

NIT No.: IITH/CMD/ELE/NIT/2024-25/28 (2nd call)



భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

**NOTICE INVITING TENDER
(NIT)**

Name of work: Supply, Installation, Testing and Commissioning (SITC) of CC Cameras in all the service buildings like MRS, WTP, Electrical Substations, AC Plants, STP & Water Pump Rooms in Kandi campus, IIT Hyderabad.

06.03.2025

**Executive Engineer - Electrical
IIT Hyderabad**

INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD
NOTICE INVITING TENDER
NIT No. IITH/CMD/ELE/NIT/2024-25/28 (2nd call)

The Indian Institute of Technology (IIT) Hyderabad invites on behalf of President of India online bids (e-tenders) in Item rate / Percentage-rate in Two-bid system (Technical Eligibility plus Financial) System, from the approved and eligible Electrical contractors of CPWD and those of appropriate list of M.E.S./BSNL/Railways/State P.W.D./Central PSUs/State Govt. departments/Central Govt. Departments OR the Specialized Agencies for the following work as per the stipulated terms and conditions mentioned below.

Copy of valid Registration of Firm (ROF) certificate, PAN card, GST Registration certificate & GSTIN should accompany the Bid and those certificates should be valid on the last date of submission of bid.

1.1	NIT No.:	IITH/CMD/ELE/NIT/2024-25/28(2nd call)
1.2	Name of work:	Supply, Installation, Testing and Commissioning (SITC) of CC Cameras in all the service buildings like MRS, WTP, Electrical Substations, AC Plants, STP & Water Pump Rooms in Kandi campus, IIT Hyderabad.
1.3	Location of work:	Indian Institute of Technology (IIT) Hyderabad campus, Kandi-502284, Sangareddy, Telangana, India.
1.4	Estimated Cost: (given merely as a rough guide)	Rs. 47,46,844/- only
1.5	Earnest Money Deposit (EMD)	Rs. 95,000/- only
1.6	Period of Completion:	45 Days
1.7	Date of Online Publication/Download of Tender document.	06/03/2025 @ 15:00hrs
1.8	Last Date for Submission of bids	12/03/2025 @ 17:00hrs
1.9	Date and time for Opening of Technical bids	13/03/2025 @ 17:30hrs
1.10	Date and Time for Opening of Financial bids	To be decided
1.11	Website Link:	https://eprocure.gov.in/eprocure/app

Sd/-

Executive Engineer-Electrical

INSTRUCTIONS TO THE BIDDERS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, preparing their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

REGISTRATION

1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email addresses and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID/password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black-and white option which helps in reducing the size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates, etc.) has been provided to the bidders. Bidders can use the “My Space” or “Other Important Documents” are available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

SUBMISSION OF BIDS

- 5) Bidder should log into the site well in advance for bid submission.
- 6) Bidder should ensure that they can upload the bid in time i.e., on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 7) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 8) The bidder has to select the payment option as “offline” to pay the tender fee/ EMD as applicable and enter details of the instrument.
- 9) The bidder should prepare the EMD (if any) as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date and time of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise, the uploaded bid will be rejected.

- 10) Bidders are requested to note that they should necessarily submit their financial bids(if any) in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 11) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc., The bidders should follow this time during bid submission.
- 12) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system-generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 13) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 14) Upon the successful and timely submission of bids (i.e., after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 15) The bid summary has to be printed and kept as an acknowledgment of the submission of the bid. This acknowledgment may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 16) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 17) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact details of the helpdesk are 0120-4711508, 0120-6277787, 0120-4001002, 0120- 4001005 and support-eproc@nic.in.

NOTICE INVITING TENDER
NIT No. IITH/CMD/ELE/NIT/2024-25/28 (2nd call)

TECHNICAL ELIGIBILITY CRITERIA:

1. Bidders shall produce definite proof from the appropriate authority, in the form of a completion certificate which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:

Experience of having successfully completed similar works during the last 07 years ending last day of the month previous to the one in which tenders are invited.

(i) Three similar completed works each costing not less Rs. 18,98,738 /- only or

Or

(ii) Two similar completed works each costing not less than Rs. 28,48,107/- only or-

Or

(iii) One similar completed work costing not less than Rs. 37,97,475/- only

“Similar Work” shall mean the work of Supply, Installation, Testing, Commissioning (SITC) of CCTV surveillance system/Networking System/BMS system/EMS system/Addressable Fire Alarm system/Data Centre IT component in any Institutional Campus /Labs/ Industries/Universities/ Commercial complexes/Power Plants/IT companies/Banks/Data Centres/PSUs etc.”

