
1	Administrative Block	5000	1	5	1115
2	Auditorium & Convention Centre	7760	1	5	2350
3	Academic Block	22245	6	4	5561
4	Central Library/ Computer Centre/Student Activity Centre/ Central Cafeteria	9110	1	4	2400
5	Centre of Excellence	4660	1	6	773
6	V.C Residence cum Camp Office	411	1	2	330
7	Senior Admin Residences (4 no. Type-8)	1098	4	2	645
8	Guest House/ Faculty House (With 20 no. guest rooms on twin sharing basis and 2 no. VVIP Suits)	2686	1	4	935
9	Type 8 & 7 Residence (32 residences)	10823	2	5	2165
10	Type 6 & 5 Residence (32 residences)	7140	2	5	1428
11	Type 4 Residence (12 residences)	1238	2	3	413
12	Type3 & 2 Residence (48 Residences)	4735	2	7	676
13	Type 1 Residence (12 Residences)	831	2	3	277
14	Transit Accommodation(28 units)	1849	1	4	462
15	Girls Hostel 1 Seater (85 students)	3492	1	6	582
16	Girls Hostel 3 Seater (261 students)	11384	1	6	1897
17	Girls Hotel 4 Seater (114 students)				
18	Boys Hostel 1 Seater (85 students)	3492	1	6	582

19	Boys Hostel 3 Seater (261 students)	11384	1	6	1897
20	Boys Hotel 4 Seater (114 students)				
21	Shopping Centre	1310	1	2	655
22	Health Centre	730	1	1	730
23	Community Centre	1020	1	2	700
24	Stadium	2350	1	3	1175
25	Gymnasium	3000	1	3	2360
26	Swimming Pool	1260	1	2	630
27	Playground (400 Meter Track)	-	-	-	-
28	Feeder School	3000	1	4	750
29	6 No. Electrical Sub-Stations	3000	6	1	3000
30	STP	1000	1	1	1000
31	WTP	1000	1	1	1000
	Total Area in Phase I	127008			36488

(i) Total Ground Covered area of SVSU campus: - 36488 Sq. meter.
(ii) Total Buildings area of SVSU campus: - 127008 Sq. meter.
(iii) Total Open area of SVSU campus: - 295354 Sq. meter.

PART-(B): Details of services:

Operation Repair & Maintenance (Day to Day works), regular & routine checking of all systems (as per OEM's standard / as decided by Engineer-In-Charge) shall be carried out in the above said buildings/throughout campus and other areas as given below:

I. Operation and Maintenance of DG Sets.
II. Operation and maintenance of Complete 6 Nos. 11KV/415V Electrical Sub-Stations
III. Operation and maintenance of entire campus all Electrical Internal and External Installations.
IV. Fire Fighting systems including fire detection system, water sprinkler system, Fire Alarm Down Comer systems and allied equipment.
V. Maintenance of all civil works (including internal & external maintenance of buildings).
VI. Operation and maintenance of all Sanitary and Plumbing system.
VII. Operation, maintenance of all RO unit's/purifiers/filters/ water cooler.
VIII. Operation and maintenance of IT Works and BMS System.
IX. Operation of HVAC system with controllers, Split/window ACs.
X. Housekeeping and cleaning work of campus with all required materials.
XI. Operation of Solar System.
XII. Operation of UPS System.
XIII. Operation of Water Supply System
XIV. Operation of Sewerage Treatment Plant.
XV. Operation and running maintenance of Swimming pool and others sports facilities.

The work shall be carried out as per the provisions in General Conditions, Special Conditions, Haryana State/CPWD Work & maintenance Manual Terms & Conditions of respective services/trades, HSR/DSR in vogue and BOQ of the contract. The Bidders are advised to have the detailed survey/study of the work site, its nature & condition, surroundings, allConditions of the contract before quoting their rates. It may please be noted that all the rates shall be inclusive of requisite manpower, T&P, Machineries, ladders, M.S. scaffoldings safety & security arrangements including provision of gratings, all leads, lifts, height & depths, working in night shifts, taxes like labour cess, VAT, Service tax, levies, etc., statutory requirements like labour license, PF registrations and other requirements under the contract. No claim shall be entertained/accepted, unlessotherwise specified, on any account beyond the accepted/agreement rates. In addition to the above any other work as may bedeemed necessary by the Engineer-in- Charge as per its directions.

IMPORTANT DEFINITIONS

In this Contract, the following terms shall be interpreted as indicated below:

i. "Service Provider" shall mean the successful bidder to whom the contract has been awarded and with whom the Tendering Authority signs the contract for rendering of operation and maintenance, goods and services.

ii. "Contract" means the agreement entered into between the Tendering Authority and the Service Provider, as recorded in the document signed by the parties, including all the attachments and appendices thereto, and all documents incorporated by reference therein;

iii. "Bidders/Bidder" means any firm taking the full responsibility of managing the contract as required in the tender. The word "Bidder" when used in the pre award period shall be synonymous with "Service Provider" which shall be used after award of the contract.

iv. "Contract Price" means the price payable / receivable to / by the Successful Bidder under the Contract for the full and proper performance of its contractual obligations;

v. "Services" means services ancillary in the Operation & Maintenance Services in throughout campus of SVSU.

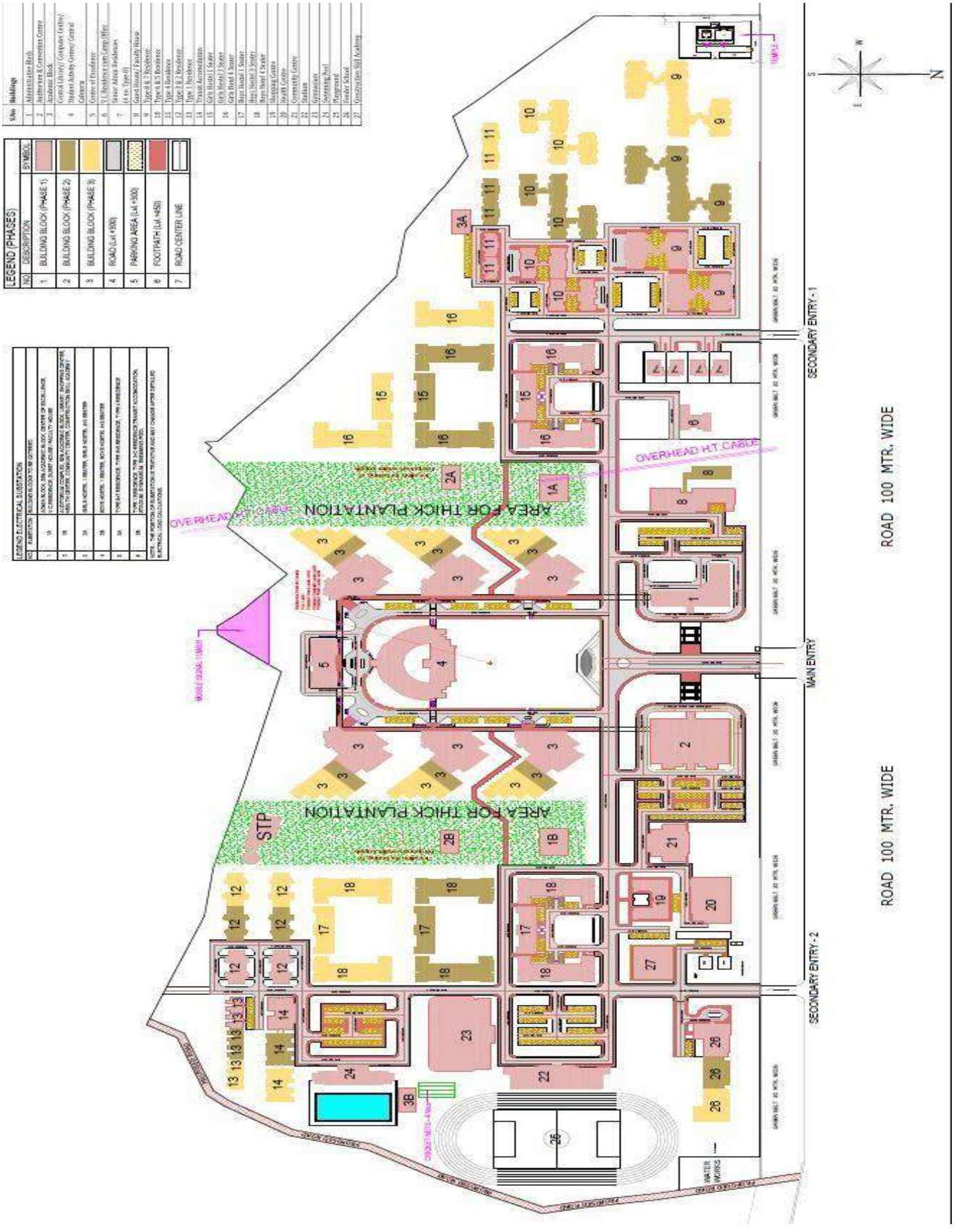
vi. "SVSU" means "Shri Vishwakarma Skill University"

vii. "Bank Guarantee" means the guarantee to be provided by the Bidders as given in the tender document for the specified amount.

ABBREVIAT'IONS

i. SVSU – Shri Vishwakarma Skill University
ii. PSU - Public Sector Undertakings
iii. MNC- Multi National Companies
iv, RTI - Right to Information under RTI Act, 2005.
v. B&R - Buildings & Roads.
vi. E&M - Electrical & Mechanical
vii. EPF - Employees Provident Fund
viii. ESI - Employees State Insurance

Master Plan of SVSU Campus



SPECIAL CONDITIONS OF THE CONTRACT

1. Work shall be carried out strictly as per the frequency of the work specified in the State PWD/CPWD/OEM specifications and State PWD/CPWD Maintenance Manual/BOQs Item/conditions of contract. One copy of Checklist (enclosed in the tender document) duly signed by the concerned official of SVSU, Palwal and Service provider shall be submitted to SVSU at the end of day or subsequent day or as per frequency mentioned in the checklist. Please note that the payment of the work will be regulated based on the duly signed checklists and as per payment procedures as set forth in these documents. The Service provider shall prepare checklists, booklets, invoices, other documents as required for authenticating payments in triplicate.

2. The Service provider shall be responsible to maintain all buildings/throughout campus and in General Shift for Office Complex along with Complaint Centre with use of Complaint Register / Computers & net based system (E-mail), telephone/mobile, messages (SMS), for receiving and monitoring the complaints 24x7 for all buildings/throughout SVSU campus. The Service provider will have to arrange and maintain at least 2 nos. Telephones/Mobile Phones, 2 nos. Computers with operators along with peripherals and broadband Internet connections to operate IVRS system and 01 no. photocopier at his own cost. If the agency intends to use computers and its internet connection(s) available at the service center, the same shall be on chargeable basis and the agency will have to pay all the bills/ running cost of the same including administrative charges, other charges & maintenance thereof. All supervisors to be provided with shift cell phones. The wireless communication with workers through ordinary cells with all workers and their payment and upkeep is Service provider responsibility. A Electrical vehicle should be available for patrol and quick reaction team.

3. Electricity and water connections already available for general purpose at the Service Centre shall be provided free of cost by the SVSU for all works covered in the scope and specifications. However, the Service provider to keep a record of works that require bulk use of these facilities in works/areas covered under the contract with a fair approximation of the quantity required.

4. The Service provider shall take immediate action to attend any complaint assigned to him through site order book/verbal instructions from Engineer-in-charge or on telephones or by call Service centre from officials (which must be authenticated subsequently by Engineer-in-Charge). In all cases, the agency must attend the complaints in the specified duration as mentioned under Special conditions of the contract to avoid penalties/ recoveries.

5. The following Assistance shall be provided by the agency to the SVSU:

A) Informing to the SVSU Engineers regarding the failure in any service in any of the area covered under these scope, any repair/ maintenance of equipment/service required for any civil/electrical works which are being provided by other agencies, in so far as they affect the assets being maintained under this contract, so that the required action can be taken up with the concerned official/agency for remedial measures. Such information must be communicated in writing to the concerned Engineer with a copy to Engineer- In-Charge.

6. All the engineers, technicians, managers, supervisors and staff including labourers engaged by the agency under this contract shall wear neat and clean uniforms as approved by Engineer-in- charge along with name badges. Identity cards duly signed by agency and countersigned by Engineer- in-chargeor his representative shall be issued to each personnel by the agency to have proper identification including their police verification.
7. All Engineers/Supervisors/Operators/Technicians/Foremen, who are present at the site shall necessarily carry mobile telephone(s) to enable the Engineer-in-charge to have easy and quick communication. Service provider to note that no extra payments shall be paid by SVSU to the service provider onthis account and the quoted rates for various items under this contract will be inclusive of such obligations. Further the duty chart/rota, roster along with designation, nature of work entrusted to them and Mobile Numbers, has to be displayed/circulated /hoisted on website for easy access by all officials for different types of routine/regular/emergent works/services.

8. The Service provider shall depute Graduate/Diploma Engineers for Civil, Electrical, Plumbing having minimumexperience of two years in similar nature of work. All such persons to be deployed by the agency must be approved by SVSU ENGINEER-IN-CHARGE of concerned specialized i.e. Civil, Electrical etc.

9. Complaints Register, Attendance Register and other records will have to be produced daily or as & when required by the Engineer-in-charge or his authorized representative. The penalty against absentee shall be levied as decided by the Engineer- in -charge.

10. When the registers get completely filled, these will be handed over to the Engineer-in-charge or his authorized representative. These will not be returned to the service provider and the same will remain as the property of SVSU may be utilized by SVSU for setting Final Bills/recoveries as may be admissible.

11. All required registers will be checked by Engineer-in-charge duly marked in chronological order but the Service provider will have to provide and maintain all such registers/ stationery etc. in up to date condition at all times. All such stationary items shall be made available by the service provider at its own costand no extra payments shall be payable by SVSU on this account.

12. For the purpose of categorization of staff as highly skilled, skilled, semiskilled and unskilled, the sweepers/ Beldar/ Helper shall be taken as unskilled, Khallasi, IInd class labour, HVAC Engineers, HVAC Technicians, Liftman/lift operator and for other similar works shall be taken as semiskilled, mason, plumber, sewer man, carpenter, wireman, electrician, Painter including works requiring similar skills , shall be taken as skilled and Supervisor, Storekeeper, shall be taken as highly skilled. They should wear different types of uniforms. The skilled labour should be minimum ITI or equivalent qualified in their respective fields.

12. Staff employed by the service provider should be well behaved & polite and any complaint of misbehavior shall be taken very seriously and the agency will immediately have to remove such staff from the site by making alternative arrangement against the defaulter. Such replacement to be duly approved by Engineer-In-Charge.

13. The Service provider shall make all safety arrangements required for the labour engaged by him at his own cost including provisions for all personal protective equipment as per site requirement. Entire responsibility due to any type of negligence on account of security/ safety or otherwise shall be of Agency for his labour. SVSU shall not be at all responsible for any mishap, injury, accident or death of the agency's staff. No claim in this regard shall be entertained/ accepted by SVSU. To ensure the same the Service provider shall keep SVSU indemnified against all such claims arising out of the contract either during the currency of the contract or otherwise. The Service provider to maintain comprehensive Insurance policy covering all their manpower, equipment, T&P and other items of use at all times duringthe entirevalidity of the Contract.

14. Each supervisor shall maintain a Complaints Diary towards all complaints observed/listed either by him or as informed by SVSU representative and get the feedback recorded from the SVSU officials in confirmation of satisfactorily redressing/attending the complaint. In case, it is found that the complaint has not been attended satisfactorily, it will be considered as unattended. List of such complaints shallbe submitted to the Engineer-in-charge or his representative on daily basis. Action as already mentioned shall be taken for unattended complaints. The redressel of complaint will be immediately confirmed to the officials by e-mail/Mobile/ land line phone. A record of all such unattended complaints is to be maintained for the same alongwith the reasons for not attending the same duly authenticated by SVSU representative.

15. For non-compliance or partial compliance of execution of items, the Engineer-in-charge reserves the his right to levy the amount of compensation to be made good by the service provider, in accordance with the scale of non- conformity and the period for which this non-conformity continues. However, thetotal amount of such compensation for the whole contract shall not exceed 10% of the awarded value ofthis contract. This shall be without prejudice to other remedies available to Engineer-in-charge under this contract to take action against the service provider.

16. All materials, T & P, consumables and contingent articles required for the work which shall be arranged by t h e service provider. Materials used s h a l l be in the order of preference
    (i) as per the nomenclature of the item/OEM specifications
    (ii) ISI marked/
    (iii) as per State PWD/CPWD specifications/
    (iv) or as approved by the Engineer-in-charge.
    The materials used for replacement shall have same or richer specifications to the original materials and compatible to the work duly approved by Engineer-In-Charge.

17. Proper record shall be maintained of all dismantled materials received from day to day operation/maintenance work. Though the same shall be the property of the SVSU which will be handed over to the Engineer-in-charge in writing.

18. Service provider shall be fully responsible for any damage caused to SVSU Campus property by him or his labourers in carrying out the work and shall be made good by the Service provider at his own cost. In case theService provider fails to make good the repairs/replacements to the satisfaction of ENGINEER-IN-Charge then SVSU shall make recoveries from the amounts due to the Service provider from either their running bills or from other money/guarantees available with it.

19. The Service provider shall be required to maintain sufficient quantity of spares, consumables, stationary items, protective gears, gloves, housekeeping items consumables etc. their stock, conforming to relevant specifications to avoid any delay in attending the complaints.

20. The tax invoice to be provided by the Service provider every month along with the bills of work done should be in detailed scheme of DVAT, not in composite scheme of DVAT. All documentary proof of meeting all statutory requirements including payments to its staff (copy of wage sheets duly signed by its staff with payments through online transfer to their respective accounts only), PF statements (with e-challan copy) and other statutory requirements shall be provided with each bill.

21. All Other agencies engaged by SVSU and working at site will also simultaneously execute the work entrusted to them and the Service provider shall extend his full co-operation wherever required to other agencies.

22. On account of security considerations, there could be some restrictions on the working hours, movement of vehicles for transportation of materials. The Service provider shall be bound to bear all such restrictions and adjust the program for execution accordingly as per the security arrangement at site and as per the procedures set forth or the permission of Engineer-in-charge of SVSU.

23. All malba or rubbish or debris, housekeeping work/complete waste of the campus, sweeping waste/non compostable throughout SVSU campus waste/garbage/construction waste or any other waste collected/ obtained from dismantling or otherwise during the maintenance and execution of the work etc. of the entire campus, has to be disposed off to the nearest dudhola/dumping ground be arranged by the Service provider at its own expense & nothing extra shall be payable on this account. However, all compostable household waste and other SVSU campus waste are to be managed by the service provider in his quoted cost either with compost plant/pellet making agency or safe disposal outside with or without consultation with local / statutory bodies. The Service provider must follow all rules & regulation by any Govt. bodies / local authority, etc. For the same the Service provider will do everything at his own level in the quoted rate, nothing extra will be paid for it by SVSU.

24. For all Horticultures works, in addition other manure & Chemicals, the agency has to purchase as required Compost produced at Compost Plant, SVSU Campus within the Campus from the agency which is operating the SWM plant @ Rs 6/- per Kg for the contract period of 2 years (or per the price agreed to by ENGINEER-IN-CHARGE). However, if the contract is extended further then the Compost will be provided @ Rs. 6.50 per kg (or as per the price agreed to by Engineer-In-Charge).

25. The agency shall restore back the premises and other articles provided by the SVSU at the time of closure of the contract.

26. Cleaning and sweeping operation including mechanized cleaning shall commence before 8:00 AM and will be done twice (one in forenoon and one in afternoon) on all days. The forenoon cleaning must be completed by 12.00 hours in all respect. If it is noticed that the work or part of work is not done in the defined area before the above specified time, a compensation of Rs.1000/- (Rupees One thousand only) or proportionate amount respectively for each default shall be levied and the same shall be recovered from the amount due to Service provider or the securities of the Service provider or the bill of the Service provider. The decision of Engineer-in-Charge shall be final in this regard. In case mechanized system is not working, equivalent quantum of sweepers has to be deployed for that period.

27. The Service provider shall write and maintain Log with stencil on all the terrace tanks, underground sump and overhead tanks with paint the dates of cleaning and the next due date for cleaning within 2 days of the completion of the cleaning operation.

28. a) The Service provider shall provide facilities such as photocopier, computer and printer along with operator.The Service provider shall provide consumables as required and maintain the aforesaid facilities intact/ operation during the tenancy of the contract.

b) The repair maintenance and housekeeping of maintenance office at throughout campus of SVSU, Village-Dudhola-Palwal.

29. For Operating 24x7 Integrated Facility Management Centre (Help Desk) with all necessary manpower, hardware and software for lodging day to day complaints is to be established at SVSU Maintenance office by the Agency to: -

a) Receive complaints through telephone/email/personal visit record the same in the system daily as well as in a complaint register for 24 X 7.
b) Provide automated status/completion of complaints to Engineer in Charge.
c) Provide system to allow feedback by Engineer in Charge regarding complaints.
d) Generate on line reports for monitoring by Engineer-in-Charge.
e) Space for running a call center/office shall be made available by SVSU in maintenance office free of cost. However, the requisite furnishing is to be provided by the Service provider at his own cost.

30. Deployment of man power and all consumables have to be provided by the agency within the quoted cost for ORM Works/ in BOQ items Specialized mentioned works. A minimum number of mason, carpenter, Carpenter Helper, fitter, sewer man, beldar, Sub-station attendants, HVAC/AC Technician, Lift Operators, Pump Operator, Gardner, Plumber, Plumber Helper, Electrician, Electrician Helper, Lineman, Sweeper, Sewerman, Solar system Technician, Complaint/Enquiry clerk etc. to be deployed by the Service provider for day to day operation and maintenance from 9.00 A.M. to 6.00 P.M. in day and for night shift or (24X7) Hrs. or as required in any emergency for maintaining the complete campus comprising of 82 Acres.

31. IF extra manpower is required to complete the any work in throughout campus of SVSU it shall be deployed by the Service provider as per the requirement of work or as per the direction of Engineer-in-Charge of SVSU. In no case, housekeeping work/cleaning/operation/maintenance and other works of complex shall be left unattended for another day; hence manpower may be increased accordingly. Nothing extrashall be payable on this account.

32. The agency should maintain a stock register for material purchased and consumed for maintenance work. This register should clearly indicate date wise receipt of material consumed on work. The agency should also maintain a register for un- serviceable or dismantled material received during repair work.

33. Unless otherwise specified, the agreement of rates for all items of work of the bill of quantities shall be applicable for all heights, depths, leads and lifts involved in the execution of work.

34. Police verification of each and every staff deployed by the Service provider shall be got compulsorily done by the Service provider and a copy of police verification shall be submitted to Engineer-in- charge after which an identity card duly countersigned by Engineer-in- charge or his representative shall be issued to each employee of the Service provider for proper identification with date of issue and validity. The Service provider shall provide uniform along with Badge and shoes within 15 days of start of work. In the event of non-compliance, a recovery of Rs. 25/- per day per employee shall be made. The employee and labours engaged by the Service provider under this contract shall wear neat and clean uniforms along with name badges as approved by the Engineer-in-charge of SVSU.

35. All the labours should be registered with EPF & ESIC. All the Manpower engaged at this site should have bank account so that they are covered under Pradhan mantri Bima Yojna and other facilities covered under labour act. Moreover their wages shall be paid through this account by cheque or through RTGS etc. However, the Agency must ensure compliance to minimum wages act as may be applicable.

36. All the workers / labours should be well dressed with identity card.

37. The Service provider have to maintain the entire campus and all complete as per existing standard by cleaning of roofs/solar panels, floors, tile/stone work, doors windows frames & shutters Including glass, all civil, hardware, CP fittings & fixtures, façade work, cleaning of water tank, sanitary and electrical fitting & fixtures etc. The Damaged/defaced /missing items shall be replaced by the existing quality/make or as per direction of Engineer-in- charge of SVSU. (The rate shall be inclusive of all activities excluding internal& external painting & polishing which shall be paid for separately under the respective items of the contract.)

38. One supervisor, having adequate experience of maintenance work, during night hours shall be deployed. In no case the Service Center is to be left unattended.

39. Complaints shall be monitored i.e. registering vis-a-vis rectification shall be maintained as per the enclosed checklist which shall be monitored by SVSU Officials.

40. The agency has to submit a complete statement of complaints vis-à-vis their redressel/rectification upto previous day/night by 5.00PM next day failing which the payment shall not be made for defaulted period. 75% of registered complaint shall have to be disposed off within 24 hours and 15% in next 48 hours and rest within 72 hours. However, complaint of emergent nature like- water, electricity, HVAC/AC, VC Residence, Senior admin residences, sewer and solar heater shall have to be attended within a maximumperiod of 4 hours. A recovery of Rs. 1000.00 per unattended/unsatisfactory complaint shall be made from the running/final bill of the agency for any delay etc. The decision of the Engineer-in- charge shall be final & binding upon the agency.

41. Total cleaning including Mechanized wash of flooring/tiling, façade/glass work, lift, solar panel, fitting & fixtures shall be included in the quoted rates.

42. All the complaints received through telephone/email/personal visit, shall be recorded daily in a complaint register for 24 X 7 by the Service provider supervisors. Their redressel/rectification is to be hoisted on website//email for information to SVSU Official /Engineer in Charge of SVSU have to be maintained on daily basis .

43. Safety and security of the inventories in common & external area /utility building/pump house/sub-stations throughout campus of SVSU shall be the responsibility of service provider.

44. Operation, maintenance of parking are also in the scope of the service provider.

45. In case the Service provider is not able to complete any work within two days and un- necessarily delays are observed, the Engineer-in-charge will be at liberty to get the remaining work completed at therisk and cost of the Service provider after giving notice through the site order book only.

46. All the malba or rubbish or debris, sweeping waste, construction waste, complete housekeeping waste, all buildings waste of the entire campus, or any other waste collected/ obtained from dismantling or otherwise during the maintenance and execution of the work have to be collected at a centralized place and to be disposed off outside the campus to a place to be arranged by the Service provider. Nothing extra shall be paid for transportation and arrangement of disposal place if any. Further all the malba or rubbish, sweeping waste, construction waste, horticulture waste, Guest House waste, or any other waste collected/obtained from dismantling shall be brought down through the staircase and shall not be thrown to the ground directly. Further, in case of any statutory levy by the Govt (and not levied or imposed as Penalty) the same shall be paid to the Agency by SVSU on production of proper documentary proof,Segregation of dry wet waste , plastic waste , e waste and residual oil etc to authorized handlers is to ensured.

47. No temporary huts/ structures will be constructed by the Service provider at the site of work or at any Government land within the jurisdiction of SVSU. Such structures, if any found at the Campus or at Government land will be demolished and removed without any notice. The Service provider will not pitch up tents for labourers, materials and his stores etc,.

48. All the splashes after plastering, white washing & painting shall be removed from doors, windows, floors, furniture, toilet & bath room fittings, electrical and other fittings and finished upto satisfactory level. Failing which the same shall be got cleaned at the risk & cost of Service provider.

49. Chlorination/bleaching shall be done daily at water tanks of main Campus. The consumables so used shall be of approved quality and standards confirming to relevant BIS. All supply of water must be routed through filtration and chlorination plant. All repair and maintenance of pump house, E & M equipment's, water line, supply line, filtration plant/RO,. is to be done by the Service provider at his own cost. Drinking water shall be got tested from Public Health Engineering Department, Haryana/CPWD/Sate PWD as per requirement. This is applicable for pump house at SVSU Campus. The complete record for receipt and supply of water quantity, testing of water, chlorination/ bleaching shall be maintained by Service provider. However, if more meters are required the same shall be provided by the Service provider himself. The rate shall be inclusive of all the above operations and nothing extra shall be paid on this account. The quality of water must be maintained as per minimum norms for use of such water.

50. All T&P including ladders, wire drawing equipment, chase cutting equipment, drilling machine, megger insulation, HT/LTcable breakdown detective instrument, earth resistance testing equipment etc. required for the work shall have to be arranged by the Service provider at his own cost. All instruments being usedmust be duly calibrated as per norms & standards.

51. All installations of SVSU Campus, Dudhola in complete operational/ Healthy condition shall be handed over to the Service provider & it will be his responsibility to keep the installation in operational & Healthy condition all the time including taking all precautions against theft etc.

52. The quoted/accepted rates shall be inclusive of all the operations involving manpower's, BOQ mentioned items, accessories, mechanical cleaning of façade/glass/flooring all T&P, machinery and equipment's etc. as contained in the scope of work, special, general conditions of contract, and generalterms & conditions of respective works as mentioned in the tender. Nothing extra shall be payable on any account what so ever.

53. The rates of all Operation, Maintenance and Special repair work are inclusive of all heights and depths. The Service provider must arrange the sufficient MS scaffolding, jhula, and or hydraulic crane for repairing of all types of civil works like vertical stake of CI line/ GI Line / HVAC Outdoors/ and electrical works etc. While working at heights or depths all due precautions as per standard safety procedures must be taken. SVSU shall own no responsibility what-so-ever on this account.

54. Periodical cleaning of disposal point of storm water and it drains as well as untreated sewage waste must be ensured well before the ensuing rainy seasons. The Service provider must coordinate with the concerned agency for the same. In no case, there should be any area flooded during rains.

55. A daily/periodical chart is to be displayed in each Wing with the information as mentioned in the check list.

56. The Service provider has to strictly submit daily/weekly/fort nightly/monthly/quarterly /twice in a year/ yearly check lists which will be main base of regulating monthly payment. In the absence of check lists, no payment shall be made for that particular period and service. Every check list duly signed by Agency's Engineer/Manager shall be submitted in duplicate to Engineer-in-charge or his authorized representative .One copy of check list duly verified and signed by the Engineer-in-charge or his authorized representative shall be preserved by agency for further submitting the same as supporting document with monthly bill to SVSU for payment.

57. The Service provider shall make suitable arrangement for barricading the area for external repair works where ever required.

58. Periodical bleaching/Fogging of garbage chutes, drains and other open areas wherever required shall be regularly carried out.

59. Monthly water meter reading of Public Health Engineering Department, Haryana and Bore-well supplyof drinking and horticulture water is to be recorded separately & maintained in a standard register duly authenticated by SVSU's authorized representative.

60. Maintenance/ upkeep and operation of fountains at agreed point of time including repair & replacement of damaged parts/accessories, etc shall be carried out as per direction of the Engineer-in-charge.

61. The agency has to have close liaison with and the security agency of the campus for safety/security of all fixtures/ fittings/property of SVSU in common areas/campus. The rates quoted are deemed to be inclusive of this and nothing extra shall be paid on this account.

62. The agency has to remove the posters that may be pasted on the outer/inner periphery of the boundary wall or at any other place in the campus. The rates quoted are deemed to be inclusive of this and nothing extra shall be paid on this account

63. The required Material will be provided by SVSU for maintenance work except Housekeeping/cleaning work for throughout campus of SVSU.

64. All the under mentioned works are to be covered in the quoted rates and nothing extra shall be paid unless and otherwise mentioned:

    (i) As per mentioned in Scope of work/BOQ quoted rates nothing shall be paid extra.

    (ii)Safety of services of common areas etc.

65. Regular preventive maintenance for all services shall be carried out by deputing exclusive preventive maintenance teams which shall be comprised of each one of Carpenter, Plumber & Electrician, sub-station attendant. Payment on this account shall be inclusive in quoted rates and nothing extra shallbe paid on this account.

66. The agency has to maintain daily category wise attendance register recording the name and designationof staff & workers as well as on Biometric electronics machines. The attendance shall be marked in registerby the agency's manager at the start & closer of each shift. The Engineer-in- charge or his authorized representative may check the physical attendance of any staff and worker at any time. If any staff and/or workers found absent without his substitute (duly authorized by agency and approved by Engineer-In-Charge) the penalty shall be recovered from the running or final bills of the agency as 800/- per person.

67. Monthly Electricity meter reading of Dakshin Haryana Bijli Vitran Nigam to be recorded separately & maintained in a standardregister duly authenticated by SVSU's authorized representative.

68. Mode of payment

Payment will be made on monthly basis on submission of bills by the Service provider duly verified by theEngineer-in-Charge of SVSU.

69. Before quoting, the bidders in his own interest shall carry out site visits to know the site conditions and full implications of the assignment. This will also help him in proper assessment of the work. Failureto do so will not absolve the bidders of his responsibility to carry out the work as specified in the Tender Documents. The cost of visiting the site shall be borne by the bidders and shall be at his own responsibility and risk.

70. All equipment's are under Warranty/Defects liability period as mentioned separately. During the warranty/defect liability period the Service provider will directly contact to the agency concerned/OEMs/IrconIsl (PMC) for ratification of defects with the consent of Engineer-in-charge of SVSU.

71. During the period of contract, if any work is required to run the premises, the rate will be finalized with the mutual consent of SVSU and the Service provider.

72. The wages of the manpower deployed should be as per the rates approved by the Government. If any defect is found, the work of the Service provider will be terminated without any notice.

73. ESCALATION:

No escalation shall be paid during the contract period.

74. **COMPLETION PERIOD:** This contract period and the quoted price/rates will be valid for 2 years from the date of award of work. However, it can be extended by one another year on satisfactory completion of 2 years work as recorded by the unit. Further it can be extended for a 3rd year with an additional 5% on the quoted rates and terms and conditions of first 2 years as per mutual agreement between the agency and SVSU.
75. SVSU reserves the right that due to necessity, any work may be added to the contract at a later stage with mutual consent between SVSU and Service provider. SVSU reserves the right to terminate any work in the contract without assigning any reason thereof.
76. The service provider shall at all times have standby arrangements for carrying out the work under the Contract in case of any failure of the existing arrangement. SVSU reserve the right for termination of the contract at any time by giving one month written notice, if the services are found unsatisfactory and also has the right to award the contract to any other selected Bidders at the cost, risk and responsibilities of Service provider and excess expenditure incurred on account of this will be recovered by the SVSU from the Service provider's Security Deposit or pending bill or by raising a separate recovery claim.
77. Any misconduct / misbehavior on the part of the manpower deployed by the Service provider will not be tolerated and such person will have to be replaced by the Service provider at his own costs,risks and responsibilities immediately, with written intimation to Engineer-in-charge of SVSU.
78. Quoted rates shall be for complete work inclusive the cost of all labours, carriage, machinery and equipment's, tools and transportation risk, overheads and general liabilities/obligations as mentioned and profits, royalties, fees, rent, entry tax, wages etc. as per prevailing rules.
79. The Service provider shall pay necessary taxes, such as GST etc. as above, to relevant authorities. In caseof any dispute, the Service provider shall submit to SVSU authorities the proof of having di scharged all the statutory obligations for consideration.
80. The Service Provider has to provide Photo Identity Cards to the personnel deployed by them for carrying out the work. These cards are to be constantly displayed by their staff & their loss be reported immediately to SVSU & Service Provider.
81. The Service Provider has assured no dispute or demand will be raised by its employees/ personnel on SVSU and further undertakes that in case SVSU is involved or dragged into any Court of Law/ in any litigation by any employee/ personnel of the Service Provider, the Service Provider will take all appropriate and

necessary steps for withdrawing such claims/ demands/ disputes by its employees/ personnel and resolve and settle the same without involving SVSU in any manner, financially or otherwise.

82. The Service Provider has undertaken to pay/ compensate SVSU in respect of cost and expenses incurred by it in countering defending such claims/ demand/ disputes and if SVSU is made liable to pay any amount by way of penalty/compensation/ damages due to any court order or otherwise, the Service Provider undertakes to indemnify and compensate the same fully.
83. The department shall provide space for storage of machines, material and chemicals as per availability for which no rentals for space will be recoverable, however, no extra payment shall be admissible for carriage/shifting etc.
84. SVSU shall not be in any manner responsible for any act, omission and commission of the employees/ personnel engaged by the Service Provider.
85. The construction work of the SVSU campus is going on. The actual payment will be made to the Service provider as per actual work done.
86. There should not be any history of litigations against the Bidder and the Bidder should not have been blacklisted by any of the government agencies or departments or should not have been guilty of moral turpitude or convicted of any labour laws etc., by any court or authority appointed to enforce any labour law or regulations.
87. Service Provider has infrastructure for dealing with Provident Fund, ESI, Bonus, Minimum wages, Labour Laws, Industrial Disputes etc. Service Providers can manage timely payment to staff even in case of delayed payment/ reimbursement by SVSU.
88. For all works include periodic renewal of licenses/NOC's from the concerned department as required from time to time for items viz lifts, STP, Sub-stations, fire department etc. as per local authority rules is the responsibility of the Service provider.
89. The work shall be awarded to the L1 bidder based on total cost of the all services (mentioned in the BOQ).

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1. General Terms & Conditions for Operation Repair and Maintenance of all Electrical Internal and External Installations (Including Wiring, Switch boards, Conducting, Fans, Refrigeration, Ovens, Electrical hot water Geyser's, all lightning, Street /Solar Lightning, Circuit breakers, Electrical LT/distributions panels, Earthings system etc.

1. The work is to be carried out as per latest State PWD/CPWD Specifications for electrical works and Maintenance Manual as amendeduptodate(for Electrical works) andaspersiterequirements.

2. Theinstallationshall be maintainedonalldaysofthemonthincluding Sundays& holidaysin day and nightshiftsandweeklyrest of thestaffshallbegivenbymakingsuitablealternativearrangementforwhichnoextrapaymentshallbemade.

3. The staff of the Serviceprovidershallmaintainthecomplaintregister, logbooks,maintenancerecordsandregisters,whichwillbesupplied by the Service provider.

4. TheService providerhastodeputethestaffasrequiredmentionedabovetomanagethethroughoutcampusof SVSU. However,workerscan be deployed in shift duty as per requirement of the Engineer-in-Charge of SVSU. A full time supervisor shall be deployed in thegeneralshiftwhoshallpossessvalidelectricalsupervisorylicense.

5. Thefittingsandfixturesifreplacedshallbepaidforseparately.
6. TheService providerwillmaintainattendanceregisterofthestaff,whichwillbecheckedbytheEngineer-in-chargeifdesired.

7. Alltheequipment'sandinstallationsshallbemaintainedinneatandcleanconditionbytheService provider.

8. Fortheelectricalwork, thequalificationsofthe Electrical Supervisorengineershouldbediplomainelectricalengineeringwith8 years' experienceorDegreeinelectricalengineeringwithatleast5-yearexperienceinrelevantfield.

8. The scope ofwork includes operation and general maintenance ofinstallations including the works such asoverhauling/ rewinding of fans/ exhaust fans, repairs/ replacement of switch gears, boards and accessories, or any other minor/ major repair. The partofthe machine& installations whichis to be sent out for repair/ testing, shall be arranged by theService providerwith theconsentof Engineer-in-chargeofSVSUand theChargesofmaterial/repairsshouldbepaidbythe SVSU.Paintingofelectricalinstallationsuchas feederpillars, streetlight poles orotheritems has tobe done once in ayearwithsuperiorquality paintone/ twocoats ofpaint as perinstructionsofEngineer-in-charge.ThedecisionoftheEngineer-in-chargeshall befinaland binding.

9. Any damage/theft caused tothe fittings/ switch gears/ installations/ machineryas a result of execution of this work shall have to be made good by theService providerathisown riskand cost.TheService providershoulddeploypropersecurity.