1. **Turnover:** The average annual financial turnover of the bidder should be at least **Rs.14,24,053/- only** during the immediate last three consecutive financial years ending 31st March 2024. The value of annual turnover figures shall be brought to current value by enhancing the actual turnover figures at simple rate of 7% per annum. The certificate from CA shall be attached with the bid.
3. To become eligible, the tenderer shall have to furnish an affidavit as per Form ‘J’ of the NIT.
4. The bidder shall have Employees Provident Fund (EPF) enlistment and proof of the same shall be attached along with the Technical Bid clearly showing the Provident Fund Code number.
5. The bidder shall submit the Indemnity bond as per format provided in Annexure-II.
6. The bidder shall submit the authorization certificate from the Original Equipment Manufacturer (OEM) of CC Camera, Switches, NVR equipment and associated critical components as per the format enclosed as Annexure- III.
7. Agreement shall be drawn with the successful tenderer on prescribed Form which is available in the website: https://drive.google.com/file/d/19_LkFZ1eQb_3BznXQtinslcLISYVdbo/view **(with up to date correction slips if any)** Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.

8. The time allowed for carrying out the work will be as stated at para 1 from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 9. The site for the work is available.**
10. Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen for information at the above-mentioned website.
11. Applicants are advised to keep visiting the above-mentioned website from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respects including updates thereof, if any. An incomplete application may be liable for rejection.
12. The contractor whose tender is accepted, will be required to furnish a **Performance Guarantee of 5% (Five Percent)** of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F'. including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
13. The description of the work is as follows:

Supply, Installation, Testing and Commissioning (SITC) of CC Cameras in all the service buildings like MRS, WTP, Electrical Substations, AC Plants, STP & Water Pump Rooms in Kandi campus, IIT Hyderabad.

Tenderer are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

14. Tenders with any condition including that of conditional rebates shall be rejected forthwith.

15. Cost of EMD may also be remitted to Institute's account number as per bank particulars given below:

Name of the Account Holder	:	Indian Institute of Technology Hyderabad
Account Number	:	30412797764
Name of the Bank	:	State Bank of India
Address of the Bank	:	IIT Kandi, IIT Hyderabad Campus, Kandi, Sangareddy, Telangana - 502284
Branch code	:	14182
IFSC code	:	SBIN0014182
MICR code	:	502002528
SHIFT code	:	SBININBB762

16. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.

17. Canvassing, whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

18. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.

19. The contractor shall not be permitted to tender for works if his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Institute.

20. No Engineer of gazette rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.

21. The tender for the works shall remain open for acceptance for a period of Ninety (90) days from the date of opening of NIT bid. If any tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the re-tendering process of the work.

22. (A) All taxes, Labor Cess etc., as applicable shall be borne by the contractor himself. The contractor shall quote his rates considering all such taxes including GST on works. Any recovery towards GST is notified by the competent authority, the same shall be effected and no claim what so ever shall be entertained by IITH. The contractor shall quote his rates accordingly.

(B) 2% as TDS amount of GST amount payable on the bills will be deducted as per the Govt. of India, Ministry of Finance, Department of Revenue notification vide No.65/39/2018-DOR, dtd: 14-09-2018.

23. *GST registration certificate of the state in which the work is to be taken up, if already obtained by the bidder.*

If the bidder has not obtained GST registration in the state in which the work is to be taken up or as required by GST authorities, then in such a case the bidder shall scan and upload following under taking along with other bid documents.

"If the work awarded to me, I/We shall obtain GST registration certificate of the state, in which work is to be taken up, within one month from the date of receipt of award letter or before release of any payment by IIT Hyderabad, whichever earlier, failing which I/We shall responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by IIT Hyderabad or GST department in this regard."

24. This Notice inviting Tender (NIT) shall form a part of the contract agreement. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of :-

- a) The Notice Inviting Tender (NIT), all the documents including Terms and conditions, Special conditions of contract, additional conditions, Technical specifications and drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- b) Standard Contract form (General Conditions of Contract) as posted in the website of the Institute. The bidder is deemed to have gone through and understood the Standard Contract Form and the General Conditions of Contract.


06.03.2025

Executive Engineer - Electrical
IIT Hyderabad

(Signature of bidder)

AFFIDAVIT

I/we undertake and confirm that our firm/partnership firm has not been blacklisted by any state/Central Departments/PSUs/Autonomous bodies during the last 07 years of its operations. Further that, if such information comes to the notice of the department then I/we shall be debarred for bidding in IIT Hyderabad in future forever. Also, if such information comes to the notice of IIT Hyderabad on any day before date of start of work, the Engineer-in-charge shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy of this notarized affidavit to be uploaded at the time of submission of bid)