10. TheService providershallsubmittheattestedphotocopyofwireman/ electriciancertificateandifrequired, showthewireman/electrician certificatein originalofelectrician/wireman employedbythemto the Engineer- in-charge.

11. The staff deployed by the Serviceprovider should have a minimum three years of experience in the relevant trade and shall be well manneredandbehavior.

12. All the Electrical Installation throughout the campus such as Switch boards, Conducting, Fans, Refrigeration, Ovens, Electrical hot water Geyser's, all lightning, Street /Solar Lightning, Circuit breakers, Electrical LT/distributions panels, Earthings system etc. shall be cleaned as per direction of the Engineer-in-Charge of SVSU.

13. Agency to carried out routine and regular checks on all the products as per OEM standardof the equipment's. if any equipment's is in warranty period/defects liability period then for repairing the same, the Service provider will be directly contacts by the concerned agency/Oems/IrconIsl (PMC)withtheconsentofEngineer-in-charge SVSU.

14. TheService providershallcoveritspersonnelunderInsuranceforpersonalaccidentanddeathwhilstperformingtheduty and theClientshallownnoliabilityandobligationinthisregard.ALLworkerstobecoveredunderESIC,PFnorms.

2. General Terms & Conditions for Operation and Maintenance of Water Supply System

1. The work is to be carried out as per latest State PWD/CPWD specifications and Maintenance Manual as amended upto date and as per site requirements.

2. The pump operators and pump operator helper etc. shall be deployed in three shifts daily. As per site requirement on all days of month including Sunday and Holidays. The qualifications for pump operators should have ITI in Machinistor pump operator with 1 year Apprenticeship in the concerned branch i.e. Machinist or pump operator.

3. The water pumps have to run daily a s per requirement of water from time to time in SVSU campus.

4. The operational staff has to make entries in the log book, daily w h i c h will be provided by the Service provider and all meter reading of incoming and outgoing quantity of water.

5. The c o n t r a c t o r shall have to deploy trained and e x p e r i e n c e d staff suitable for water supply pumping installation.

6. Any material required for operation and maintenance of water supply works shall be supplied by the SVSU In the special case any material/repair is required from OEMs/manufacturer these will be directly purchased by the Service provider through equipment's OEMs/Manufacturers with the approval of the Engineer-in-charge of SVSU.

7. The Service providers shall k e e p a l l the installations neat and clean co n d i t i o n and in working order all the time.

8. The scope of wo r k i n c l u d e s maintenance of i n st all atio n s including w o r k s s u c h as main p a n e l board r e p a i r i n g , r e p l a c e m e n t of v a l v e s a n d switches, replacement of defective/damaged water level indicators, automation system, ammeter, voltmeter, phase pr ev en ter , all water line underground, over ground, valves, or any other work etc. The decision of the Engineer-in-Charge of SVSU.

9. Repairing/ overhauling of all s u b mer s i b l e pumps, motors, GI pipes, accessories, gate valves Including taking out and l o w e r i n g of submersible pump sets as and wh en r e q u i r e d at site has to be done by the Service provider with the approval from the Engineer-in-charge of SVSU. The material/repair charges required for its repair will be paid by SVSU.

10. Painting of Pumps, motors, frames, panels, pipes, and accessories has to be done by Service provider with superior quality one/two coats of paint as per requirement/instructions of Engineer-in-charge. The decision of the Engineer- in-charge shall be final and binding.

11. Any d a m a g e caused to the electrical fittings, switch gears, machinery as a result of execution of this work shall have to be made go o d by the Service provider at his own risk.

12. In case of emergency the staff may have t o work beyond normal working hours for which no extra payment shall be made by the department.

13. The staff should wear set of uniforms with name plate and carry Identity Card, which shall be provided by the Service provider within Quoted rates. Fo r the same no any extra cost will be given by the SVSU.

14. Watch and ward of all the installations shall be the responsibility of the Service provider.

15. In case of any shortage of drinking water from Public Health Engineering Department, Haryana, the Service provider has to arrange on urgent basis potable water from other Source with the consent of Engineer-in-charge of SVSU. He shall be paid for as per actual.

16. There are deep bore wells, which are spare for feeding main reservoir. The operation and maintenance of bore wells/pipe lines etc. including repair have to be done by the Service provider with the consent of Engineer-in-charge.

17. AgencytocarriedoutroutineandregularchecksonallthePumpsasperOEMstandard.

18. The Water supply equipment's installed details is attached at Annexure -2)

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3. General Terms & Conditions for Operation and Maintenance of Complete Fire-Fighting system, Fire Alarm, Down Comer System

1. The scope of work comprises Fire Fighting installations at Campus and equipment's installed in different areas of Campus (List of installed equipment's at Annexure -3)

2. The manpower has to be provided as per required for operation for throughout campus of SVSU.

3. The installations shall be maintained round the clock on all days of the month including Sundays and holidays and weekly rest of the staff shall be given by making alternative arrangement for which no extra payment shall be made. On no account the installation will be left unattended.

4. In case of emergency, the staff may have to work beyond normal working hours, for which no extra payments shall be made.

5. The Service provider will maintain attendance records of the staff, which will be checked by the Engineer-in-charge of SVSU.

6. The staff of the Service provider shall maintain all log books and record/ registers which will be supplied by Service provider and duly certified by Engineer-in- Charge.

7. All the equipments and installations will be maintained in neat and clean condition.

9. The contractor has to arrange consumable materials like cotton waste, cloth, soap bar, duster, fuse, wire, black tape, battery acids and all other spares/ materials for maintenance at his own cost for bonafied use in the work and nothing extra shall be paid by SVSU.

10. The Service provider has to arrange T & P required for the work at site.

11. Safety of the staff employed will be the responsibility of the Service provider who must depute well experienced & trained staff in respect of handling fire fighting equipments . SVSU will not be responsible for any mishap, injury or death of the staff.

12. The scope of work includes operation and maintenance of installations. In case of repairs the Service provider shall arrange additional skilled staff within his quoted rates and without any extra cost, For major works such as wiring, repairs of pumps, motors, valves, hydrants, pipelines and fittings/ replacement of switch gears, hose pipes, nozzles, cards, alarm equipment's, S.I. panel boards, starters, other major repair for which part of the machine, installation, is to be sent out for repair/ testing shall be arranged by the Service provider. For the same material/repair is required these will be directly purchased by the Service provider through equipment's OEMs/Manufacturers/market dealer/other source with the approval of the Engineer-in-charge of SVSU.The decision of the Engineer-in-charge shall be final and binding.

13. Painting of down comer systems such as pumps, motors, hose cabinets, pipes, and accessories has to be done as per requirement with superior quality one/ two coats of paint as per instructions of Engineer-in- charge ofSVSU. The decision of the Engineer-in-charge of SVSU shall be final and binding.

14. Any damage caused to the fittings/ switch gears/ installation/ machinery as a result of execution of this work shall have to be made good by the Service provider at his own risk.

15. The agency has to deploy a supervisor or technician preferably retired fire officer for round the clock. The agency shall perform Block wise of all building/throughout campus of SVSU mock drill as per direction of Engineer-in-charge of SVSU at any time in the presence of Engineer-in-charge of SVSU. It will be responsibility of the agency to keep a close liaison with Haryana Fire Service for carrying mock drills.

16. The validity of fire clearance of various structures mentioned in the terms & condition as enclosed in tender documents,as & when due shall be got issued from concerned department by the Service provider first at his own level then it shall be reimbursed to the Service provider by SVSU.

17. The Service provider shall be responsible for refilling of all the fire extinguishers as per requirement Including display the date of refilling & next due date of refilling on cylinder itself. Payment for the same separately paid by the SVSU.

18. Agencytocarriedoutroutineandregularchecksonallthe Fire Fightingproducts as perOEM standard.

(DOWNCOMER SYSTEM)

1. The following works i.e. tests/ checks are to be carried out as per the demand of the installation, and/or, as per direction of the Engineer-in-charge and proper logbook should be maintained and got test checked by the Engineer-in-charge of SVSU or his authorized representative.

   a) Check the water level in the fire tank/ terrace tank, and fill-up the tank (twice a week)
   b) Check all glands/ valves at the terrace and prevent leakages, if any (Weekly)
   c) Check healthiness of the power supply of the main control/ starter panel, voltages, fuses, starters, connectors, power connection etc. (Weekly)
   d) Check the status of hose pipes, nozzles etc. (Weekly)
   e) Check the working condition of the pump – motor set (Weekly).
   f) Test check auto – manual function of the pressure switch of the down-comer system (Monthly)
   g) Check and clean the Y- strainer/ stop valve, flange gaskets as required. (Monthly)

2. The Service provider has to get the down comer system operation tested once in a month, and recorded in the register and got countersigned by the Engineer-in-charge of SVSU.

3. The cleanliness of the pump sets, panels and other accessories shall be the responsibility of the Service provider. Materials i.e. cotton waste, old dhoti, soap etc., are to be provided by the Service provider.

4. Consumables like, gland packing, grease, all oils, coupling nuts and bolts, cotton tape, empire tape. PVC tape, battery lead clamps, hose pipes, nozzles, distilled water, fuse wires and all material for minor repair shall be provided by the Service provider at his own cost during the maintenance period.

4. General Terms & Conditions for Operation Repair and Maintenance Of DG Sets

The scope of work comprises of following installations:

1. 415V, 3phase 50HZ, 4 wire Radiator cooled following DG sets with Acoustic Enclosure. The Diesel Engine shall be complete with necessary control and safety devices as per IS/ BS specifications. The Engine is suitable for continuous operation of Generator, inclusive of Flywheel, flexible coupling, air cleaner, corrosion resistor, Radiator, fan with guard, Fuel pump, fuel filter, AMF relay, Electronic governor, starting system with separate Battery charger with 2nos 24Vsealed low Maintenance Batteries, Voltage regulator, Instrument panel with RPM Indicator, Exhaust silencer (residential), protections against Low Lub.oil pressure, high water temperature and with standard capacity fuel tank suitable for 8hrs of Full load operation, fuel lines from Fuel tank to DG set, battery stand, anti vibration pads and first filling of lubricating oil and fuel oil for set. The Alternatoris be suitable for 415V 3phase, 4wire, 50HZ AC supply operation and is able to delivered full load current at 100% Unbalance load.

a) **i) 6 nos. 500 KVA, (ii) 2 Nos.160 KVA, (iii) 1 Nos.180 KVA, (iv) 1 Nos.280 KVA, (v) 1 Nos. 200 KVA, (vi) 1 Nos. 62.5 KVA,**

2. For the Maintenance and Operation of the D.G. Sets, the Service provider shall contact and co-ordinate with the Original Equipment Manufacturer.

a) The Service provider has to depute trained staff in 3 shift duty i.e round the clock as per the deployment chart. The duty hours can be changed as per discretion of Engineer-in- charge.
b) The DG set installations shall be maintained round the clock on all days of the month including Sundays and holidays .The weekly rest of the staff shall be given by making alternate arrangement for which no extra payment shall be made.
c) In case of emergency, the staff may have to work beyond normal working hours, for which no extra payments shall be made by the department.
d) The Log Book, maintenance records shall be maintained by the staff of the Service provider. All the registers log book shall be supplied by the Service provider and got verified from the Engineer-in-charge for which no extra payment will be made to Service provider.
e) The worker can be deployed in shifts as per the requirement and as per the direction of the Engineer- in-charge.
f) The Service provider has to arrange the consumable like cotton waste, cloth, soap bar, duster, fuse wire, black tape, battery acids etc. of all the mandatory checks as recommended by the manufacturers etc. for bonafied use in the work. Nothing extra shall be paid to the Service provider by the SVSU on this account.
g) The Service provider has to arrange T & P required for the work at site.
h) Safety of the staff employed for the job will be the responsibility of the Service provider who must ensure adequate safety of the staff. SVSU will n o t be responsible for any mishap, injury or death of the staff.
i) The Service provider will maintain attendance records of the staff, which will be checked by the Engineer- in-charge.
j) All the equipments and installations will be maintained in neat and clean condition.
k) The scope of work includes operation and day to day maintenance of installations i.e. cleaning of installations, checking of all parts, oil level lubrication level batteries terminal and water Including recording of all parameters. In case of minor repairs the Service provider shall arrange additional skilled staff within his quoted rates and without any extra cost. The works such as overhauling/ rewinding of engine, alternators, fans, repairs/ replacement of switch gears, AMF panel boards, or other major repair for which part of the machine, installations, is to be sent out for repair/ testing shall be arranged by the Service provider. Payment for major components shall be made separately by the SVSU as per actual.
l) Painting of DG sets and accessories such as panels etc. has to be done once in a year with superior quality one/ two coats of paint as per instructions of Engineer-in-charge. The decision of the Engineer-in-charge shall be final and binding in this regard.
m) Any damage caused to the fittings/ switch gears/ installations/ machinery as a result of execution of this work shall have to be made good by the Service provider at his own risk and cost.

n) The DG sets are to be operated in case of failure of mains supply or as and when required by the department.

o) When power supply is not available from Dakshin Haryana Bijli Vitran Nigam, the agency has to run all the DG sets. Diesel required for DG sets will be made available by SVSU. The Service provider will have to maintain the log book of each DG set duly signed by the SVSU officials. It is the responsibility of the Service provider that the storage oil tanks of all DG sets should be completely filled at all times. If oil is required, the same will be intimated by the Service provider to the Engineer-in-Charge of SVSU.

p) The Service provider will be done the services/required major maintenance etc. of DG Sets directly from the manufacturer/authorized service center as per time-lines of manufacturer with the approval of Engineer-in-charge. The Charges of Mobil Oil, Oil filter, service fuel filter kit, Service Charges, spares etc. firstly to be paid by the Service provider and then reimburse/paid by the SVSU.

p) The co n t r a c to r shall b e responsible to carry out the services of the DG Sets as per Original Equipment Manufacturer's instructions.

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5. General Terms & Conditions for Operation and Maintenance of6 Nos. Electrical Sub-stations

The scope of work comprises of 6 Nos. Electrical Sub-stations:

1. Operation and maintenance of Complete 6 Nos. 11KV/415V Electrical Sub-Stations including all switchgears and Sub-Stations Equipment's i.e. 5 Nos Transformers of 1000 KVA, 2 Nos Transformers of 400 KVA, 1 Nos Transformers of 1600 KVA HT and LT Panels, HT and LT cables of entire campus, APFC panels, Control Panels, Ring-main Systems, Earthing systems, DC systems, all switchgears, etc. (with periodically service/maintenance of Transformers/Circuit Breakers/other equipment's of sub-stations should be done by the Service providers as described time-lines by the manufacturer should be done by the Service provider through manufacturer) in three shifts for all days in a month includingSundays and holidays complete with required Manpower's i.e. Electrical engineers, Sub-station attendants etc. in all 11KV/415V, 6 Nos Electrical Sub-stations of SVSU. Details are under: -

2 Nos (ESS-2A and 2B) Sub-stations, each of 400 KVA.
1 Nos (ESS-3B) Sub-station of 1000 KVA.
1 Nos (ESS-3A) Sub-stations of 1600 KVA.
1 Nos (ESS-1B) Sub-stations of 2000 KVA
1 Nos (ESS-1A) Sub-stations of 2000 KVA

Note: - Details about placing of the Sub-stations has been given in the master plan of the campus which are attached in DNIT.

2. For the Maintenance and Operation of the 6 Nos. Electrical Sub-stations, the Service provider shall contact andco-ordinate with the Original Equipment Manufacturer.

a) The Service provider has to depute trained staff in 3 shift duty i.e round the clock as per the deployment chart. The duty hours can be changed as per discretion of Engineer-in- charge.

b) The 6 Nos. Electrical Sub-stations installations and DG Sets shall be maintained round the clock on all daysof the month including Sundays and holidays .The weekly rest of the staff shall be given by making alternate arrangement for which no extra payment shall be made.

c) In case of emergency, the staff may have to work beyond normal working hours, for which no extra payments shall be made by the SVSU. The qualifications for the deployed manpower should be 2 years in relevant field.

d) The Log Book, maintenance records shall be maintained by the staff of the Service provider. All the registers log book shall be supplied by the Service provider and got verified from the Engineer-in-charge for which noextra payment will be made to Service provider.

e) The worker can be deployed in shifts as per the requirement and as per the direction of the Engineer- in-charge. Nothing extra shall be paid to the Service provider by the SVSU on this account.

f) The Service provider has to arrange the consumable like HT and Glows, cotton waste, cloth, soap bar, duster, fuse wire, black tape, Pliers, line testers, Cable fault detector, multi-meter, clamp-meter, battery acids etc. of all the mandatory checks as recommended by the manufacturers etc. for bonafied use in the work. Nothing extra shall be paid to the Service provider by the SVSU on this account.

g) The Service provider has to arrange T & P required for the work at site.

h) Safety of the staff employed for the job will be the responsibility of the Service provider who must ensure adequate safety of the staff. SVSU will not be responsible for any mishap, injury or death of the staff.

i) The Service provider will maintain attendance records of the staff, which will be checked by the Engineer-in-charge.

j) All the equipment's and installations will be maintained in neat and clean condition.

k) The scope of work includes operation and day to day maintenance of installations i.e. cleaning of installations, checking of all parts, oil leve,l lubrication level, batteries terminal and water Including recording of all parameters. In case of minor repairs the Service provider shall arrange additional skilled staff within his quoted rates and without any extra cost. The works such as overhauling/ rewinding of Transformers, Circuit breakers, Switchgears, earthing system, fans, repairs/ replacement of switch gears, AMPF panel boards, replacement required of HT/LT cable or other major repair for which part of the machine, installations, is to be sent out for repair/ testing shall be arranged by the Service provider with the approval of the Engineer-in-charge of SVSU. Payment for major components/repairing/materials shall bemade firstly by the Service provider and then reimburse by the SVSU as per actual.

l) Painting of Sub-stations equipment's/ accessories such as panels etc. has to be done as per requirement with superior quality one/ two coats of paint as per instructions of Engineer-in-charge. The decision of the Engineer-in-charge shall be final and binding in this regard.

m) Any damage caused to the equipment's/ switch gears/ installations/ machinery/ transformers/circuit breakers/HT/LT panels/AMPFC panels or other equipment's or Manpower's i.e. engineers/ electrician/sub-station attendant/ etc. as a result of execution of this work shall have to be made good by the Service provider at his own risk and cost. SVSU should not be responsible for the same.

n) The electricity supply breakdown from Dakshin Haryana Bijli Vitran Nigam,supply time to time should be recorded in register by the Service provider.

o) The Service provider will be done the services/required major maintenance etc. of 6 Nos. electrical sub-stations equipment's and DG Sets directly from the manufacturer/authorized service center as per time- lines of manufacturer with the approval of Engineer-in-charge. The Charges of transformer oil, silica gel, relay replacement, contactor replacement/repairs, Coil charges, MCCB replacement, service Charges, other spares etc. firstly to be paid by the Service provider and then reimburse/paid by the SVSU.

p) The contractor shall be responsible to carry out the services of the transformers/HT/LT panel etc. as per Original Equipment Manufacturer's instructions

q) Agency to carried out routine and regular checks on all the products as per OEM standard of the equipment's. if any equipment's is in warranty period/defects liability period then for repairing the same, the Service provider will be directly contacts by the concerned agency/Oems/IrconIsl (PMC) with the consent of Engineer-in-charge SVSU.

r) The Service provider/Agency shall cover its personnel under Insurance for personal accident and death whilst performing the duty. The SVSU shall own no liability and obligation in this regard.

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6. General Terms & Conditions for Operation Repair and Maintenance of Solar System

1. The work is to be carried out as per latest State PWD/CPWD Specifications for electrical works and Maintenance Manual as amendeduptodate(forElectricalworks) and aspersiterequirements.