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-

Signature of Bidder(s) or an authorized Officer of the firm with stamp

Signature of Notary with seal

Checklist of documents to be submitted along with Technical Bid

Sl. No.	Doc Ref	Description of the Document	Enclosed Yes/No	Remarks
	<i>Applicant shall submit the following documents for technical scrutiny</i>			
1	Registration of Firm (ROF)	Copy of valid Registration of Firm (ROF)		
2	PAN details	Copy of PAN card		
3	GST registration details	Copy of GST Registration certificate & GSTIN should accompany the Technical Bid		
4	Details of similar works executed. <i>(Detailed statements to be enclosed)</i>	Not less than Rs. 18,98,738/- only of estimated cost (Three similar works)		
		Not less than Rs. 28,48,106/- only of estimated cost (Two similar works)		
		Not less than Rs. 37,97,475/- of estimated cost (One Similar work)		
5	As per Para No. 1.4 of NIT	Cost of EMD of Rs. 95,000/- only		
6	As per Sl. No.2 of NIT	The average annual financial turnover of the bidder should be at least Rs. 14,24,053/- only during the immediate last three consecutive financial years ending 31 st March 2024. The value of annual turnover figures shall be brought to current value by enhancing the actual turnover figures at simple rate of 7% per annum. The certificate from CA shall be attached with the bid.		
8	As per Sl. No.3 of NIT	To become eligible, the tenderer shall have to furnish an affidavit as per Form 'J' of the NIT.		
9	As per Sl. No.4 of NIT	The bidder shall have Employees Provident Fund (EPF) enlistment and proof of the same shall be attached along with the Technical Bid clearly showing the Provident Fund Code number.		

10	As per Sl. No.6 of NIT	The bidder shall submit the Indemnity bond as per format provided in Annexure-II.		
11	As per Sl. No.7 of NIT	The bidder shall submit the authorization certificate from the Original Equipment Manufacturer (OEM) of CC Camera, Switches, NVR and associated critical components, as per the format enclosed as Annexure- III.		
12	As per Sl.No.23 of NIT	Undertaking for GST registration in the state in which the work is to be taken up		

Note: The above check-list is broad and indicative only. Apart from the above, the bidder shall ensure to submit all the relevant documents along with his technical bid, which are specified in this Notice inviting Tender document and also which are otherwise appropriately required in support of its bid.

PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of quantities (Enclosed): Part A (Item Rate)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor

Sl. No.	Description of item	Quantity	Rates in figure & words at which the material will be charged to the Contractor	Place of issue
..... NIL				

SCHEDULE 'C'

Tools and plants to be hired to the contractor

Sl. No.	Description	Hire Charges per day	Place of issue
..... NIL			

SCHEDULE 'D'

Extra schedule for specific requirements/documents for the work, if any.

--- NIL ---

SCHEDULE 'E'

Reference to General Condition of Contract.: *Posted in the website of the Institute.*

Name of the work : **Supply, Installation, Testing and Commissioning (SITC) of CC Cameras in all the service buildings like MRS, WTP, Electrical Substations, AC Plants, STP & Water Pump Rooms in Kandi campus, IIT Hyderabad.**

Estimated cost of work : **Rs. 47,46,844/- only**

Earnest money : **Rs. 95,000/- only**

Performance Guarantee : **5.0% of the accepted tendered value**

Security Deposit : **2.50% of the tendered amount**

SCHEDULE 'F'

GENERAL RULES AND DIRECTIONS:

Officer inviting tender: : *Executive Engineer-Electrical, IITH or successor thereof.*

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3 : **1) Electro-Mechanical works...100%**
2) Civil works...0%

Definitions:

2(v) Engineer -in- Charge : *Executive Engineer-Electrical, IITH or successor thereof.*

2(viii) Accepting Authority : *Superintending Engineer-Civil, IITH or successor thereof.*

2(x) Percentage on cost materials and Labour to cover all overheads and profit : *15% (Fifteen) per cent.*

2(xi) Standard Schedule of Rate : *CPWD, Delhi Schedule of Rates (DSR) 2022 E &M, with up to date correction slips.*

Standard Contract Form : *IITH General Conditions of Contract for Construction Works*

Clause 1

i) Time allowed for submission of Performance Guarantee, Programme Chart (Time and Progress) and applicable licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance, in days : *7 (Seven) Days*

ii) Maximum allowable extension beyond the period provided in (i) above

: *7 (Seven) Days*
: *Yes*

Clause 1A

Whether Clause 1A is applicable

Clause 2

Authority for fixing Compensation under Clause 2

: *Superintending Engineer, IITH or successor thereof.*

Clause 3(VII): If the contractor had secured the contract with Government as a result of wrong tendering or

other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement-will be made ineligible.

Number of days from the date of issue of letter of acceptance for reckoning date of start : **07 Days from the date of issue of LOA or handing over of site, whichever is later**

Milestones : Not Applicable

Time allowed for execution of work : **30 Days**

Authority to give fair and reasonable Extension of time for completion of work (Web based hindrance register) : *Superintending Engineer, IITH or successor thereof.*

Rescheduling of mile stones : *Superintending Engineer, IITH or successor thereof.*

Clause 6:- Measurement Book : (i) *For works having estimated cost more than Rs 15 Lakh – Clause 6*
 Clause applicable, 6 : (ii) *For works having estimated cost Rs. 15 Lakh or less – Contractor’s option of Clause 6 or to be exercised at the time of Tender Submission*

Clause 7:

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment : *Rs. 5 Lakhs/-*

Clause 7A: : *Yes.*
 Whether Clause 7A is applicable : *No running account bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-charge.*

Clause 10A:

List of testing equipment to be provided by the contractor at site lab : *As given in additional specifications*

Clause 10B (i)- Secured advance on Materials:

Whether Clause 10 B (i) shall be applicable : NA

Clause 10C:

Component of labour expressed as percent of value of work : NA

<u>Clause 10CA</u>	:	<i>Not Applicable</i>
<u>Clause 10CC</u>	:	<i>Not Applicable</i>
Clause 10D	:	<i>Applicable</i>
Clause 11:		
		<u>For ELECTRICAL WORKS</u> CPWD General Specifications for Electrical works: Part I Internal 2013 Part II External 1994 up to date Corrections Slips. NIT Particular specifications
Specification to be followed for execution of work	:	<u>For CIVIL WORKS</u> CPWD Specifications (Civil) Volume I- 2019 & Volume II-2019 with up to date corrections slips Particular specifications of OEM
Clause 12:		
12.2 & 12.3: Deviation limit beyond which Clause 12.2 & 12.3 shall apply for building work	:	<i>100% (One hundred per cent)</i>
12.5 : Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work	:	<i>100% (One hundred per cent)</i>
Clause 14: Whether Clause 14 is applicable	:	<i>Yes.</i>
Clause 16 Competent Authority for deciding reduced rates.	:	<i>Superintending Engineer, IITH or successor thereof up to 5% of tendered amount, beyond which, Director, IITH.</i>
Clause 18: List of mandatory machinery, tools & plants to be deployed by the contractor at site	:	<i>As required for the work.</i>
Clause 25: Settlement of disputes by Conciliation and Arbitration:		
Conciliator	:	<i>Dean (Planning)</i>
Authority to appoint arbitrator	:	<i>Director, IIT Hyderabad</i>
Place of arbitration	:	<i>Hyderabad</i>
Venue of arbitration	:	<i>IIT Hyderabad</i>
Type of Arbitration Tribunal	:	<i>Sole Arbitrator</i>

Note: Provisions of Arbitration and Conciliation Act 1996 with latest amendments in force shall be applicable.

Clause 32: *As required for the work.*

Clause 38

(i): Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates

: Not Applicable

*DSR –2023 Civil
published by CPWD*

(ii): Variations permissible on theoretical quantities:

(a) Cement

2% plus/minus

(b) Bitumen All Works

2.5% plus only & nil on minus side.

(c) Steel Reinforcement and structural steel sections for each diameter, section and category

2% plus/minus

Special Conditions of Contract

1. Before tendering, the Agency shall inspect the site of work and shall fully acquaint himself about the conditions prevailing at site, availability of materials, availability of land and suitable location for construction of godowns, stores and camp, transport facilities, the extent of lead and lifts involved in the work (over the entire duration of contract) including local conditions, as required for satisfactory execution of the work and nothing extra whatsoever shall be paid on this account.
2. The contractor shall at his own expense and risk arrange land for accommodation of labour, setting up of office, the storage of materials, erection of temporary work-shops, and construction of approach roads to the site of the work including land required for carrying out of all jobs connected with the completion of the work. In any case, **IIT Hyderabad (Institute) shall not permit setting up of labour camps within its premises.** If during construction it becomes necessary to remove or shift the stored materials shed workshop, access roads, etc. to facilitate execution of any other work by any other agency, the contractor shall do as directed by the Engineer-in-charge and no claim whatsoever, shall be entertained on this account.
3. It shall be deemed that the contractor shall have satisfied himself as to the nature and location of the work, transport facilities, availability of land for setting up of camp etc. The department will bear no responsibility for lack of such knowledge and the consequences thereof.
4. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the Engineer-in-charge. Nothing extra shall be paid on this account.
5. The Agency shall at his own cost submit samples of all materials sufficiently in advance and obtain approval of the Engineer-in-charge. Subsequently, the materials to be used in the actual execution of the work shall strictly conform to the quality of samples approved by the Engineer-in-charge and nothing extra shall be paid on this account. The acceptance of any sample or material on inspection shall not be a bar to its subsequent rejection, if found defective.
6. The contractor shall at his cost, make all arrangements and shall provide necessary facilities as the Engineer-in-charge may require for collecting, preparing, packing forwarding and transportation of the required number of samples for tests for analysis at such time and to such places as directed by the Engineer-in-charge, and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The cost of tests shall be borne by the contractor/Institute in the manner indicated below (except for water):
 - a. By the contractor, if the results show that the material does not conform to relevant specifications and BIS codes or any other relevant code for which conformity test is carried out.
 - b. By the Institute, if the results show that the material conforms to relevant specifications and BIS codes or any other relevant code for which conformity test is carried out.
7. The work shall be carried out in such a manner so as not to interfere/or effect or disturb other works being executed by other agencies, if any.
8. Materials used on work without prior inspection and testing (where testing is necessary) and without approval of Engineer-in-charge are liable to be considered unauthorized, defective and not acceptable. The Engineer-in-charge shall have full powers to require removal of any or all of the materials brought to site by contractor which are not in accordance with the contract, Specifications or do not conform in character or quality to the samples approved by the Engineer-in-charge. In case of default on the part of the contractor in

removing rejected materials, the Engineer-in-charge shall be at liberty to have them removed at the risk and cost of the contractor.