2. Theinstallationshall bemaintainedon all days ofthemonth including Sundays& holidaysin dayandnight shiftsand weekly rest ofthestaffshall begivenbymakingsuitablealternativearrangementforwhichnoextrapaymentshall bemade.

3. The staff of the Service provider shall maintain the maintenancerecordsand registers, whichwill besuppliedbytheService provider.

4. The Service provider has to depute the staff as required to manage the throughout campus of SVSU. However, workers can be deployed in shift duty as per requirement of the Engineer-in-Charge of SVSU. A full time supervisor shall be deployed in the general shift who shallpossessvalidelectricalsupervisorylicense.

5. Thecleaningofsolarplatesshouldbedoneatleast 2 timesinamonthorasperrequirementwiththedirectionof Engineer-in-Charge ofSVSU.

5. Thefittingsandfixturesifreplacedshallbepaidforseparately.

6. TheService providerwillmaintainattendanceregisterofthestaff,whichwillbecheckedbytheEngineer-in-chargeifdesired.

7. Alltheequipment'sandinstallationsshallbemaintainedinneatand clean conditionbytheService provider.

8. ThescopeofworkincludescIeaning,operationandgeneralmaintenanceofSolarplates/system,inverters,otheretc. which is to be sent out for repair/ testing, shall be arranged by the Service providerwith the consentof Engineer-in-charge of SVSU andthe Charges of material/repairs should be paid by the SVSU. Painting string/modules or other items has to be done as per requirement with superiorqualitypaintone/ twocoats ofpaintasperinstructionsofEngineer-in-charge.ThedecisionoftheEngineer-in-charge shall befinalandbinding.

9. Any damage/theft caused to the fittings/ switch gears/ Solar system installations/ inverters as a result of execution of this work shall have tobe made good by theService providerathisown riskand cost.TheService providershoulddeploypropersecurity.

10. TheService providershallsubmittheattestedphotocopyofwireman/ electrician/solarcertificateandshowthesamecertificatesinoriginal ofelectrician/wireman/solaremployed by themtothe Engineer-in-chargeofSVSU.

11. ThestaffdeployedbytheService providershouldhave aminimumoneyearsofexperienceinthetradeand shall bewell manneredand behavior.

12. Agency to carried out routine and regular checks on all the products as per OEM standard of the equipment's. if any equipment's is in warranty period/defects liability period then for repairing the same, the Serviceprovider will be directly contacts by the concerned agency/Oems/IrconIsl (PMC)withtheconsentof Engineer-in-charge SVSU.

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7.General Terms & Conditions for Operation Repair and Maintenance of UPS System

1. The work is to be carried out as per latest State PWD/CPWD Specifications for electrical works and maintenance Manual as amendeduptodate(forElectricalworks) and aspersiterequirements.

2. Theinstallationshall bemaintainedon all days ofthemonth including Sundays& holidaysin dayandnight shiftsand weekly rest ofthestaffshall begivenbymakingsuitablealternativearrangementforwhichnoextrapaymentshall bemade.

3. The staff of the Service provider shall maintain the maintenancerecordsand registers, which willbesupplied bytheService provider.

4. ThecleaningofUPSsystemandBatteriesshouldbedoneasperrequirementorwiththedirectionof Engineer-in-ChargeofSVSU.

5. Thefittingsandfixturesifreplacedshallbepaidforseparately.

6. TheService providerwillmaintainattendanceregisterofthestaff,whichwillbecheckedbytheEngineer-in-chargeifdesired.

7. Alltheequipment'sandinstallationsshallbemaintainedinneatandcleanconditionbytheService provider.

8. The scope of work includes cleaning, operation and general maintenance of UPS system, batteries. which is to be sent out for repair/ testing, shall bearrangedby theService providerwiththeapprovalof Engineer-in-chargeof SVSU/SVSUofficialsandthe Charges ofmaterial/repairsshouldbepaidbytheSVSU. ThedecisionoftheEngineer-in-chargeshallbefinalandbinding.

9. Any damage/theft caused to the fittings/ switch gears/ UPS systeminstallations/ Batteriesas aresult of execution ofthis work shall havetobemadegoodbytheService providerathisownriskandcost.TheService providershoulddeploypropersecurity.

10. TheService providershallsubmittheattestedphotocopyofwireman/ electrician/solarcertificateandshowthesamecertificatesinoriginal ofelectrician/wireman/solaremployedby them tothe Engineer-in-chargeofSVSU.

11. The staff deployed by the Service provider should have aminimum one years of experience in the trade and shall bewell manneredandbehavior.

12. Agency to carried out routine and regular checks on all the products as per OEM standard of the equipment's. if any equipment's is in warranty period/defects liability period then for repairing the same, the Serviceprovider will be directly contacts by the concerned agency/Oems/IrconIsl (PMC)withtheconsentof Engineer-in-charge SVSU.

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8.General Terms & Conditions for Housekeeping Work

1. The garbage/debris/waste should be collected from rooms twice in a day and should be disposed off at Segregation yard at marked place of local municipal committee or arrange by the Service provider..

2. The Service provider will m a i n t a i n attendance records of the staff, which will be checked by the SVSU officer-in- charge of SVSU/SVSU officials of the work. In case of absence of any staff, recovery shall made as per the "Details of deployment of man power" under Special Conditions of Contract.

3. The Service provider shall arrange minimum list of machinery (T&P) required moping/sweeping/ cleaning/cleaning of façade work/cleaning of glasses/ garbage chute cleaning. In case the minimum nos. ofT & P if not provided by party then suitable recovery shall be made from the bills.

a)	Double bucket trolley (Wringer trolley with wheels) with two buckets system of 25 litre each	2 nos.
b)	High pressure water jet machine mounted with battery/generator system and water storage tank complete on wheels	2 no.
c)	Wheel mounted dustbin closed trolley for disposal of garbage from chutes	8 nos.
d)	Operator for Vacuum cleaner	As per requirement
f)	List of chemicals required for housekeeping work.	

M/s Johnson and Diversey

S. No.	Chemicals	Items to be cleaned
1	R2	Marble floors, Granite floor.
2	Complete	Kota, Mosaic tiles, Vinyl, Rectified tiles-Polish
3	Nobile	Marble floors-Polishing
4	Spiral	Kota & Hard Floor
5	Snapback	Kota, Vinyl, Mosaic tiles
6	Liver Star	Hand disinfectant before/after going into critical areas
7	Emerel	Restorative product for fixtures

AND/OR

(B) M/s ECO Lab-Henkel

1	Sigla	Floor moping & Scrubbing on daily basis.
2	Nettoklar	Marble crystallization as and when required basis.
3	Polli	Regular buffing of Granite

Note:-

1. The consumption of various chemicals shall be regulated as per the manufactures specifications.

2 The chemicals regarding toiletries etc. not mentioned above shall be from M/s Johnson and Divers and/or M/s ECO Lab-Henkel as approved by the Engineer-in-charge.

3. Sewer lines and drains shall be cleaned with high pressure jet machine through approved agency by the Engineer-in-charge twice a year or, if required ,more followed by all repair works Including replacement of damaged sewer line, manhole cover & frame etc. In no case manholes and drains are to be left open and are to be kept always covered failing which the entire responsibility of any mis- happening , if any , shall be of the Service provider.

4. The drains/sewer are to be cleaned by the end of the month of April i.e. well before the arrival of the monsoon. The drain shall always be covered with proper & regular size of pre-cast RCC covers and the corners and/or irregular size of openings shall be covered with cast –in- situ RCC covers. Cleaning operation shall be followed by repair work as per requirement at site.

5. All domes in SVSU Campus Including. projected chhajjas etc shall be dusted off/cleaned monthly.

6. Glow P a i n t i n g of kerb stones and r o a d marking shall be carried out once a year Including repair/ replacement of damaged kerb stone & MS gratings and paint them to match with existing one.

7. At all times the work area or the area unsafe for passage mus be displayed with placard carrying the message of such safety.

8. In case of poor performance SVSU reserves the right to terminate the contract by issuing one-month notice.

A) THE DETAILS OF BUILDINGS AND AREA COVERAGE FOR HOUSEKEEPING SERVICES FOR SVSU CAMPUS: -

S.No	Buildings	Area in Sq. M	No. of Blocks	No. of Stories	Ground Coverage
1	Administrative Block	5000	1	5	1115
2	Auditorium & Convention Centre	7760	1	5	2350
3	Academic Block	22245	6	4	5561
4	Central Library/ Computer Centre/Student Activity Centre/ Central Cafeteria	9110	1	4	2400
5	Centre of Excellence	4660	1	6	773
6	V.C Residence cum Camp Office	411	1	2	330
7	Senior Admin Residences (4 no. Type-8)	1098	4	2	645
8	Guest House/ Faculty House (With 20 no. guest rooms on twin sharing basis and 2 no. VVIP Suits)	2686	1	4	935
9	Type 8 & 7 Residence (32 residences)	10823	2	5	2165
10	Type 6 & 5 Residence (32 residences)	7140	2	5	1428
11	Type 4 Residence (12 residences)	1238	2	3	413
12	Type3 & 2 Residence (48 Residences)	4735	2	7	676
13	Type 1 Residence (12 Residences)	831	2	3	277

14	Transit Accommodation(28 units)	1849	1	4	462
15	Girls Hostel 1 Seater (85 students)	3492	1	6	582
16	Girls Hostel 3 Seater (261 students)	11384	1	6	1897
17	Girls Hotel 4 Seater (114 students)				
18	Boys Hostel 1 Seater (85 students)	3492	1	6	582
19	Boys Hostel 3 Seater (261 students)	11384	1	6	1897
20	Boys Hotel 4 Seater (114 students)				
21	Shopping Centre	1310	1	2	655
22	Health Centre	730	1	1	730
23	Community Centre	1020	1	2	700
24	Stadium	2350	1	3	1175
25	Gymnasium	3000	1	3	2360
26	Swimming Pool	1260	1	2	630
27	Playground (400 Meter Track)	-	-	-	-
28	Feeder School	3000	1	4	750
29	6 No. Electrical Sub-Stations	3000	6	1	3000
30	STP	1000	1	1	1000
31	WTP	1000	1	1	1000
	Total Area in Phase I	127008			36488

(iv) Total Ground Covered area of SVSU campus: - 36488 Sq. meter.
(v) Total Buildings area of SVSU campus: - 127008 Sq. meter.
(vi) Total Open area of SVSU campus: - 295354 Sq. meter.

B) BROAD DETAILS OF SCOPE OF WORK

1. Cleaning, sweeping, moping and wiping of floors, staircase on daily basis from Monday to Friday or as required by Officer-In-charge. Cleaning activity shall start in the morning at 7.00 AM so as to complete all the dusting/ cleaning/ moping work before 9.00 AM.

2. Thorough cleaning of all toilets using required detergent by putting naphthalene balls and air purifier in all urinals, wash basins and WC area.

3. Cleaning and dusting of entire furniture, partitions, wooden cabin walls, railings, doors, windows venetian blinds, racks, sofas, typewriters, computers, telephones, curtains, wall mounted fans etc. with dry/wet cloth, feather brush and duster.

4. Lifting, carrying and disposing the dead bird's animals, rats, insect's etc. if found in and around the office building.

5. Clearing of any choking's in the drainages, manholes etc.

6. Washing/dry cleaning of chairs, sheets, towels, clothes, curtains etc in SVSU premises will be done by the Service providerfrom time to time or as and when required or as per the directions of the Engineer-in-Charge of SVSU which are included in the BOQ quoted rates. Nothing extra will be paid for the same by the SVSU Time to time laundry of chairs, bed-sheets, tawls, cloths, curtains, should etc be done.

7. The consumable items i.e. Toilet Cleaner (Harpic/Lizol/Homeninza), Hand wash refill pack(Savlon/Dettol/Godrej/Santoor), Soap(Dettol/Medimix/Lifeboy), Dustpan, Glass Cleaner(Collin), Liquid Hand Wash with pump(Lifeboy/Dettol), Urinal Cube, Washing Powder(Speed/Nirma/fena), Toilet Air Freshener (Odonil/Goodhome), Floor Cloth (Poucha,XL Size), Room Freshener(Godrej/Ambi Pur), Scrubber(10x15cm) , Stick Broom (Tilli Jharoo) , Toilet Tissue Role(Origami) , Toilet Brush (42-45cm in length), Naphthalene Balls (80Gm), Phenyl of white color concentrated(5ltr Can), Wiper large Having blade size 41cm and M.S rod Length 120cm., Wiper (Small) Having blade size38 cm and M.S length 85-90 cm., PVC Buckets (18 ltr)., Mask (Pioneer or equivalent), Hand Guard Surgical Gloves/Disposable latex Examination Gloves (Nature to White Color, Powdered with absorbable

dusting Powder, Large Size Box, Mortein Spray/All Out Baygon, Window Cleaning Wiper Having Blade Length 25cm, Plastic Hand Pot(Mug-1 Ltr), Bleaching Powder(25 Kg Bag) , Rubber Gloves(Pinhole free, Non Sterile,NoFiller,Made from Natural Rubber (Latex size-8) etc. to be provided by the Service provider/agency for the housekeeping facility in theQuoted rates. nothing extra shall be payable on this account by the SVSU.

8. Removal of beehives and cobwebs/honey webs from the office building and its premises.

9. Cleaning and sweeping of open area including balconies and roof tops with brooms.

10. Maintenance of lawns & surroundings, cutting of hedges, cutting/shaping of plants by mali and removal of garbage from the office building and its premises.

11. The Service provider shall also be responsible for **pest control** in the all offices/ buildings of SVSU campus and shall carry out sprays etc. minimum once in a month. The insecticides and pesticides should be sufficient enough to take care of Mosquitoes, Cockroach, Silver fish, crawling insects at library and carpeted rooms, rats etc. The insecticide and pesticidesprayed should be of ISI mark and in case the pest control is ineffective the firm shall have to carry out operation morethan once in a month. If any damage i.e. electrical wiring, EPBAX System, HVAC PCB, Indoor/Outdoor unit of HVAC systems, ofc wirings/ cables etc. caused by rats in the buildings, Service provider will be responsible for the same and due same any damaged equipment/instrument will be repaired by the Service provider within 3 days at own cost. SVSU has not been responsible for the same.
12. The Service provider must employee adult and skilled labour only. Employment of child labour will lead to the termination of the contract. The Service provider shall engage only such workers, whose antecedents have been thoroughly verified, including character and police verification and other formalities. In order to maintain quality services and minimize operational problems, the Service provider must rotate the staff once in six months with prior written intimation toSVSU.

13. Proper registers/records for the jobs carried out on daily, weekly, fortnightly and monthly basis will be maintained by the Supervisor of the Service provider and will be countersigned by the SVSU officer-in-charge at regular intervals and finally at the end of each month.

14. The service provider should possess or procure needful infrastructure, gadgets and other material required for smoothhousekeeping services. No additional cost towards this will be borne by SVSU.

Terrace Cleaning: -

15. The Service provider shall clean the terrace periodically as per instruction of SVSU official. Quoted rates shouldbe inclusive of this item. No extra payment whatsoever will be made on this account.

Cleaning Services:

1. The aim and objective is to provide a high level of a clean, hygienic and presentable look to the entire area. The Service provider and his management team will supervise the awarded work. The Service provider has toensure that the staff deployed is dressed in neat and clean uniform approved by the SVSU , Officials.
2. General Requirements and Documentation
3. Organizational structure and line of authority
4. Mechanized Housekeeping manual and all SOP (Standard Operating Procedures)
5. List of equipment used
6. Description for each category of Mechanized housekeeping & Arboriculture
7. Maintaining records / details of
   a) Complaint Book
   b) Duty Roster / Deployment Sheet of Housekeeping
   c) Inventory of Stores
   d) Accident / theft Register
   e) Logs and checklists

8. The Service provider shall undertake all types of work viz, cleaning, dusting, toilet cleaning, etc., in general and the following works in particular.
9. Monthly WORK:

UNDERGROUND & OVERHEAD WATER TANKS: -

1. The Service provider shall clean & disinfect the Underground & Overhead Tank periodically after emptying the water from the tanks as per instruction of SVSU. The Service provider's quoted rates should be inclusive of this item. No extra payment whatsoever will be made on this account.
2. Cleaning of underground/OH or terrace water storage tanks including chemical treatment with Anti-bacterial agent. All the above operations should be executed by trained workers and technicians, properly dressed along with gum boots, to work as per the direction of Engineer in charge

C. JOBS TO BE CARRIED OUT DAILY

i) Cleaning of general toilets at least thrice daily (at 8.30 AM, 12.00 Noon & 3.30 PM) with phenol and detergent etc and maintain the toilets floors dry during office hours. Cleaning of windows and window sills of all toilets to be done regularly. Wash basins, urinals, WC are to be cleaned with suitable detergent. Flushing system of all toilets is to be checked at regular interval every day. Naphthalene balls, air purifier and liquid soap and paper rolls are to be provided by the agency regularly to ensure continuous availability of these materials in requisite place/container.

ii) Cleaning of attached toilets with phenol, removing all dust and unwanted materials, keeping dry, cleaning of window sills once in a day. Naphthalene balls air purifier; toilet rolls/paper rolls and liquid soap are to be provided by the agency regularly to ensure continuous availability of these materials in requisite place/container.

iii) Cleaning of corridors staircases and common area with phenol in the morning and with plain water continuously.

iv) Cleaning & moping of pantries and electrical rooms once in a day during office hours.

v) Cleaning of office working areas, removing dust from floors, windows, doors, furniture's, fixtures, telephones, cupboards, air conditioners, filing almirahs, cabinets, glass panes, computers etc. with dry/wet duster and or with suitable cleaning agent. Moping of floors with phenol.

vi) Collection of waste paper from rooms, waste paper, baskets, lobbies and putting in bags at the specified location.

vii) Cleaning of carpets by soft brush.

viii) To clean glass panes on doors, windows & partitions with soap/cleaning agent.

ix) Cleaning of chokage in sewer and pumping lines within premises as and when required.

x) Cleaning gulley trap and manholes within and surrounding of premises as and when required.

xi) Cleaning of duct and shaft spaces, garbage, and removal and putting them in dustbin kept outside the building.

xii) Cleaning/removal of any type of stains of ink etc. from the building premises and staircases.

xiii) Cleaning, sweeping and wiping of floors, furniture and hand washing area etc. during office hours.

xiv) Cleaning of carpets in rooms by vacuum cleaners.

xv) Cleaning of lift walls with silver/brass liquid cleaner.

xvi) Cleaning of Each Sub-station and STP.

xvii) Cleaning the all road of SVSU campus.

xviii) Room fresheners in all office area to be used daily in the morning. Room freshener should be of ISI Mark or of standard Make.

xix) Spray of scented Mosquito and cockroach killer on all floors as and when required. Mosquito/cockroach killers shall be of ISI mark. Special scanted purifiers shall be sprayed at least twice daily in all rooms, cabins, bathrooms, reception, conference halls lifts lobby, lifts etc.

xx) Maintenance of lawns & surroundings, cutting of hedges, cutting / shaping of plants by mali and removal of garbage from the office building and its premises.

D. JOBS TO BE CARRIED OUT WEEKLY

a. Acid cleaning of sanitary ware without damaging their shine, scrubbing and cleaning of floors and walls in toilets/rooms, corridors with soap, detergents, kerosene/petrol or any other chemicals, automatic mopper/scrubbing machine to be used at least once in a week.

b. Cleaning of fabric upholstered sofa sets with vacuum cleaners and leatherite upholstered sofa set and chairs with soap solution/ cleaning agent of approved quality.

c. Cleaning of brass letters by brasso (polish).