9. The Work shall be carried out as per CPWD specifications for electrical works internal 2013 as amended up to date and as per the scope of work, technical specifications and approved make list mentioned in the NIT.
10. The work shall be carried out in such a manner so as not to interfere/or effect or disturb other works being executed by other agencies, if any.
11. Any damages done by the contractor to any existing work or work being executed by other agencies shall be made good by him at his own cost.
12. The work shall be carried out in the manner complying in all respects with the requirement of relevant rules and regulations of the local bodies under the jurisdiction of which the work is to be executed and nothing extra shall be paid on this account.
13. The contractor shall maintain in good condition all work executed till the completion of the entire work entrusted to the contractor under this contract and nothing extra shall be paid on this account.
14. No payment will be made to the contractor for damage caused by rain, floods and other natural calamities whatsoever during the execution of the works and any damage to the work on this account shall have to be made good by the contractor at his own cost and nothing whatsoever' shall be paid on this account.
15. The Item Rates or Percentage Rates for all items of work, unless clearly specified otherwise shall include the cost of all labour for materials, de-watering and other inputs involved in the execution of the items.
16. No claim whatsoever for idle labour, additional establishments, costs of hire and labour charges for tools and plants etc. would be entertained under any circumstances.
17. For the safety of all labour directly or indirectly employed in the work for the performance of the contractor's part of this agreement, the contractors shall, in addition to the provisions of Safety code and directions of the Engineer-in-charge make all arrangements to provide facility as per the provisions of Indian Standard Specifications (Codes) listed below and nothing extra shall be paid on this account.
 - a) IS 3696 Part I Safety Code for scaffolds and ladders
 - b) IS 3696 Part II Safety Code for scaffolds and ladders Part II ladders
 - c) IS 764 Safety Code for excavation work
 - d) IS 4081 Safety Code for Blasting and Drilling operations,
 - e) IS4138 Safety Code for working in compressed air.
 - f) IS 7293 Safety Code for working with construction machinery
 - g) IS 7969 Safety Code for storage and handling of building materials
 - h) IS 5216:1982 code of safety procedures and practices in electrical works
18. The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards and by providing red flags, red lights and barriers. The contractor shall be responsible for any accident at the site of work and consequences thereof.
19. Labour Welfare Cess @ 1% shall be deducted at source from the bills of Gross value (which includes the cost

of stipulated materials) of the work done and Government shall not entertain any claim whatsoever in this respect in this contract. The Labour cess will be deducted in conformity with the Govt. guidelines for Electrical works and Civil works accordingly.

20. The ESI and EPF Contribution on the part of the employer in respect of the contract shall be paid by the contractor.
21. The contractor shall obtain a valid licence under the contract labour (R A) Act, 1970 and the contract labour (Regulation and Abolition) Central Rules, 1971 before the commencement of the work, and continue to have a valid licence until the completion of the work. The contractor shall also comply with provision of the Inter-State Migrant Women (Regulation of Employment and conditions of service) Act 1979.
22. All tools, tackles, safety equipment and labours required for maintenance and testing works / AMC at all levels and heights shall have to be provided by the tenderer at no extra cost.
23. Spare parts used by vendor should conform to IS specifications as applicable.
24. Any damaged due to mishandling by the person deputed by the vendor shall have to be restored back to its original condition by the vendor at their own cost.
25. **The Defect liability period (DLP)/Warranty Period of the work including all equipments, system components is minimum 36 months from the date of completion as certified by the Engineer in Charge (EIC).** The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. All expenditure, including government levies on account of the replacement are to be borne by the supplier/agent
26. **Payment of Running bills**

The running bills shall be submitted by the contractor as per the progress of work done at site. However, the following will be the basis of payment for the items claimed under running bills:

- a) Gross Payment to be made on supply of material at site: **70% of quoted rate.**
- b) Gross Payment to be made on installation of material at site: **15% of quoted rate.**
- c) Gross Payment to be made on satisfactory Testing & Commissioning of material at site: **15% of quoted rate.**

After receipt of the running bill at IITH, the contractor shall get the executed work and claimed quantities in bill checked and verified from the Engineer-In-charge or his authorized Engineer and after satisfactory verification of work executed at site, the payment to the contractor shall be released.

27. As this work is time targeted and in view of the allocated budget/fund for the said work may be lapsed by 31st March 2025, the contractor has to complete the work in all respects as per the time allowed for the completion of work i.e., 30days only or on or before 21st March 2025 strictly, whichever is the earlier and and to this extent the contractor shall ensure to submit the Final Bill of Quantities and Invoice to the CMD office by 21st March, 2025. On receipt of the final bill completed in all respects only by the contractor, the payment will be processed by the CMD office.
28. **Advance Payment:** If the work is not completed on or before 21st March 2025 with all the final bill and measurements submitted by the contractor then for the balance quantum of work (to be assessed by EE-Electrical), the Advance Payment may be made to the contractor on or before 31st March 2025 for the balance quantum of work, at the discretion of IITH against Advance Submission of the Irrevocable Bank

Guarantee of equal amount by the contractor to IITH, which will be binding on the contractor. This Advance Payment may be released without Prejudice to the right of Govt. to recover Compensation for delay in the execution (if any) in accordance with the Clause 2 of the General Conditions of Contract (GCC).