E. JOBS TO BE CARRIED OUT FORTNIGHTY BASIS

i) Polishing of brass items with approved brass cleaning material.
ii) Cleaning of carpets in rooms by vacuum cleaners without damaging the carpet.
iii) Dusting of false ceiling etc. with soft broom and cloth.
iv) Cleaning of sofa sets with soap water/ vacuum cleaners.
v) Washing and cleaning of driveways, parking areas and roads within the office premises.
vi) Lift lobby and all toilets floors and other areas, as may be directed by Officer In-charge, shall be cleaned with floor scrubbing machine.
vii) Cleaning of Façade work / cleaning of glasses of all buildings by Automated Facade Cleaning System.

F. JOBS TO BE CARRIED OUT ON MONTHLY BASIS:

1. All floors in common area floors including staircases shall be cleaned thoroughly with floor scrubbing machine with soap and water to remove all stains etc. After cleaning the floors with soap and water the floors shall be properly wax polished.

2. Total office area floors to be cleaned with floor scrubbing machine, wherever required as per directions of Officer-In-charge.

G. PROVIDING WORKFORCE;

The Service Provider has to provide workforce with all required materials in sufficient numbers to maintain the buildings/throughout campus of SVSU as required and of quality to ensure workmanship of the degree specified in the job order and to the satisfactionof the Engineer-In-Charge of SVSU/SVSU officials.

9.General Terms & Conditions for Operation Repair and Maintenance ofHVAC System/Split/Window ACs

1. The work is to be carried out as per latest State PWD/CPWD General Specification wherever applicable and State PWD/CPWD Maintenance Manual with latest correction slips.

2. HVAC VRV/VRF Unit of 2243 HP of DAIKIN as well 32 HP of Voltas Ltd.

3. The installations shall be maintained on all days of the month including Sundays & holidays and weekly rest of the staff shall be given by making alternative arrangement for which no extra payment shall be made.

4. In case of emergency, the staff may have to work beyond normal working hours, for which extra payments shall not be made by the SVSU.

5. The log book, complaint register, maintenance records, duly certified by the Engineer –in- Charge ,shall be maintained by the staff of the Service provider. All the registers shall be supplied by the firm/Service provider and certified by the Engineer-in-Charge.

6. The Engineer-in-charge has the right to remove/ terminate the services of any worker without assigning any reason..

7. The workers can be deployed in shift duty as per requirement & as per discretion of the Engineer-in- charge.

10. The watch and ward of the HVAC/ACs Plant installation, controllers, Outdoor machine, machines room will be the responsibility of the Service provider.

11. The general cleaning & upkeep of the AC plant shall be the responsibility of the agency.

12. The AC operator/Mechanic should operate the A C p l a n t as per operating conditions/instructions of the manufacturer. Only those persons are to be employed who have at least 1 (one) year experience in operation of AC Plants and capable of reading & writing in Hindi/English.

13. Any accident involving damage to human life, AC Plant equipment etc. due to mal operation of AC plant, by the staff of Service provider, will be the responsibility of the Service provider. The Service provider has to make good the losses, by way of replacement of machinery, equipment, compensation to the person etc. The decision of Engineer-in-charge in this regard shall be final and binding on the firm.

14. The Service provider has to maintain the record/ attendance register of staff and to be produced to Engineer-in-charge as and when required.

16. The firm shall examine periodically all safety devices/ governors to ensure that AC plants are in proper working condition as per the checklist enclosed in the tender document.

19. Following items are not included in the scope of work: Repairing / Material / maintenance of AC plant, Gas charging / refilling etc.

20. The Service provider will be done the periodically services/required major maintenance etc. of HVAC/ACs directly from the manufacturer/authorized service center as per time-lines of manufacturer with the approval of Engineer-in-charge. The Charges i.e. filters, Gas refiling, Service Charges, spares etc. firstly to be paid by the Service provider and then reimburse/paid by the SVSU.

21. For the Maintenance and Operation of the HVAC system with controllers/Split/Window ACs, the Service provider shall contact and co-ordinate with the Original Equipment Manufacturer.

22. AgencytocarriedoutroutineandregularchecksonalltheproductsasperOEMstandard.

23. Agency to carried out routine and regular checks on all the products as per OEM standard of the equipment's. if any equipment's is in warranty period/defects liability period then for repairing the same, the Service provider willbe directly contacts by the concerned agency/Oems/IrconIsl (PMC) with the consent of Engineer-in-charge SVSU.

10.General Terms & Conditions for Operation Repair and Maintenance ofIT Works and BMS System

The scope of work comprises of following installations:

Optical Fiber & Ethernet Cabling and Any other IT connectivity cabling
Smart Board setup/ Interactive Panels (Projector, short through projectors, Motorize Screen etc.)
CCTV System (Camera, NVR with storage, LED TV's, PoE Switches etc.)
Public Address System (Ceiling speakers, Digital voice evacuation system, Remote paging microphone, CD/DVD/USB Player, speaker cabling etc.)
Network & Hardware Equipment's (Switches, Fiber switch, Routers, Firewall, wi-fi Access points, wi-fi controller, OFC to Ethernet converters, Racks, Patch Panels etc.)
Desktop/Workstations/Laptop/Printers
Printer Cartridge refilling
EPABX System including Telephone instruments.
Access Controls System (card readers, card software, smart cards, magnet locks etc.)
Audio/Video Conferencing Setup (Table Top Microphone, handheld wireless mics, podium with mic and speaker, Digital Conference Controller, ceiling mounted speakers, Amplifier, HDMI matrix switcher, motorize floor box, Audio De-embedder, rack, connecting cables etc.)
Complete Auditorium including all equipment and devices and seminar halls in the auditorium block
Requirement of Desktop/Workstations/Laptop/Printers on rent basis as per the SVSU requirement
Maintenance & replacement of LAN/Voice I/O, gang box, faceplate, patch cable (1 ,2,5,10,20 meters) etc.
Day to day hardware/network/software issue resolutions of users in the organization.
Any other IT related item installed in any building and not covered in above points.

2. For the Maintenance and Operation of the IT Works and BMS System, the Service provider shall contact and co- ordinate with the Original Equipment Manufacturer.

The Service provider has to depute trained staff in 3 shift duty i.e. round the clock as per the deployment chart. The duty hours can be changed as per discretion of Engineer-in- charge.
In case of emergency, the staff may have to work beyond normal working hours, for which no extra payments shall be made by the department.
The Log Book, maintenance records shall be maintained by the staff of the Service provider. All the registers log book shall be supplied by the Service provider and got verified from the Engineer-in-charge for which no extra payment will be made to Service provider.
The worker can be deployed in shifts as per the requirement and as per the direction of the Engineer-in-charge. The
Service provider has to arrange the consumable like tools required for the maintenance, cable ties, conduit pipes, cables, patch codes, gang boxes etc. or any other item required. Nothing extra shall be paid to the Service providerby the SVSU on this account.
The Service provider has to arrange T & P required for the work at site.
Safety of the staff employed for the job will be the responsibility of the Service provider who must ensure adequate safety of the staff. SVSU will not be responsible for any mishap, injury or death of the staff.
The Service provider will maintain attendance records of the staff, which will be checked by the Engineer-in-
charge. All the equipment's and installations will be maintained in neat and clean condition.
The scope of work includes operation and day to day maintenance of IT infra requirements, IT devices and equipment's and IT issues.
Any damage caused to the any other installed item or device or anything else as a result of execution of this work shall have to be made good by the Service provider at his own risk and cost.
The Service provider will be done the services/required major maintenance/periodical checkup of all the installed IT devices and maintain a record and report of the same.

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Annexure-1

SEWAGE TREATMENT PLANT - 800 M3/DAY WORKS

Sr. No.	DSR-2016/NS	DESCRIPTION	Unit	Quantity
1	NS 1	Design, supply, installing, testing & commissioning of Sewage Treatment Plant of 800 m3/day based on SBR technology (excluding excavation, back filling & disposal of surplus earth MS / Civil construction work) for the following duty: Nature of Sewage - Domestic Sewage waste water shall be discharged into the STP. Design to take consideration of same.		
		Approved vendors for STP work: Thermax/BS Enviro/Doshion/C-Tech/Advent Envirocare/ Geo-Miller		
		The STP design based on the following parameters:		
		Daily average flow: 800 M3/Day		
		PH : 6.5-8.5		
		BOD : 250-300 mg/l		
		S. Solids : 250 mg/l		
		COD : 450-500 mg/l		
		Oil & Grease : 45 mg/l		
		Sewage discharge standard after treatment :-		
		PH : 6.5-9		
		BOD : Less than 20 mg/l		
		S. Solids : Less than 50 mg/l		
		COD : Less than 80 mg/l		
		Oil & Grease : Less than 5 mg/l		
		Preliminary Work		
		Shop Drawing		
	i	Detailed GA drawing, flow diagram, equipment list, power load requirement	Job	1
	ii	Design, calculations of all elements of the plant, electrical and mechanical work to satisfy adequacy of design	Job	1
	iii	Submission of detailed GOOD FOR CONSTRUCTION' stage architectural, structural, construction, electrical, mechanical and piping drawing for approval.	Job	1
		Electro-Mechanical Equipment		
		Bar Screen :		
2	NS 2	Supplying, installing, testing & commissioning Perforated manual screen including 1 coarse screen of particular size having provision for lifting arrangement etc. complete as required.		
		Size : 1000mm X 1200mm		
		MOC : SS-304		
		Make: BS Enviro/Jash/Geo-Miller/ Envirad	Nos.	1
		Purpose: For Separation of Large Solids		
3	NS 3	Supply, Installing, Testing & Commissioning Perforated Roto sieve rotating screw type drum fine screen of particular size complete required as per manufacturer specification		
		Make : BS Enviro/Jash/Geo-Millar	Nos	1

4	NS 4	Supply, installation, testing & commissioning of non clogging type Submersible Sewage Pumps having CI casing & CI impeller complete with foundation bolt and all accessories, motor of required capacity. pressure gauge on delivery line with isolation cock, level controller to control the level for provision to control the level of sump automatically. Pumps shall have following duty:2No.(1W+1S)		
		Flow Rate : 53.3 M3/Hr		
		Head : 15mtr		
		Solid handling : 32MM		
		Make: Kirlosker/Wilo/Grundfos	Set	1
		Purpose: For sewage transfer from equalisation tank to SBR reactor		
5	NS 5	Supply, installation, testing & commissioning of non clogging monoblock type Sludge Recirculation pump having CI casing & CI impeller complete with and foundation bolts all accessories, motor of required capacity. pressure gauge on delivery line with isolation cock, level controller to control the level of sump automatically. Pumps shall have following duty:		
		Flow Rate : 14 M3/Hr		
		Head : 10 mtr		
		Solid handling : 8 MM		
		Make: Kirlosker/Wilo/Grundfos	Set	1
		Purpose: For transfer sludge to Sludge holding tank and recirculation to SBR Reacter		
6	NS 6	2 Nos. twin type rotary air blowers (1W + 1S) capable of delivering 800 M3/hr of free air at 0.5 kg/cm2 driven through “V” belt or directly coupled through flexible coupling to a TEFC motor of suitable HP Suitable for 415 ± 10% volts, 3 phase, 50 cycles A/C supply. Including foundation and foundation bolts work.		
		Make: Everest/Beta/Akash	Set	1
		Purpose: For air supply to equalisation tank/sludge holding tank/SBR reactor		
7	NS 7	Supplying, installing, testing & commissioning of Horizontal centrifugal non clog water pumps with CI casing and CI Impeller along with motor, pressure gauge with isolation cock, Isolation valve, NRV on delivery line. at suction. Mechanical seal, suitable vibration elimination pads of approved design, drain pipe with valve for the pump. The pump shall be suitable for 415±10% volts 3 phase AC supply. Including foundation bolts(1 Working + 1 Standby)		
	i	Filter Feed Pump		
		Capacity : 50 M3/Hr		
		Head :25Mtr		
		Make: Kirlosker/Grundfos/Wilo	Set	1
		Purpose : For Feed Water into Filter MGF/ACF		
	ii	Irrigation Water Tranfer Pump		
		Capacity :25 M3/HR		
		Head : 30Mtr		
		Make : Kirlosker/Grundfos/Wilo	Set	1
		Purpose : For Transfer Treated Water to Use		
	iii	Flushing water transfer Pump		
		Capacity : 50 M3/Hr		
		Head :60Mtr		
		Make: Kirlosker/Grundfos/Wilo	Set	1
		Purpose : For Transfer Filter Water to Flusshing		

8	NS 8	Supply, installation, testing and commissioning of Sludge Feed Pumps Screw type Complete with all fittings & accessories. Including foundation and foundation bolts.(2Nos.- 1W+1S)		
		Capacity :4 M3/H		
		Head : 40mtr		
		MOC :CI		
		Make : Roto/UT/Cavity	Set	1
		Purpose : For Feed Sludge to filter press		
9	NS 9	Supplying, installing, testing and commissioning of MSEP vessel filter with all necessary accessories. Filter shall be suitable for minimum working pressure of 6 kg / cm2 and shall include media, standard fittings like pressure gauges, sampling cock, rinse drain, vacuum breaker etc. The MS sheet thickness for tank shall be min. 6mmfor dishess and 8mm for shell. The internal surfaces of tank shall be treated with epoxy coating and external surface with primer and anticorrosive enamel paint (Min. 2 coats).		
	i	Pressure Sand Filter		
		Type : Down Flow		
		Flow rate: 50 M3/hr		
		Dia : 1800 mm		
		Height: 2200 mm		
		Filter Media: Sand & Gravel		
		MOC: MSEP		
		Make : BS Enviro/Thermax/Doshion/C-Tech/Advent Envirocare	Nos.	1
		Purpose: For removal of suspended solids		
	ii	Activated Carbon Filter		
		Type : Down Flow		
		Flow rate: 50 M3/hr		
		Dia : 1800 mm		
		Height: 2200mm		
		Filter Media: Activated Carbon		
		MOC: MSEP		
		Make : BS Enviro/Thermax/Doshion/C-Tech/Advent Envirocare	Nos.	1
		Purpose: For removal of color & odor		
10	NS 10	Supply, installation, testing & commissioning of Poly dosing system comprising of 300 ltrs HDPE/FRP tank with 0-10 LPH electronic metering type pump and SS agitator complete with motor.		
		Make : E-Dose/ Asia LMI or Equivalent	Nos.	1
		Purpose : For Thickening of Sludge		
11	NS 11	Supply, installation, testing & commissioning of Chlorine dosing system comprising of 200 ltrs HDPE/FRP tank with 0-40 LPH Hypochlorite Dosing electronic metering type pump.		
		Make: E-Dose/Asia LMI or Equivalent	Nos.	1
		Purpose : For Disinfection of water		

12	NS 12	Supply, installation, testing and commissioning of Filter Press of particular size with all fittings & accessories . Hydraulic operated.		
		Size of Filter Press : 36"*36"*35 Plates		
		Make : Pharmatech/Universal/Eqvt.	Nos.	1
		Purpose : For Sludge Drying		
13	NS 13	Providing and fixing all piping (as described below) and isolation control valves for making the system complete.		
		MS Epoxy : Submerged air piping		
		MS Epoxy : Air piping & pumped effluent riser (non-submerged)		
		MS Epoxy : Interconnecting pipe line after delivery header of pump/ filter		
		MS Epoxy : Pumped effluent (submerged) & tank overflow pipe line	Lot	1
		Make: -TATA/Jindal		
		Purpose :- For Flow Control & Transfer path of Flow		
14	NS 14	Supply of MS puddle flanges in accordance to BS : 10 table D as required to be provided (in the structural slab and wall) of various diameters. Puddle flanges shall be provided for all the structural component of the STP. The installation of the puddle flanges shall be carried out by the Civil Service provider in accordance to the Civil GA drawings (to be prepared by the STP Service provider) at the required levels and position : under the supervision of the civil Service provider.	Lot	1
15	NS 15	Non clog, Self Cleaning type air dispersion system capable of handling 3-5 cfm of air with oxygen transfer efficiency of 3-4% per / meter water depth. Air dispersion grid shall be assembled in modular form so that they can be replaced / repaired easily from plat form at the top.		
	i	Course Bubble Diffuser	Lot	1
	ii	Fine Bubble Diffuser	Lot	1
		Make: Scogen/Rehau		
		Purpose :- For Providing the path of Air		
16	NS 16	Supply, installation, testing and commissioning fully automatic SBR package, Automated system shall include Floating Decanter with articulated arm, stainless steel collector joint, knee joint, air compressure and flexible hose pipe. make a provision for auto air scoring specially for decanting machenism for self cleaning to avoid blocking in extraction nozzle , MOC should be SS-304 for decanted water extraction from SBR tank. Inlet of sewage water decantation and areation shall be automatic and PLC controlled with the help of automatic valves. SBR cycle shoul be auto control through PLC including air compressure for Decanter, ultrasonic water point control unit, Disolve oxygen transmeter, Hydro static pressure transmeter, pressure gauge, Human machin interface shall be provide with PLC to make the system complete.		
		Decanter Diameter Size : 250 MM NB	Nos	2
		Purpose: For Collection of Water from SBR Reactor		
		Make: BS Enviro/C-Tech/Geo-miller		

17	NS 17	Supply, installation testing and commissioning of packaged type Ultra filteration unit with all components and accessories complete to make the system functional and shall be installed after water treatment system in STP With UF Feed pump, backwashing arrangement with all respect, All pupms consider (1W+1S)		
		Capacity : 25.06 M3/HR @ 16 Working Hours		
		Make : Deerfos/Toray/GE	Set	1
		Purpose:- For Membrane Filteration		
18	NS 18	Supply, installation, testing & commissioning of Ozone generator system comprising SS ventury, oxyzen concitrator, SS recirculation pump, ozone dosing asembly recirculation line comple with replacable ozone cell for suitable capacity.		
		Flow Rate: 50 m3/Hr @ 16 Hours Operation		
		Make: B S Enviro/Oz-air	Job	1
		Purpose : For Oxidisation/Disinfection of water		
19	NS 19	Approval from pollution board at initial & various other stages of works including preparation of report / drawings as per pollution board requirement. Service provider shall include the cost of all chemicals consumed during testing & commissioning and the cost of such items of works which are not explicitly mentioned above, but are mendatory to have pollution board approval. (Approval scope only related to STP works)	Set	1
		Purpose : For Physical/Chemical & Biological Analysis of Water		
		INSTRUMENTS WORKS FOR SEWAGE TREATMENT PLANT		
20	NS 20	Supply, installation, testing and commissioning of motorised gate valves for distribution Header		
		Diameter : 100 MM NB (Decanter Diameter)		
		Location: Outlet of distribution Chamber (SBR Tank)		
		Purpose: For distribution of Sewage in SBR Tank		
		Make: AIP/Zoloto/Velimor	No	2
21	NS 21	Supply, installation, testing and commissioning of motorised valves for Decanters		
		Diameter : 250MM NB (Decanter Diameter)		
		Purpose: For Decantation Of Water From SBR Tank		
		Make: AIP/Zoloto/Belimo	No	2
22	NS 22	Supply, installation, testing and commissioning of motorised valves for Air distribution in SBR tanks		
		Diameter : 100 MM NB		
		Purpose: For Distribution of air in SBR Tank		
		Make: AIP/Zoloto/Belimo	No	2
23	NS 23	Suppy, installation, testing & commissioning of electro-mangnetic type flow meter at inlet of reactor tanks.		
		Make: Aster/Electronet/Eqvt.	No	2
		Purpose : For Measure flow quantity with time		