Detailed Scope of Work & Technical Specifications

SCOPE OF WORK

1. The scope of work includes supply, installation, testing & commissioning of CC cameras along with passive and active network works for centralized monitoring system and the system is NVR based. The CC cameras should be installed across all the service buildings in IITH campus as per the requirement of IITH and as per the directions of Engineer-In-Charge at the service building's locations with indoor and outdoor cameras with NVR system.
2. All the cameras will be monitored from the centralized location and also through remote login as per the requirement of IITH and directions of Engineer-In-Charge.
3. Each service building will have a individual PoE switch and all the PoE switches will be connected to NVR/Main Control room through OFC network, OFC network is already existing.
4. Detailed network architecture and drawings should be prepared and submitted after completion of work.
5. All the equipment active and passive material should meet the requirement mentioned in Technical Specifications and as per the approved makes list failing which the particular material will be rejected
6. All the CCTV cameras installation and placing of PoE switches, installation of main switch and workstations should be executed as per the instructions of Engineer-in-Charge in the specified locations.

Training:

Wherever needed, the Engineer-In-Charge or his representative of the Institute should be trained by the contractor at the IITH site free of cost. In case the person is to be trained at contractor site abroad or in India it should be mentioned in the quotation clearly. The supplier should bear all the expenses for such training including 'to & fro' fares and lodging & boarding charges.

Technical Specifications

S.No.	Equipment/System	Detailed Specifications
1.	64 Channel 8 Sata NVR (8 MP)	64CH Embedded 4K NVR 8SATA expandable each BAY up to 10TB, audio input & Output, Two way communication supported, G7.11 audio format support, 400Mbps recording throughput, 16 alarm inputs & 6 Outputs, RS485, RAID, Esata and RS232 to be supported with max. 16 users, Op. temp -10 to 50 deg. C, NDAA compliant, UL, CE, FCC certified. MAF to be submitted from OEM.
	Operating Systems	Embedded Linux
	Processor	ARM processor or better
	ONVIF	Profile S
	Channels	64
	SATA	8 HDD, each sata expandable up to 10TB, total 80TB
	Date & Time	Time Zone, Manual, Automatic Sync NTP, Daylight Saving Time
	Security	Chipset and streaming encryption
	Log	System log, Event log
	User Management	User level: Administrator, Operator, Media user
	Audio Input & Out Put	each 1, Two-way communication
	Audio Format	G.711
	Resolution	3840 x 2160, 1920 x 1080, 1280 x 1024, 1024 x 768
	PTZ Operation	Direction control, Home, Iris, Preset, Patrol (group), Focus +/- Zoom +/-
	Alarm Input & Output	16 Input & 4 Outputs
	e-SATA	supported
	Protocols	IPv4, TCP/IP, HTTPS, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DDNS, IP Filter, P2P
	Through put	Min. 400Mbps
	Operating Temperature	-40°C ~ 60°C
	Playback Function	Regular (play, pause, stop), Play backwards, Next frame, Go back 30 seconds, Go forward 30 seconds, Speed control, Timeline, Timeline scale, Digital zoom, Audio, Snapshot, Back up
	Search Mode	Time search, Event Search, Video clip
	Certifications	UL, CE, FCC, NDAA Compliant
2.	3MP Bullet Camera IR Fixed 2.8mm	3MP IR Fixed Lens Bullet camera, 1/2.7" progressive CMOS image sensor, Min. Illumination 0.005 (color), S/N Ratio: 50dB, Electronics Shutter: 1/8 ~ 1/32000, IR Distance: 40M, WDR~120dB/BLC/HLC/3D DNR, Gain Control: 0 ~100%; SD card up to 256GB; Motion Detection and Tampering; Video Compression: H.265 HEVC/H.264/MJPEG, Smart Codec; Triple Stream; Protocols: IPv4, IPv6, TCP / IP, HTTP, HTTPS, RTSP / RTP / RTCP, IGMP / Multicast, SMTP, DHCP, NTP, DNS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS; Security: User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, Stream encryption, AES128 / 256, SSH/ Telnet

		closed, PCI-DSS compliance H.265 HEVC/ H.264/ MJPEG, Smart Codec; ONVIF: S,G,T; Op. Temp: -40 to 60 Deg; power consumption max. 6W; IP67, IK10, UL, NDAA Compliance. MAF to be submitted from OEM
	Video Standard	NTSC / PAL
	Scanning System	Progressive
	Image Sensor	1/2.7" CMOS, 3MP Bullet camera
	Minimum Illumination (Color/BW)	0.005 Lux/F1.6 (Color, 30 IRE), 0 Lux/ F1.6 (IR ON)
	S/N Ratio	50 db
	Electronic Shutter Speed	1/8 ~ 1/32,000
	IR Distance	40M
	IR Light Control	Smart IR (Auto / Manual) / OFF
	Day/Night	Auto (ICR) / Color / BW
	Backlight Compensation	WDR-120db, BLC, HLC
	Gain Control	0-100%
	Noise Reduction	3D DNR
	Lens	2.8mm
	Privacy Masking	4 Areas
	Local Storage	up to 256GB
	Video Compression	H.265 HEVC/H.264/MJPEG, Smart Codec
	Ethernet	10 Base-T/100 Base-TX Ethernet (RJ-45)
	Protocols	IPv4, IPv6, TCP / IP, HTTP, HTTPS, UPnP, RTSP / RTP / RTCP, IGMP / Multicast, SMTP, DHCP, NTP, DNS, DDNS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS
	ONVIF Profile	G, S, T
	Security	User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, Stream encryption, AES128 / 256, SSH / Telnet closed
	Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)
	Relative Humidity	Less than 90 %, non-condensing
	Power Consumption (Max)	6W
	Certifications	IP67, UL, FCC, NDAA Compliance.
3.	3MP IR Fixed Dome Camera 2.8mm	3MP IR Fixed Lens Dome camera, 1/2.7" progressive CMOS image sensor, Min. Illumination 0.005 (color), S/N Ratio: 50dB, Electronics Shutter: 1/8 ~ 1/32000, IR Distance: 40M, WDR~120dB/BLC/HLC/3D DNR, Gain Control: 0 ~100%; SD card up to 256GB; Motion Detection and Tampering; Video Compression: H.265 HEVC/H.264/MJPEG, Smart Codec; Triple Stream; Protocols: IPv4, IPv6, TCP / IP, HTTP, HTTPS, RTSP / RTP / RTCP, IGMP / Multicast, SMTP, DHCP, NTP, DNS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS; Security: User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, Stream encryption, AES128 / 256, SSH/ Telnet closed, PCI-DSS compliance H.265 HEVC/ H.264/ MJPEG, Smart Codec; ONVIF: S,G,T; Op. Temp: -40 to 60 Deg; power consumption max. 6W; IP67, IK10, UL, NDAA Compliance. MAF to be submitted from OEM
	Video Standard	NTSC / PAL

	Scanning System	Progressive
	Image Sensor	1/2.7" CMOS, 3MP Dome camera
	Minimum Illumination (Color/BW)	0.005 Lux/F1.6 (Color, 30 IRE), 0 Lux/ F1.6 (IR ON)
	S/N Ratio	50 db
	Electronic Shutter Speed	1/8 ~ 1/32,000
	IR Distance	40M
	IR Light Control	Smart IR (Auto / Manual) / OFF
	Day/Night	Auto (ICR) / Colour / BW
	Backlight Compensation	WDR-120db, BLC, HLC
	Gain Control	0-100%
	Noise Reduction	3D DNR
	Lens	2.8mm
	Angle Of View (H x V x D)	H: 88°, V:47
	Privacy Masking	4 Areas
	Local Storage	up to 256GB
	Pan Range	0-330
	Tilt Range	0-75
	Rotation Range	0-337
	Video Compression	H.265 HEVC/H.264/MJPEG, Smart Codec
	Ethernet	10 Base-T/100 Base-TX Ethernet (RJ-45)
	Protocols	IPv4, IPv6, TCP / IP, HTTP, HTTPS, UPnP, RTSP / RTP / RTCP, IGMP / Multicast, SMTP, DHCP, NTP, DNS, DDNS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS
	ONVIF Profile	G, S, T
	Security	User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, Stream encryption, AES128 / 256, SSH / Telnet closed
	Operating Temperature	-40°C ~ 60°C (-40°F ~ 140°F)
	Relative Humidity	Less than 90 %, non-condensing
	Power Consumption (Max)	6W
	Certifications	IP67, UL, FCC, NDAA Compliance. Preferred MAKE in INDIA
4.	10TB Surveillance HDD	Capacity: 10 TB
	Interface	SATA 6 Gb/s
	Recording Technology	CMR
	Drive Bays Supported	16+
	AI Channels	32
	AI Real Time Capture Events/Sec	Up to 120
	AI Real Time Compare Events/Sec	Up to 96
	HD Cameras Supported	Up to 64
	RV Sensors	Yes
	Max. Sustained Transfer Rate OD (MB/s)	245MB/s
	Cache (MB)	256
	Tarnish Resistant	Yes
	Load/Unload Cycles	600,000
	Non-recoverable Read Errors Rate, Max	1 per 10E15
	Power-On Hours per year	8,760
	Workload Rate Limit (WRL)	550
	Mean Time Between Failures	2,000,000 hr