24	NS 24	Supply, Installation, Testing & Commissioning of Water level controller for operation of the system connected to control panel for automatic switching ON / OFF of each pump.		
		Make: Advance/Active Control/Eqvt.	Lot	
		Purpose : For control Amount of Influent in tank		
25	NS 25	Supply, Installation, Testing & Commissioning of pressure gauges with in all respect		
		Make: H Guru/Inflow/Waree/Eqvt.	Lot	
		Purpose : For Measure & Indicate the pressure into vessel		
26	NS 26	Supply, Installation, Testing & Commisioning of PH Indicator with in all respect		
		Make: Aster/Hanna/Eqvt.	Lot	
		Purpose : For measure acidic & alkaline nature of water		
		ELECTRICAL AND INSTRUMENTATION FOR INSTALLATION FOR SEWAGE TREATMENT PLANT		
27	NS 27	Electrical Panel with PLC Control		
		Supply of the PLC based control panel with interlocking arrangement with suction pumps,modulating or shut-off valves including necessary wiring, magnetic switches and sensors complete to make the system functional with following interlocking		
		Construction: compartmentalized type skid mounted, MCC control panel will be free standing; vertical, fabricated from CRCA steel sheet 14/16 G conforming to degree of protection IP-52 or better. Cable entry will be from bottom.		
		System Voltage: 380 to 410 Volts & 50HZ (415V +- 10%, AC, 50 HZ +- 5% for india) Surge protection to be provided at every applicable point.		
		PLC: The programmable logic controller (PLC) shall consist of a PLC hardware, with 16K (min) program memory shall be protected by a backup battary with further memory protection from an EEPROM.		
		HMI: 5.5 inch colour touch screen HMI, will be mounted on A Man-machine interface terminal (MMI) shall be mounted on the front of the main control panel for control of the activated sludge plant. It will provide a display of the process parameters and equipments status. The display will have an associated keypad. the system will allow operator changes to set points and control of equipments. The terminal shall include an alarm annunciation with a dedicated alarm page and allow acknowledgement of alarm.		
		Make: Siemens/ABB/Eqvt.	Set	1
28	NS 28	This includes Design, supply, installation, testing and commissioning of STP Main Electrical Panel (MCC) housing with individual DOL starter of suitable capcity upto 10 HP motor and Star delta starter above 10 HP motor panels for various loads complete in all respects with suitable switchgear. It shall be provided with metering, ACB's with S/C & O/L releases, MCCB Units, lamps, bus bars etc. The accessories used shall conform to the latest IS codes. The complete panel shall be complete Type tested Assembly panel.	Set	1
		MCC -1 (Sewage Treatment Plant)		
		Make : CPRI Approved		

Annexure-2

WATER SUPPLY SYSTEM

S.NO.	DSR 2016/ NS	DESCRIPTION	UNIT	QTY
1	NS 1	Supplying, installing, testing & commissioning vertical inline pumps for external domestic water supply with S.S. casing, S.S. impeller. mechanical seal, S.S. Shaft directly coupled to motor suitable for operation on 400/440 volts, 3 phase 2900 RPM. TEFC electric motor mounted on a common channel baseplate 150mm dia pressure gauge, G.M. gauge, G.M. isolation cock and cement concrete foundation with plaster. Flexicon rubber expansion bellow shall be provided at discharge side of each hydro. pump. Cost shall include providing and fixing C I body flanged S.S Y-strainer(at suction side of each pump) fabricated out of 1.6 mm thick Stainless Steel 304 sheet with 3 mm dia hole, min test pressure 16 kg/sqcm including rubber gasket, flanges, nuts, bolts and washers, complete as required.		
	a)	Control panel with pressure switch, electrical wiring, cabling from panel to pumps, level controller complete with all accessories.		
	b)	GI Heavy duty (Class-C) suction and discharge header with butterfly valve at suction & discharge side of each pump & non return valve at discharge of each pump.		
	c)	Set of accessories such as Pressure Switches, Connecting Power & Control Cabling etc.		
		Hydropneumatic system as described above		
	d)	Hydropneumatic system for Domestic water supply system--For feeding domestic water to all Overhead water tanks with 1 No. Precharged vessel of minimum capacity of **1000** Lts with interchangeable butyl rubber membrane connected to outlet header with necessary flanges, gaskets, isolation valves, nuts, bolts etc. complete.Variable Speed. Discharge header to be provided with automaticaly operated pressure release valve 25 mm dia with isolation valve capable to reduce (excessive pressure) to upto 10.0kg/sq cm. Location-Pump room for domestic water.		
		Flow rate(each pump)= 30 lps, Head = 110 Mts.		
		RPM 2900		
		No. of pumps 4 (3 working, 1 Standby)-30 hp-appx-each pump.	Set	1
		NOTES :-		
		a) Service provider should include the rate of all Electrical/Mechanical items completewith all accessories/fittings & controls as required to operate the system automatic/manual and pumps shall be protected against running dry including wiring, conduiting & all accessories complete as required.		
		b) Service provider to select suitable HP of pumps and specify catalogue no. and nameof manufacturers.		
		Makes: Kirloskar/Grundfoss		
2	NS 2	Supplying, installing, testing & commissioning vertical inline pumps for flushing water supply with S.S. casing, S.S. impeller. mechanical seal, S.S. Shaft directly coupled to motor suitable for operation on 400/440 volts, 3 phase 2900 RPM. TEFC electric motor mounted on a common channel baseplate 150mm dia pressure gauge, G.M. gauge, G.M. isolation cock and cement concrete foundation with plaster.Flexicon rubber expansion bellow shall be provided at discharge side of each hydro. pump. Cost shall include providing and fixing C I body flanged S.S Y-strainer(at suction side of each pump) fabricated out of 1.6 mm thick Stainless Steel 304 sheet with 3 mm dia hole, min test pressure 16 kg/sqcm including rubber gasket, flanges, nuts, bolts and washers, complete as required.		

	a)	Control panel with pressure switch, electrical wiring, cabling from panel to pumps, level controller complete with all accessories.		
	b)	GI Heavy duty (Class-C) suction and discharge header with butterfly valve at suction & discharge side of each pump & non return valve at discharge of each pump.		
	c)	Set of accessories such as Pressure Switches, Connecting Power & Control Cabling etc.		
		Hydropneumatic system as described above		
	d)	Hydropneumatic system for Flushing water supply system--For feeding flushing water to all Overhead water tanks with 1 No. Precharged vessel of minimum capacity of **1000** Lts with interchangeable butyl rubber membrane connected to outlet header with necessary flanges, gaskets, isolation valves, nuts, bolts etc. complete.Variable Speed. Discharge header to be provided with automaticaly operated pressure release valve 25 mm dia with isolation valve capable to reduce (excessive pressure) to upto 10.0kg/sq cm. Location-Pump room for STP.		
		Flow rate(each pump)= 20 lps, Head = 110 Mts.		
		RPM 2900		
		No. of pumps 4 (3 working, 1 Standby)-25 hp-appx-each pump.	Set	1
		NOTES :-		
		a) Service provider should include the rate of all Electrical/Mechanical items completewith all accessories/fittings & controls as required to operate the system automatic/manual and pumps shall be protected against running dry including wiring, conduiting & all accessories complete as required.		
		b) Service provider to select suitable HP of pumps and specify catalogue no. and nameof manufacturers.		
		Makes: Kirloskar/Grundfoss		
3	NS 3	Providing & fixing fully submersible sump pumps for dewatering with C.I casing & shaft suitable for operation on 400 / 440 V pH 50 cycle A/C power supply.Cost shall automatic/manual operations & cyclic operations of pumps.		
		Sump pumps-Location - Inside Drainage sump of pump room		
		Flow rate(each) - 3Lps		
		Head 9 Mts		
		RPM 2900		
		Solid handling-15mm		
		No. of pumps 2 (1 working,1 standby)-3 hp-appx-each pump	Set	1
		Makes: Kirloskar/Grundfoss		
4	NS 4	Design, manufacture, supply, installation, testing and commissioning of the following intergrated, cubicle type, dead front, extensible, sheet steel control panel anchoring the panel to the foundation. The panel shall be duly powder coated and suitable for 500 volts, 50 cycles, 4 wire supply. Quoted price shall include 25 mm thick rubber mats over 50mm thick wood platform, wiring, cabling ,cable trays,control wiring and copper earthing from control panel to various equipment like motor starters, pump motor, etc. The panel shall have separate compartments for bus bar and cable alleys.The following components and accessories shall be mounted within control panel.		

		All MCCB's shall be motor protection category, current limiting & electronic release type. All MCCB's shall be Ics = 100% Icu, with rotary handle. All TP MCCB shall be with heavy duty solid isolable neutral link. The panel shall be provided with suitable relays including contactors, star-delta / DOL starters for all pumps as applicable, 3 nos. phase indicating lamps, ammeter, voltmeter, selector switches, CT's, PT's, protective fuses, indicating lights for incoming and outgoing feeders, 1 Set of indication lamps for mains ON/OFF/Trip conditions, auxillary switches, dry suction cut off, single phase preventer etc. The under voltage release and no volt coil shall not be provided in the MCCB's.(Location of panel-Inside pump room).		
		Provisions shall be made for providing potential free contacts to all pump starters for connection to building automation system.		
		The rates shall include necessary interconnecting armoured copper control cables of suitable sizes within the panel and from panel to various motors and engines, pressure switches, level switches of water tanks, cable trays etc required to complete the entire installation upto the satisfaction of engg-in-charge.		
	a.	One No. Incoming incoming MCCB complete with the following:		
		i. Voltmeter with selector switch and fuses.		
		ii. Ammeter with CT's and selector switch.		
		iii. Over voltage and under voltage tripping mechanism for persistent voltage fluctuations of ± 10% of the rated voltage for more than 5 minutes.		
		iv CT operated over current and earth fault realy (IDMT) with indicating lamps.		
		v. Phase indicating lamps with toggle switches.		
		vi. Indication lamps for ON/OFF/TRIP starters of motor.		
	b.	Copper bus bar sleeves type, rated for three phase & neurtal phase bus bar shall have maximum current density of 1 amps per sq.cm. and the neutral bus bar of not less than 50% capacity.		
		<u>OUTGOING:</u>		
	c.	Outgoing feeder to hydropneumatic system panel.		
	d.	Outgoing feeders with starters with Single Phase Preventor and out going feeder to drainage sump pump motor (2 nos- 1 working , 1 standby). The compartment shall contain CT operated ammeter with selector switch and an indicating lamp with fuse and toggle switch for`ON'/`TRIP'status of motor.		
	e.	Necessary cable alleys space for spare switches, internal wiring and copper earthing of all equipment shall also be included. All switch gears/control gears shall be motor duty rating.		
	f.	All MCCB's to be suitable for motor duty		
		Control Panel as described above.	Set	1
		Switchgears Make : ABB / L&T / Siemens		
5	2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :		
	2.10.1	All kinds of soil		
	2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	metre	9282
		47		

6	18.12	Providing and fixing G.I. pipes complete with GI fittings including trenching & refilling etc.		
		External work		
	18.12.5	40mm nominal bore	metre	298
	18.12.6	50mm nominal bore	metre	298
	18.12.7	65mm nominal bore	metre	238
7	18. 40	Painting G.I. pipes and fittings with two coats of anti- corrosive bitumastic paint of approved quality.		
	18.40.4	32mm nominal bore	metre	170
	18.40.5	40mm nominal bore	metre	298
	18.40.6	50mm nominal bore	metre	298
	18.40.7	65mm nominal bore	metre	238
8	18. 41	Providing and filling sand of grading zone V or coarser grade, allround the G.I. pipes in external work :		
	18.41.4	32mm nominal bore	metre	170
	18.41.5	40mm nominal bore	metre	297
	18.41.6	50mm nominal bore	metre	297
	18.41.7	65mm nominal bore	metre	238
9	18.33	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
	18.33.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	94
10	18.34	Constructing masonry Chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
	18.34.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	107

11	18.35	Constructing masonry Chamber 120x120x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
	18.35.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	160
12	18.59	Providing and laying D.I. double acting air of approved quality with bolts,nuts,rubber insertions etc. complete(the tail pieces etc if required will be paid separately).		
	18.59.1	50 mm dia	each	14
13	18.68	Providing and laying D.I. specials of class K-12 suitable for push- on jointing as per IS : 9523 :		
	18.68.1	Up to 600 mm dia	quintal	85
14	18.72	Providing and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329 :		
	NS 5	80 mm dia Ductile Iron Double Flanged	metre	510
	18.72.15	100 mm dia Ductile Iron Class K-9 pipes	metre	680
	18.72.16	150 mm dia Ductile Iron Class K-9 pipes	metre	6290
	18.72.17	200 mm dia Ductile Iron Class K-9 pipes	metre	1530
	18.72.18	250 mm dia Ductile Iron Class K-9 pipes	metre	136
	18.72.19	300 mm dia Ductile Iron Class K-9 pipes	metre	68
14A	18.70	Providing push-on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and the cost of rubber gasket :		
	NS 6	80 mm dia pipes	joint	57
	18.70.1	100 mm dia pipes	joint	65
	18.70.2	150mm dia pipes	joint	102
	18.70.3	200 mm dia pipes	joint	154
	18.70.4	250 mm dia pipes	joint	188
	18.70.5	300 mm dia pipes	joint	250
15	18.80	Disinfecting C.I. water mains by flushing with water containing bleaching powder @ 0.5 gms per litre of water and cleaning the same with fresh water, operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory.		
	18.80.1	80 mm diameter C.I. pipe	100 metre	510
	18.80.2	100 mm diameter C.I. pipe	100 metre	680
	18.80.4	150 mm diameter C.I. pipe	100 metre	6290
	18.80.5	200 mm diameter C.I. pipe	100 metre	1530
	18.80.6	250 mm diameter C.I. pipe	100 metre	136
	18.80.7	300 mm dia	100 metre	68
16	NS 7	Providing & fixing CI non return valve tested to a pressure of 15 Kg / Sqcm. Including flanges/union, nuts, bolts, washers etc. complete as required.		
		a) 80mm dia Make: Zoloto / Leader /SKS	Each	2

17	NS 8	Providing and fixing M.S. puddle flanges fabricated out of 6 mm thick M.S. plate of size 200 x 200mm plus dia of pipe of 600 mm long pipe pieces to R.C.C. water tanks / R.C.C. walls. The entire fitting shall be painted with black Japan paint .		
		25 mm dia	Each	14
		80 mm dia	Each	10
		150 mm dia	Each	9
		200 mm dia	Each	9
		250 mm dia	Each	5
18	18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)		
	18.17.2	32 mm nominal bore	Each	17
	18.17.3	40 mm nominal bore	Each	34
	18.17.4	50 mm nominal bore	Each	42
	18.17.5	65 mm nominal bore	Each	31
	18.17.6	80 mm nominal bore	Each	34
19	18.31	Providing and fixing CI sluice valves(with cap)complete with bolts,nuts,rubber insertions etc.(the tail pieces if required will be paid separately)		
	18.31.1.2	100 mm diameter-Class II	Each	42
	18.31.3.2	150 mm diameter-Class II	Each	119
	18.31.4.2	200 mm diameter-Class II	Each	34
	18.31.5.2	250 mm diameter-Class II	Each	7
20	19.19	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality		
	19.19.2	M D - 10		
	19.19.2.2	Circular shape 500 mm internal diameter	Each	21

Annexure-3

List of Fire-Fighting Equipment's which is executed at SVSU Campus

Sl. NO.	DSR 2016/ NS	DESCRIPTION
	3	**FIRE FIGHTING WORKS**
1	NS 1	Providing, laying, jointing and testing of following sizes of pipes conforming to IS-1239 with all accessories like all fittings including tees, elbows, reducers, flanges, rubber gaskets, nuts bolts, washers, suction & discharge headers and fixing the pipe on floor / wall /ceiling with suitable size clamps, hangers, structural steel supports including cutting holes and chases in brick, R.C.C work and making good the same to original conditions complete in all respects.Cost shall include providing two coats of synthetic enamel paint of approved shade over a coat of primer. Including painting of legends both direction arrow as per the approval of the Engineer-in -Charge.
		For Fire System - M.S. 'C' Heavy class pipe
	a	50 mm dia (4.47mm thickness)
	b	65 mm dia (4.47mm thickness)
	c	80 mm dia (4.85mm thickness)
	d	100 mm dia (5.40mm thickness)
	e	150 mm dia (5.40mm thickness)
		Make: Jindal/Tata/Prakash Suriya
2	NS 2	Providing & fixing of butterfly valve suitable for pressure more than 15 Kg/Sqcm. with flanges, nut bolts & gaskets and SS disc 316 grade etc all complete
	a	50 mm dia
	b	65 mm dia
	c	80 mm dia
	d	100 mm dia
	e	150 mm dia
		Make: Zoloto/Kartar/Leader
3	NS 3	Providing & fixing cast iron Slim seal dual type non-return valves (PN1.6) complete with matching flanges, rubber insertion, nuts, bolts and washer complete as required.etc. of following sizes.
		100 mm dia
4	NS 4	Supply, Installation, Testing & Commissioning of Single headed, Gunmetal ISI marked oblique pattern hydrant landing valve with 80 mm dia flange inlet and 63 mm dia instantaneous type female out let complete with gunmetal cap and G.I chain twist release type plug and all accessories as per IS:5290-1983
		Make: Zoloto/Kartar/Leader
5	NS 5	Providing & fixing swinging type First Aid hose reel in red colour with 36 mts long and 20 mm dia heavy duty rubber water hose, 20 mm dia globe valve stop cock, terminating with G.M. coupling & nozzle of 5mm outlet with shut off valve confirming to IS 8090 - 1976 complete with drum and brackets for fixing on wall, bolts & nuts conforming to IS:884-1969 complete as required.
		Make: Minimax/Newage/ Life Guard
6	NS 6	Providing & fixing non-percolating flexible hose (RRL type – B) ISI marked (IS:636 Type B) 63 mm dia x 15 m long complete with ISI marked Male and female coupling (IS:903) bound and riveted to hose pipe with copper rivets and 1.5 Sq.mm.copper wire.brusting pressure not less than 22 Kg/Sqcm. (two nos. for each hydrant-valve).
		Make: Minimax/Newage/ Life Guard
7	NS 7	Providing & Fixing Gun-metal 63 mm dia short size branch pipes with 20 mm dia nozzle with 63 mm instantaneous coupling ISI marked (IS:903)
		Make: Minimax/Newage/ Life Guard
8	NS 8	Providing and fixing standard firemans axe with heavy rubber handle ISI marked.
		Make: Minimax/Newage/ Life Guard

9	NS 9	Providing and fixing inlet breaching having C.I. body Two way gun metal 63 mm dia instantaneous inlets conforming to IS 903 fitted with non return valves, 25 mm dia gun metal drain cock, blank cap, brass chains and 150 mm dia flanges with all accessories suitable for local fire tender complete as required.
		Make: Minimax/Newage/ Life Guard
10	NS 10	Providing and fixing 4mm thick glass door of size 2.1m x 0.9m with anodized aluminium frame of size 0.10 x 0.05 M with centre opening for fire hose cabinet. Suitable marked on the outside with the letters "FIRE HOSE" including locking arrangement. All aluminium work to be in Red P.O. colour.
		Make: Minimax/Newage/ Life Guard
11	NS 11	Providing and fixing weather proof cabinet of size not less than 0.9 x 0.6 x 0.5 mtr made out of M.S. sheet not less than 1.5 mm thick having central opening and 4 mm thick glazed glass doors (Two nos.) suitably marked on the outside 'with the letters "FIRE HOSE" including necessary locking arrangement and painting in red colour suitable to accomodate, external yard hydrant valve, 2 nos 15 mtr long Hose pipe, branch pipe, nozzle and fire man's axe. It shall be mounted on boundary wall complete as required.
12	NS 12	Providing and fixing ISI Marked of approved make Fire Extinguishers complete with all accessories as per manufacturer's specifications.
	a	CO_2 gas nozzle type - 9 Litre capacity (IS:15683).
	b	Mechanical Foam gas cartridge type. 9 Kg capacity (IS:15683).
	c	ABC dry powder stored pressure type 6 kg capacity (IS:15683).
		Make: Minimax/Newage/ Life Guard
13	NS 13	Providing and fixing signages printed on photoluminescent U1000 aluminium sheet of 1.0 mm (+ -10%) containing lumigen II as base chemical, covered under UV stablized coating and of appropriate size (Glo-lite or eq. Make) including fixing on wall, door, ceiling etc. with proper clamps, hangers, cleats anchor fasteners etc. complete in all respacts as diercted by Engineer-in-charge
14	NS 14	Supply, Fixing, Testing & Commissioning of fire authority approved electrical motor driven fire pump, suitable for automatic operation consisting of following : **(DOWN COMER PUMP).**
		(a) Horizontally mounted, end suction type, **Centrifugal fire pump** with operating speed of 2900 rpm, as per IS:1520 complete for delivery of under mentioned discharge against desired mentioned head so as to ensure a minimum pressure of 35 meter at the highest and farthest outlet at the specified flow complete with necessary strainers , 100 mm dia dial pressure gauge of calibration 0-15 kg/sq cm including bypass arrangement for periodic testing of the working of the pumpset as well as testing of automation with required length and size of MS pipe and control valves for proper completion of work. The pump shall be capable of giving 150% of rated discharge at head not less than 65% of rated head. The pump shall be provided with Mechanical seals. The impeller shall be enclosed type and accurately balanced dynamically. The pump casing shall be of cast iron, impeller shall be of bronze and shaft shall be of stainless steel.
		(b) Squirrel cage, TEFC induction **motor** as per IS : 325, suitable for 415 V +/- 10%, 3 Phase, synchronous speed 2900 rpm, IP 55 protection and class 'F' insulation, vaccume impregnated windings with heat and moisture resisting varnish for the above pump and flexible coupling with the pump. The motor shall be rated for continuous duty and shall have HP rating necessary to drive the pump at 150% of it's rated discharge at 65% of rated head.
		(c) Common bed plate of fabricated mild steel channel or cast iron type, coupling, coupling guard ets as required.
		(d) Suitable cement concrete pump **foundation** and vibration clamping arrangement as required. with foundation bolts, anti vibration pads, washers etc.
		(e) **Pressure switchs** (for both upper and lower levels) for automatic operation of motor including necessary wiring upto control panel.
		Discharge : 450 liter per minute

		Head : 35 meter
		Make : Kirloskar/Mather & Platt/Groudfoss
15	NS 15	Supply, Fixing, Testing & Commissioning of fire authority approved electrical motor driven fire pump, suitable for automatic operation consisting of following : **(DOWN COMER PUMP).**
		(a) Horizontally mounted, end suction type, **Centrifugal fire pump** with operating speed of 2900 rpm, as per IS:1520 complete for delivery of under mentioned discharge against desired mentioned head so as to ensure a minimum pressure of 35 meter at the highest and farthest outlet at the specified flow complete with necessary strainers , 100 mm dia dial pressure gauge of calibration 0-15 kg/sq cm including bypass arrangement for periodic testing of the working of the pumpset as well as testing of automation with required length and size of MS pipe and control valves for proper completion of work. The pump shall be capable of giving 150% of rated discharge at head not less than 65% of rated head. The pump shall be provided with Mechanical seals. The impeller shall be enclosed type and accurately balanced dynamically. The pump casing shall be of cast iron, impeller shall be of bronze and shaft shall be of stainless steel.
		(c) Common bed plate of fabricated mild steel channel or cast iron type, coupling, coupling guard ets as required.
		(d) Suitable cement concrete pump **foundation** and vibration clamping arrangement as required. with foundation bolts, anti vibration pads, washers etc.
		(e) **Pressure switchs** (for both upper and lower levels) for automatic operation of motor including necessary wiring upto control panel.
		Discharge : 900 liter per minute
		Head : 35 meter
		Make : Kirloskar/Mather & Platt/Groudfoss
16	NS 16	Design, manufacture, supply, storing, inspection, handling, assembling, installation in correct alignment, position, affecting proper connections, testing and commissioning of 14 SWG CRCA sheet steel fabricated cubical type **Electrical Control Panel for fire fighting pump**, floor mounting, dust & vwrmin proof, front operated construction, enclosure class - IP 52, powder coated after proper treatment with 7 tank process with top/bottom removable gland plates, as required, double compression type cable glands, earth bus, hinged and lockable doors to achieve dust and vermin proof complete with all inter connections small wiring by min. 2.5 sq. mm. FRLS copper wires, ckt labels etc. The panel feeders shall be suitable for terminating suitable nos. 3.5 / 4 core armoured aluminium cable required. Cost shall include cable / wiring from each pump to electrical panel, cable trays, earthing for all pumps.
		All MCCB's shall be motor protection category, current limiting & electronic release type. All MCCB's shall be Ics = 100% Icu, with rotary handle. All TP MCCB shall be with heavy duty solid isolable neutral link. The panel shall be provided with suitable relays including contactors, star-delta / DOL starters for all pumps as applicable, 1 no. phase indicating lamp, ammeter, voltmeter, selector switches, CT's, PT's, protective fuses, indicating lights for incoming and outgoing feeders, 1 Set of indication lamps for mains ON/OFF/Trip conditions, auxillary switches, dry suction cut off, single phase preventer etc. The under voltage release and no volt coil shall not be provided in the MCCB's.
		Provisions shall be made for providing potential free contacts to all pump starters for connection to building automation system / Fire alarm control panel.
		The rates shall include necessary interconnecting armoured copper control cables of suitable sizes within the panel and from panel to various motors and engines, pressure switches, level switches of water tanks, cable trays etc required to complete the entire installation upto the satisfaction of engg-in-charge.
		The fault withstanding capacity of panel shall be 35 KA rms for 1 sec.
		Following Fire fighting pump shall have to be controlled -
		1 set of electric motor driven down comer pump
		(Switchgears Make : ABB / L&T / Siemens / Schneider)
		Incomer :
		MCCB with flush mounting square CT operated ammeter with selector switch, Voltmeter with selector switch, protective fuses and phase indicating lamps.

		Bus Bar :
		TPN, 415 volt, 3 phase, 4 wire, 50 HZ electrolitic high conductivity Copper with SMC / DMC supports, with colour coading and insulated by heat shrinkable sleeves and clips on shrouds for joints. The current density of copper bus bar shall not exceed 1.25 amp/sqmm.
		Outgoing :
		1 no. 63 AMP each TP MCCB with star delta starter of suitable HP for down comer pump with over load protection, single phase preventor complete for automatic operation, selector switch for local/remote, auto/manual/off operation, with CT operated ammeter with selector switch and indication lamps for "On" "Off" and "Trip" mounted on the cubicle door.
		1 no. 63 AMP FP MCB as spare
		Control panel as described above
		Switchgears Make : ABB / L&T / Siemens
17	NS 17	Providing, fixing, testing and commissioning of pressure vessel (450 mm dia & 1800 mm height) for pressurization of fire system complete with pressure switches with isolation valves, pressure gauge with isolation valve, valves at outlet / drain to operate as per operating sequences including 80 mm dia drain valve, air release valve with stop cock on the top Duly painted from inside and outside complete as required.
18	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.
	18.48A	Circular tank.

Sl. NO.	DSR 2016/ NS	DESCRIPTION
	7	**FIRE ALARM WORKS**
1	NS 1	Providing,fixing, testing and commissioning of Conventional fire alarm control and indicating panel,microprocessor based with RS 485 communication, pulser, timer for dual stage alarm facility complete with indicators, floor selector switches, stand by SMF lead acid battery (suitable for 48 hours normaloperation & after that min. 30 minutes for full load operation),battery charger,battery box,connections to building automation system/ Firefighting pump panel etc. as required, complete in all respect as per specifications and requirements.The panel shall have facility of automatic dialling to 5 telephone numbers in case of alarm. The main control panel should give a distinct visual signal of the isolation of zone from the local indication panel. If all the zones at the local panel are isolated or if the fuse of the LCP gets blown, it should result in an open circuit fault indication at the Main Panel. Each zone should have provision of activation of hooter.The Panel shall be provided with suitable Nos. No./NC Potential free contacts for control modules as per site rquirement and as per quantity specified above. (4 Zone Panel)
		Makes: Bosch/ Thorn/ Gamewell/ Siemens/Unipos/ Edwards
2	NS 2	Supply, Installation, Testing and Commissioning of 1 loop addressable fire alarm control panel, expandable upto 16 loops. Controller shall be 5.7 inch color touch screen display with stylus(320*240 pixels), inbuilt networking port(both RS485&Ethernet),Serial port for printer,two supervisory inputs,two position key switch and USB port for programming. The Panel shall handle 1350 detection points, 10,000 history events,menu driven user interface with smart search. The events shall be displayed in different colors- red for alarm events & yellow for trouble etc. for easy identification. The Panel shall be VDS/EN 54/UL approved.
		Makes: Bosch/ Thorn/ Gamewell/ Siemens/Unipos/ Edwards
3	NS 3	Providing, fixing, testing and commissioning of resettable type manual call points as per specifications.The manual call point should have an indicator, which should "blink" in stand by condition.
		Makes: Bosch/ Thorn/ Gamewell /Unipos/ Edwards

4	NS 4	Supply, Installation, Testing and Commissioning of addessable manual break glass unit (Double action) with inbuilt isolators as per NFPA 72 style 7 wiring requirements, with flexible network structures & necessary fixing arrangements with key complete as required. Shall be EN 54 / Vds/UL Certification.
		Makes: Bosch/ Thorn/ Gamewell /Unipos/ Edwards
5	NS 5	Supply, Installation, Testing and Commissioning of Stand alone Loop Powered detector base sounder with inbuilt isolators as per NFPA 72 style 7 wiring requirements & with 32 different tone variants selection options & adjustable sound pressure by 5 levels, the sound pressure 92.1 dB(A), with flasher having Synchronized flash rate of 1 Hz and Light intensity > 2 cd, should be programmed from the panel. Shall be EN54 / Vds/UL Certification.
		Makes: Bosch/ Thorn/ Gamewell/Unipos
6	NS 6	Providing, fixing, testing and commissioning of electronic hooters housed in sheet steel / Polymer housing suitable for wall /ceiling and surface / recess mounting including making connectionswith wires complete in all respects and as per specifications.
		Makes: Bosch/ Thorn/ Gamewell/Unipos
7	NS 7	Supplying, erection, testing and commissioning of LPCB Certified HPSR Insulated Fire survivor copper conductor flexible cable with terminations etc. as required.(2X1.5 sqmm fire test as per BS 6387 CWZ BSEN 5002)
		Makes: Batra Hanley/Lapp/Finolex
		Total NS ITEMS AMOUNT
		NOTE-
	*	The above system shall be installed in 5 different building blocks.
	*	The contractor shall take instructions from IRCON ISL, prepare and submit shop drawings for location of detectors , cabling and other equpment to installed along with make/model no/specifications sheets of all equpments for all 7 different buildings for approval before procurement of any material.
	*	The work shall be carried out by OEM authorised Channel partner for the project only. The contractor shall submit authority letter from OEM in favor of specialized agency executing the work before commencement of the same.

Annexure-4

DETAILS OF SWIMMING POOL

SN	DSR 2016/NS	Description	UNIT	QTY.
	(F)	SECTION-D POOL EQUIPMENTS		
		CLASSIC COMPETITION Swimming Pool Panel		
5	NS 1	Stainless steel structure complete with base frame, Modular panels, Classic type overflow gutter and punchedbuttresses. Rear side of panels and gutter protected by a transparent plastic sheet. All other parts manufactured in AISI 470 stainless steel, more resistant to corrosion than AISI316L. Size 1.4m x 1.00m	mtrs	100
		Modular STRUCTURE HEAD WALLS		
6	NS 2	Headwall construction, the Modular Panel is 300mm higher than the water level, to host competition touch pads according to FINA norms. Designed for fixing to concrete pool deck construction (excluded from supply). Upper frame 100mm wide, in Myrta stainless steel. Link plate described in dedicated position. To be completed by a concrete deck-step (excluded from supply) built by third finishing on horizontal plate not included.	mtrs	50
		GUTTER DRAIN		
7	NS 3	The gutter grid is sloping 5° and creates with the PVC coping an hand-grip complying with EN norms.	mtrs	50
		RECESSED STEP STAIR		
8	NS 4	Stainless steel structure complete with base frame, Modular panels, Classic type overflow gutter and punched buttresses. Rear side of panels and gutter protected by a transparent plastic sheet. Complete with recessed foot rest on short sides. Size 1.2m x 1.00m	Nos.	4
		GRAB RAIL RECESSED STEP STAIR		
9	NS 5	PAIR OF GRAB RAILS FOR RECESSED FOOT LADDER. Anchors in the Modular gutter.	Nos.	4
		H: 1.20 m		
10	NS 6	REINFORCED PVC MEMBRANE with polyester mesh Obtained by calendaring two PVC membranes at hot temperature.The face towards water has a special chlorine resistant formulation and recieves a transparent acrylic paint for extra protection.	Sqm	1475
		Thickness: 1.5 mm		
		HOT WELDING AND SEALING		

11	NS 7	Providing laying and sealing the Alkorplan T2000 memberane supplied in rolls 205 cm wide on the construction site by hot temperature welding. Filling and finishing with Liquid PVC on joints and smoothing each welding	Sqm	1475
		MOSAIC TARGET		
12	NS 8	FINA size obtained with glass mosaic, 20 x 20 mm x 2 mm thick. Gluing, filling and installation Complete in al respect.	Nos.	20
		Mosaic Line width : 250 mm		
		BLACK LANE MARKING IN PAINT		
13	NS 9	Providing and marking Black Paint stripes on the floor PVC using Liquid PVC with tetrahydrofurane, ethyl acetate etc.	Nos.	10
		Size according to FINA norms.		
		"TWIN TYPE" OVERFLOW GUTTER DRAIN		
14	NS 10	Set of two vertical overflow gutter drains for discharge of overflow water into return piping network of filtration system. Includes two solid PVC sockets fpr 90 mm dia. Pipe connection.	Nos.	6
		Capacity 30 m^3/h for each set of twin drain		
15	NS 11	Providing, laying and joint welding of UPVC pipes (class 6kg/ sqm) heavy duty with necessary fittings like reducers, bends, T-joints etc complete as per the directions of Engineer-in-charge (Finolex /Astral/ Prince) . The rate should include required labour, tools and tackles, etc. complete		
	i	160mm dia	Metre	30
	ii	90mm dia	Metre	180
	iii	63mm dia	Metre	45
		FILTRATION EQUIPMENT		
		Filters		
16	NS 12	TOTALLY ANTI-CORROSIVE Bobbin Wound filter 2000mm diameter. Fitted with pressure gauge panel manual air bleeder, water drain and emptying plug.fitted with collector arms and diffuser made from unplasticized PVC and polypropelene. Filtration velocity $40m^3/hr/m^2$. Max. working pressure : 2.5 Kg/cm^2. Flow rate = $125m^3/hr$. Outlet: 140mm, Height: 2040mm; Filtration area: 3.14m2,	Nos.	2
		Make: Aqua Pac, Abyss		
		Valve Battery		
17	NS 13	Valve Battery Manifold made in PVC with flanges for connecting to filters as per DIN 2501 standards. Consists of set of 5 - buttterfly valves for carrying out filtration, back-washing, rinsing and shut down of the filters. Size : 140mm	Nos.	2

		Valve Battery Supports		
18	NS 14	Valve battery supports made in Zinc Plated Steel. Height : 2.30m,Easy Assembly Valve Manifold Brackets from 63mm dia - 225mm for all filter types	Nos.	4
		Make: Aqua Pac, Abyss		
		Support Brackets		
19	NS 15	2 Support Brackets with anti-vortex clamps and fixing screws	Nos.	4
		Make: Aqua Pac, Abyss		
		Re-circulating Pumps		
20	NS 16	Cast Iron Pumps 3000 r.p.m. Mechanical Seal in Stainless Steel. I.P.-54 motor protection. Stainless steel AISI-420 shaft. With stainless steel AISI-316 strainer basket. Conn. PN-16 according to DIN2501. Flowrate :123m3/hr @ 12m.head. 10 HP Voltage 400V/ 3 ph. (2 working and 1 standby)	Nos.	3
		Make: Aqua Pac, Abyss		
		CHEMICAL DOSING SYSTEM		
		Dosing Pumps		
21	NS 17	Membrane Dosing Pumps "EXACTUS" model.		
		Electronic dosing pump to be mounted both on its base as well as hung on the wall. Pumps following CE regulations. IP- 65 protection. Power connections : 220/240V, 50/60 Hz. The materials in contact with liquid are : Ploypropylene,Viton, Teflon and PVC. Includes anti-acid plastic case. Operating panel protection provided by a transparent polycarbonate cover. Lubrication not required. Flow 20l/hr @ 5 bar	Nos.	2
		Make: Aqua Pac, Abyss		
		Chemical Storage Tanks		
22	NS 18	Semi transparent polyethelene tank with external scale so that levels can be checked easily, capacity of tank 500lts.	Nos.	2
		Make: Aqua Pac, Abyss		
		Agitators		
23	NS 19	Agitators for easy installation in the tanks, provided with steering grip in bakelite, rod and propellor arms in PVC, length of stirring rod 900mm	Nos.	2
		Make: Aqua Pac, Abyss		
		POOL BASIN EQUIPMENT		
		Inlets		
24	NS 20	White ABS plastic bottom inlet for concrete with S.S. screws and regulable flow. Max. Flow/ inlet = 9,000l/hr,Max flow rate: 12m3/hr complies with EN 13451-1.	Nos.	48
		Make :Aqua Pac, Abyss		

		Pool Drains		
25	NS 21	Main drain. Body and grille in white ABS. Grille fixed with scres. Maximum flow 13m³/hr.	Nos.	2
		Make :Aqua Pac, Abyss		
26	NS 22	CONTROL and REGULATORY VALVES		
	i	All valves shall be in UPVC with PN10 rating and EPDM seat.		
	ii	Ball Valve dia 50 mm (filling line).	Nos.	3
	iii	Ball Valve dia 90 mm (UV-8).	Nos.	8
	iv	Butterfly Valve Dia 110 mm (Pump Suct & Del-12).	Nos.	12
	v	Flange & Adapter for Dia 110 mm.	Nos.	12
	vi	Butterfly Valve dia 140 mm (Inlet- 4,UV-4).	Nos.	8
	vii	Flange & Adapter for 140 mm.	Nos.	8
	viii	Ball Valve Dia 63 mm (Suction Inlet-2).	Nos.	2
	ix	Butterfly Valve Dia 160 mm (Drain-2,BT Suction-4).	Nos.	6
	x	Flange & Adapter for 160 mm.	Nos.	6
	xi	Wafer Check Valve Dia 110 mm (Pump Del).	Nos.	6
	xii	Flange & Adapter for Dia 110 mm.	Nos.	6
	xiii	Wafer Check Valve Dia 160 mm (BT Suction).	Nos.	4
	xiv	Flange & Adapter for 160 mm.	Nos.	4
		COMPETITION EQUIPMENT		
		“TRACK START" BLOCK		
27	NS 23	Supply and Installation of Starting block in plain PVC board. Fiberglass top 740 x 520 mm with track start (5 positions). Fixing with 6 bolts. Possibility of fixing with 4 bolts substituting existing old starting blocks.	Nos.	6
		Make : Omega , Modular		
		FLOAT LANES		

28	NS 24	Supply ANTI wave racing lane of 50m MAXI MODEL consiting of 50m ss cable ,ss hook , super tensioner and antiwave float as FINA standard and colour. instead of abyss or equivalent plastic float of approved color and polyster line. All complete as per direction of engineer in charge and site condition.	Nos.	7
		Make : Anti, Modular, Omega		
		FLOATING ROPE ANCHORS		
29	NS 25	Providing Floating rope anchors plain PVC board blued on both sides of the gutter channel polished stainless steel anchor bolted on the two PVC boards extension for floating lines after the spring	Nos.	14
30	NS 26	Supply FLOAT LINE Roller made in SS-316. make ANTI . It is mounted over rotating wheels for max. Mobility & transport Width 1.8m Make : Anti, Modular, Omega	Nos.	4
31	NS 27	Float Line tensioner. In AISI 316.Chrome plated brass.	Nos.	7
32		Complete Pump House of Swimming Pool with all switchgears, motors, Cables etc.	Complete	

SAMPLE FORM FOR SITE ORDERS BOOK

Name of work .....

Sl. No.	Remarks of the Inspecting Officer or Contractor	Action taken by Whom	Remarks
1	2	3	4

OPERATION AND MAINTENANCE, HOUSEKEEPING AND OTHER SERVICES

CHECKLIST

(This list contains many examples of items that can be used for preventive maintenance. It is not a complete list. The checklist to meet their needs, requirements and abilities. As per requirements any other item can be added or deleted)

Service Provider	***SVSU officials***	***Date***

ITEM	Completed	Needs Further Attention
LIGHTING (EXTERIOR & INTERIOR)		
Building Exterior		
Pedestrian Walkways		
Parking Areas		
Sports Fields		
Building Interior		
Emergency		
All lights working		
Glassware conditions		
Fixture support conditions		
Wire conditions		
Ballast conditions		
Timers/sensors		
Junction box and cover conditions		
Switches conditions		
Outlet and cord conditions		

ITEM	Completed	Needs Further Attention
Fire Extinguishers		
Inspection dates		
Overall conditions		
BMS and Security Cameras		
Function		
Directionality/location accuracy		
Power source		
Overall condition		
Smoke Detectors		
Function		
Battery efficiency		
Hard wire connections		
Overall condition		
Windows		
Pane conditions		
Lock operation		
Frame alignment and conditions		
Weather sealing conditions		
Hardware conditions and lubrication		
Overall condition		

ITEM	Completed	Needs Further Attention
DOORS		
Automatic closure operation		
Hardware conditions and lubrication		
Weather sealing conditions		
Frame alignment and conditions		
Door stop placement/stability		
Alarm system operation (if applicable)		
Overall condition		
RESTROOMS		
Fire safety		
ADA accessibility		
Plumbing		
Sinks/Hardware		
Urinals		
Toilets		
Dispenser operation/conditions		
Partitions		
Trach receptacles		
OFFICES		
Fire safety		
Emergency Control Panels		
Fire Alarm		
Intrusion Alarm		
Floor conditions for tripping hazards		
File cabinets		
Partitions		
PA system		

ITEM	Completed	Needs Further Attention
KITCHEN/DINING AREAS		
Fire safety		
Beverage dispensers		
Broilers		
Cookers		
Dishwasher		
Drink cooler		
Food slicer/chopper		
Freezer(s)		
Trash disposal		
Grill		
Ice machine		
Mixer(s)		
Oven(s)		
Cooler(s)		
Steamer(s)		
Toaster(s)		
Exhaust systems		
Hood function and condition		
Grease trap function and condition		
Filter condition		
Exhaust duct condition		
Fan function and condition		
Furniture: Counters/Tables/Benches/Lockers/Chairs		

ITEM	Completed	Needs Further Attention
CLASSROOMS		
Fire safety		
Furniture: desks/chairs/tables/shelves		
Marker board		
Electronic board		
Audio-visual equipment		
Computers/work stations/wiring		
Partitions		
Flooring for tripping hazards		
Plumbing (if applicable)		
PA speaker system operation		
Emergency/panic call button (if applicable)		
Wall map(s)		
Exit access		
AUDITORIUMS		
Fire safety		
Seating		
Passageway clearance and markings		
Exit lighting		
Aisle/walkway lighting		
Markers for edges of stage areas		
Risers		
Stage		
Curtains		
Changing rooms		
Area lighting		
Stage lighting		
Staging equipment		
Sound system		
Lobby/entrance area		
Concession area		
Emergency exit visibility and lighting conditions		

ITEM	Completed	Needs Further Attention
GYMNASIUMS		
Fire safety		
Seating/bleachers		
Floors/mats		
Scoreboard		
Sound/speaker system		
Lighting fixture protection conditions		
Gym equipment		
Basketball goals		
Team benches		
Staging equipment		
Signage		
Closets/equipment storage areas		
Concessions		
Locker rooms		
Restrooms		
DRAINS/LANDSCAPE SYSTEMS		
Drains		
Down spouts on gutters channeled away from buildings		
Drains on flat roofs clear of debris/trash		
All exterior drains clear of debris/trash		
Exterior drains/cover conditions		
Vegetation conditions near buildings/walkways		
Root systems		
Vines		
Overgrown shrubs		
Overall condition		

ITEM	Completed	Needs Further Attention
PARKING LOTS		
All drains clear of debris/trash		
Potholes		
Erosion		
Cracking		
Tripping hazards		
Parking bumper conditions and positions		
Speed bump conditions (if applicable)		

ITEM	Completed	Needs Further Attention
PLAYGROUNDS		
General Safety		
Signage		
Fence conditions		
Overall conditions of grounds for deficiencies such as vandalism/debris Buildup/trash/tripping hazards		
Equipment		
Follow recommended manufacturer specifications/guidelines		
Stability		
All items functioning properly		
Surface conditions		
Hardware conditions		
Paint conditions		
Spring conditions		
Lubrication of all moving parts		
Railings		
Overall condition and durability for deficiencies such as excess wear/rot/rust/ Splintering/warping/cracking/insect infestation/broken-missing parts		
Boundary containment		
Proper dispersion of ground cover material		
Drainage		

ITEM	Completed	Needs Further Attention
EXTERIOR STAIRS/DECKS/LANDINGS		
Expansion joint conditions (concrete)		
Metal spacer conditions		
Overall condition		
Railings		
Wood material		
Attachment(s) to primary structure (code regulations)		
Coverings		
Footings/foundations		
GATES/FENCES		
Chains/locks		
Hinge conditions and lubrication		
Weld joint conditions		
Bolts and screw conditions		
Structural conditions		
Tracks		
Alignment		
Deficiencies such as sharp edges/gaps/splintering		
HVAC SYSTEMS		
Follow manufacturers recommendations for preventive maintenance		
Filters cleaning		
General conditions		
Condensation drains		
Motor		
Lubrication		
Housing stability		
Connection conditions		
Unit operation/noise level		
Split/Cassette or roof mounted		
Air filter conditions		
Burner assembly conditions		
Circulation		
Condensation drains		
Condenser/compression function		
Cooling coil conditions		
Electrical functions		

ITEM	Completed	Needs Further Attention
DIESEL GENERATORS		
Operation/Functionality		
Fuel level (if applicable)		
Battery charger condition		
Gauge conditions		
Circuit breaker conditions		
Activation device conditions		
Wiring conditions		
Overall condition		
SUB_STATIONS/ELECTRICAL SYSTEMS		
Equipment cleanliness		
Distribution system		
Wire/cable conditions for deficiencies such as corrosion/dirt/moisture and fire hazards		
Circuit breakers		
Hardware conditions		
Porcelain conditions		
Cotter pin conditions		
Air supplier operations		
Overall condition for deficiencies such as corrosion/noise/excessive temps		
Fuses		
Insulator conditions for deficiencies such as burns or cracks		
Contact surface conditions for deficiencies such as burning, pressure and misalignment		
Fuse holder condition		
Hardware condition		
Overall condition		
Lock security		
Utility room cleanliness and safety		
Overall condition		

ITEM	Completed	Needs Further Attention
STRUCTURAL		
Visual inspections of structures with emphasis on load bearing support areas that can be observed externally during a walk through		
Particular attention to evaluate potential for access by water into building areas		
Beams for rot/termites/bowing/splitting/slippage/fungus/etc.		
Foundations for cracking/slippage/water intrusion/etc.		
Joist conditions for rot/termites/bowing/splitting/fungus/etc.		
Overall signs of structural failure		
Sill conditions for rot/termites/bowing/splitting/fungus/etc.		
Stud conditions for rot/termites/bowing/splitting/fungus/etc.		
Wall conditions		
Masonry for cracks/scaling/mortar/crumbling/etc.		
Wood for termites/peeling paint/dry rot/fungus/etc.		
ELEVATORS		
Serviced by licensed elevator contractor		
Inspected		
Checks of emergency notification system in event of stall		

ITEM	Completed	Needs Further Attention
HOT WATER HEATERS IN HOSTELS		
Drain valve lubrication/function		
Gas shut-off valve lubrication and function		
Piping supply lines		
Pressure valve relief function		
Temperature settings		
Draft diverter conditions		
Flue/chimney conditions		
Vent condition		
Utility room condition		
Overall condition		

ITEM	Completed	Needs Further Attention
ROOFS		
Supporting structural integrity for cracks, moisture stains, etc.		
Flashing conditions for water penetration, displacement, tearing, etc.		
Surface conditions		
Subsurface condition for signs of moisture penetration		
Membrane conditions		
Plumbing stack vent and roof connection conditions		
Roof ventilation conditions		
Skylight conditions/broken glass or frame/rust/corrosion		
Structural conditions		
Roof edging conditions		
Expansion joint conditions		
Shingle conditions		
Asphalt roof conditions such as brittle/missing shingles/cracking/curled edges/ Exposed wood, etc.		
Flat roof conditions such as bare areas/ cracks/exposed nail heads/ ponding/etc.		
Overall condition		
GUTTERS/ROOF DRAINS		
Mounting stability		
Bolt, screw and strap conditions		
Proper/sufficient drainage away from facility		
Join conditions and stability		
Splash block location		
Seam and elbow conditions		
Caulking condition		
Gutter positioning toward downspouts		
Overall condition for corrosion/rust/blockage/obstructions/etc.		
Cleaned regularly and prior to anticipated heavy rainfall		

17565/2022/IDC

ITEM	Completed	Needs Further Attention
MOISTURE / LEAKS / SPILLS		
Checks for moldy odors		
Inspection of ceiling tiles/floors/walls for leaks/discoloration		
Check areas where moisture is commonly generated (such as kitchens/locker rooms/ bathrooms/etc.		
Check windows, windowsills, and window frames are free of condensation		
Check that indoor surfaces of exterior walls and cold water pipes are free of condensation		
Ensure the following areas are free from signs of leaks/water damage:		
Indoor areas known for roof or wall leaks		
Walls around leaky or broken windows		
Floors and ceilings under plumbing		
Duct interiors near humidifiers/cooling coils/ and outdoor air intakes		
HOUSEKEEPING SERVICES		
Cleaning of Toilets		
Cleaning of Floors		
Cleaning of Roofs		
External throughout campus of SVSU		
PEST CONTROL		
Throughout campus of SVSU		

TENDER

I/We have read and examined the notice inviting tender, schedule, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, General contract conditions & other documents and Rules referred to in the conditions of contract and all other contentsin the tender document for the work.

I/We hereby tender for the execution of the work specified for the SVSU within the time specified **in Schedule‘’** viz., schedule of quantities and in accordance in all respect with the specifications, designs of SVSU campus and instructions in writing referred to in Rule-1 of General Rules, Directions other Conditions of contract and with such materials as are provided for, by, and in respect of and in accordance with, such conditions as applicable.

We agree to keep the tender open for one hundred twenty (180) days from the date of opening of technicalbid.

A sum of Rs. …… is hereby forwarded in receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guaranteeissued by a scheduled bank as earnest money.

A copy of earnest money in receipt treasury challan/deposit at call receipt of a scheduled bank/fixed depositreceipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank isscanned and uploaded **(strike out as the case may be)**.

If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said SVSU or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely.

Further, if I/We fail to commence work as specified, I/ We agree that SVSU or the successors in office shallwithout prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely.
The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the special and General terms and conditions contained.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/Weshall be debarred from participating in the re-tendering process.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred from tendering in future. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated: **Signature of Bidder**
Postal Address:
Witness:
Address:
Occupation:

A C C E P T A N C E

The above tender (as modified by you as provided in the letters mentioned herein under) is accepted by mefor and on behalf of the SVSU for a sum of Rs. ……..
(Rupees……
……)
The letters referred to below shall form part of this contract agreement: -(a)
(b)
(c)

For & on behalf of SVSU

Signatures……
Dated: Designation……

FORMAT- I

DETAILS OF BIDDRER

1 NAME OF TENDERING COMPANY / FIRM / BIDDER:

2 NAME OF OWNER / DIRECTORS / PROPRIETOR:

3 FULL PARTICULARS OF OFFICE:

(a) Address:

(b) Telephone No.:

(c) Fax No.:

(d) E-Mail Address

4 FULL PARTICULARS OF THE BANKERS OF COMPANY / FIRM /:

(a) Name of the Bank:

(b) Address of the Bank:

(c) Telephone No.

(d) Fax No.:

(e) E-Mail Address:

5 REGISTRATION DETAILS:(a) PAN / TAN No:

(b) Service Tax Registration No.

(c) E.P.F. Registration No.

(d) E.S.I. Registration No.:

(e) TIN No. /VAT No. / Sale Tax No.-

6 DETAILS OF EARNEST MONEY DEPOSIT:

(a) Amount (Rs.):	
(b) D.D. No.	**Date:**
(c) Drawn on Bank:	
(d) Valid up to:	

7 DETAILS OF TENDER FEES:

(a) Amount (Rs.):	
(b) D.D. No.	**Date:**
(c) Drawn on Bank:	
(d) Valid up to:	

The above format may be used to provide requisite details

Date: **Place:**

Name: **Seal:** **Signature of Bidder**

FORMAT- II

WORK EXPERIENCE

Experience of Repairs, Operation and Maintenance works completed during last seven years preceding 18 October, 2022 and ongoing works Use separate sheet for each work.

1.	Name of the work/ Project Name	
2.	Name of the Client and Address	
3.	Describe area of Participation (Specific Work done/Services rendered by the applicant)	
4.	Period of Work Done/Services rendered for the project	
5.	Total cost of work	
6.	Date of start of the work and the present status	
7.	Any other details	

NOTE:

Supporting documents like certificates from the clients in support of each of the above projects has been furnished.

Signature of Bidder

FORMAT -III

DECLARATION

1. I, …….. Son / Daughter of Shri ……..Proprietor / Partner / Director / Authorized Signatory of ..... am competent to sign this declaration and execute this tender document.
2. I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.
3. The information / documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I / we, am / are well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

Signature of Authorized Person

Date: **Full Name:**

Place: **Company's Seal:**

N.B.: The above declaration, duly signed and sealed by the authorized signatory of the company, should be enclosed with Technical tender.

FORMAT-IV

(TO BE TYPED ON A LETTER HEAD)

UNDERTAKING

To,

Registrar
SVSU,
Village-Dudhola
Palwal - 121102

Subject: **Tender for providing Repairs, Operation and Maintenance (with day to day) works at SVSU, Dudhola-Palwal for a period of two years.**

Sir/Madam,

1. I/We hereby agree to abide by all terms and conditions laid down in tender document.
2. This is to certify that I/We before signing this bid have read and fully understood all the terms and conditions and instructions contained therein and undertake myself/ourselves to abide by the said terms and conditions.
3. I/We abide by the provisions of Income Tax return/and other statutory provisions like Service tax, TIN number, from time to time.
4. I/We do hereby undertake that execution of work of Repairs, Operation and Maintenance Services of (Civil, Electrical, ICT & Mechanical etc works mentioned in scope of work) works at SVSU, Dudhola-Palwal shall be ensured by our Agency, as well as any other assignment considered by the Registrar, SVSU, Dudhola-Palwal.
5. I/We do hereby undertake that in case agency is unable to prove by documentary evidence compliance regarding ESI Act, EPF Act, Minimum Wage Act, GST Regulations, any other Act as applicable, SVSU shall be at liberty to terminate the contract at any stage.

(Signature of the Bidder)
Name and Address of the Bidder. Telephone No.

FORMAT – V

CHECK LIST OF THE DOCUMENTS TO BE SUBMITTED WITH THE TENDER

S. No	Items	Confirm and Indicate Page Number
1	EMD in the form of Bank Draft for Rs._____/-	
2	Bid documents fee in the form of bank draft for Rs_____/- in case bid documents have been download from the website,	
3	Tender form with complete technical bid and Financial bid, with all pages serially numbered , signed and stamped on each page,	
4	Copy of PAN Card & TAN Certificate,	
5	Labour License under the Contractor Labour Act (R & A, Act 1970),	
6	Registration certificate of Company Act,	
7	Income Tax return for the last three years,	
8	Balance Sheet & Profit & Loss Account for last three years,	
9	Service Tax registration certificate with details of the last payment,	
10	Copy of Sales Tax/ VAT Certificate/TIN Certificate/copy of GST Registration,	
11	Sealed, Signed & Separate Technical bid documents,	
12	Sealed, Signed & Separate Price/Financial Bid document,	
13	Filled Format- I to VIII,	
14	Documents in support of Satisfactory work experience during last 5 years	
15	Certificate of Satisfactory work completion from previous organizations,	
16	Annual Turnover of company, certified by Chartered Accountant,	
17	Agency should not have been debarred/blacklisted by any of the Govt. /PSUs /SVSU. A written statement on a stamp paper of Rs10/- will be submitted.	
18	ESI Certificate along with latest challan,	
19	EPF Certificate along with latest challan,	
20	Valid License copy for Operation & Maintenance work (i.e. Civil & Electrical License) under the CPWD/State Govt./PSUs./MES/Others,	
21	ISO Certificate, if any.	

Signature of Authorized Person

Date: **Full Name:**

FORMAT– VI

DETAILS OF EXISTING CONTRACTS:

Sr. No.	Name and Address of the Organization, Name, Designation and Contact Telephone / Fax No. of the Officer concerned	Details regarding the Contract	Value of Contract (Rs.)	**Duration of Contract**	
				From	**To**
				DD/MM/YYYY	**DD/MM/YYYY**
A					
B					
C					
D					
	Additional information, If any				

The above format may be used to provide requisite details

Signature of Bidder

Date: **Name:**

Place: **Seal:**

FORMAT -VII

LETTER OF AUTHORISATION FOR

ATTENDING BID OPENING

(To reach on or before time of bid opening)

To

Registrar

SVSU,

Village-Dudhola

Palwal - 121102

Subject: Authorization for attending bid opening on_ _____

in the Tender of ..... _____

Following persons are hereby authorized to attend the bid opening for the tender mentioned above on behalf_____(Bidder) in order of preference given below.

Order of Preference	**Name**	**Specimen Signatures**
I.		
II.		

Alternate Representative

Signature of Bidder Or

Officer authorized to sign the bid Documents on behalf of the Bidder

Note:

1. Maximum of two representatives will be permitted to attend bid opening. In case where entry is restricted to one, first preference will be allowed. Alternate representative will be permitted when regular representatives are not able to attend.

2. Permission for entry to the hall where bids are opened may be refused in case authorization as prescribed above is not received.

FORMAT - VIII

(TO BE TYPED ON A LETTER HEAD OF THE AGENCY)

UNDERTAKING

Certificate of Non-Participation of near Relatives in the tender

I_____, S/O_____

R/O_____hereby certify that none of my relative(s) is/are employed in SVSU as per details given in tender document. In case at any stage, it is found that the information given by me is false/incorrect, SVSU shall have the absolute right to take any action as deemed fit/without any prior intimation to me.

Signed_____ For and on behalf of the Bidder

Name (caps)_____ Position_____

Date_____

To,

Regis
trar
SVSU,
Village-
Dudhola
Palwal -
121102

Signature of Bidder