	(MTBF) (hours)	
	Warranty, Limited (years)	5
	Rescue Data Recovery Services (years)	3
	Startup Current, Typical (12V, A)	2
	Average Operating Power (W)	10.1W
	Idling Average (W)	7.8 W
	Standby Mode/Sleep Mode, Typical (W)	1/1
	Voltage Tolerance (5 V)	±5%
	Voltage Tolerance (12 V)	±10%
	Operating (Ambient, min °C)	0
	Operating (drive reported, max °C)	65
	Non-operating (ambient, min °C)	-40
5.	24port Fiber SFP Port (Fibre Switch)	<p>Architecture</p> <p>Proposed Switch should have 20 SFP ports, 4 Combo 10/100/1000BASE-T/SFP ports and 4 SFP+ ports</p> <p>Switch should Support Internal/External Redundant Power Supply.</p> <p>Switch shall have SD Card slot/USB/External flash for easy file store & restoration like firmware, configuration file, boot image, syslog etc.</p> <p>Shall support Min 1GB DRAM and 1GB flash</p> <p>Performance</p> <p>The Switch shall have Non-blocking wire speed switch fabric with Min. 128 Gbps Back plane or higher</p> <p>The Switch shall have Min.95 million pps or higher</p> <p>The Switch shall support Min. 68K Mac address</p> <p>The Switch shall be able to do Physical Stack min 9 units per stack or more</p> <p>The Switch shall be able to do IP Stacking up to 30 units per IP</p> <p>The Switch Should support Jumbo Frame (up to 12K Bytes)</p> <p>Layer 2 switching</p> <p>Switch should support ARP, Proxy ARP and Gratuitous ARP.</p> <p>The LAN switch shall have IEEE 802.1Q VLAN encapsulation and should support 4k Vlans.</p> <p>It shall have support for Detection of Unidirectional links and to disable them to avoid problems such as spanning tree loops</p> <p>It shall support 802.1v Protocol-based VLAN</p> <p>Should support MAC based Vlans</p> <p>Should support GVRP or equivalent, Private Vlan or equivalent, Subnet VLAN or equivalent, Voice Vlan and QinQ (port based qinq and selective qinq).</p> <p>Multicast VLAN to allow multiple VLANs to receive the same multicast traffic</p> <p>Switch should have support for below Spanning Tree protocol Standards:</p>

	<ul style="list-style-type: none"> • 802.1D STP • 802.1w RSTP • 802.1s MSTP
	The Switch should have 802.1AX Link Aggregation Up to 30 groups per device.
	Port Mirroring One to one/Many to One, Flow based mirroring & VLAN Mirroring
	Switch shall support ITU-T G.8032 Ethernet Ring Protection Switching to provide protection for Ethernet traffic in a ring topology, while ensuring that no loops are within the ring at the Ethernet layer
	The Switch shall have the intelligence to detect the loop occurring from the unmanaged network segment
	Layer 3 Routing Features
	Switch should support Static routing for IPv4 and IPv6, RIP for IPv4 and RIPng for IPv6 from day 1
	Switch should support Min 256 IP Interfaces
	Should have policy-based routing, ipv4 static route, RIP v1/v2
	Route Redistribution support
	IPv6 Tunnelling: Tunnel types should be supported are Static, 6to4, ISATAP and GRE.
	Should Support DHCP server for IPv4/ IPv6 address
	Should support VRRP v2 & V3.
	Should support Bidirectional Forwarding Detection
	Quality of service
	Switch should support 802.1p priority queuing with 8 queues per port.
	Queue Handling mode: WRR & Strict Mode, Strict + WRR and Weighted Deficit Round Robin (WDRR)
	Granular Rate Limiting functions on per port & flow based to guarantee bandwidth in increments shall be as low as 8 Kilobits per Second.
	Class of service shall be based on Switch port, DSCP, Vlan ID, TCP/UDP port, Protocol type, 802.1p queues, IPv4/v6 address, IPv6 flow label.
	Broadcast and Multicast traffic/storm control
	Weighted Random Early Detection (WRED) for congestion control
	OAM
	802.3ah Ethernet Link OAM
	802.1ag Connectivity Fault Management (CFM)
	Switch shall support ITU-T Y.1731
	Optical Transceiver Digital Diagnostic Monitoring (DDM) & Dying gasp
	Security
	IEEE 802.1X Port Based Access control and Host based Access control and Guest VLAN
	It shall support RADIUS/TACACS+ authentication to enable centralized control of the switch and restrict unauthorized users from altering the configuration.

		It shall have IP-MAC-Port binding
		Switch should be able to authenticate and access control based on MAC and web (Http or Https)
		BPDU Attack Protection, ARP protection, IP Source Guard, Dynamic ARP Inspection and DOS Attack Prevention
		It shall support for SSHv2, SNMPv3 to provide network security by encrypting administrator traffic
		Switch shall support 802.1Qbb Priority-based Flow Control (PFC).
		Management
		The LAN switch shall have CLI, WEB GUI support
		It should support RMON v1 and RMON v2
		It shall support Trivial File Transfer Protocol (TFTP) to reduce the cost of administering software upgrades by downloading from a centralized location.
		It shall support Network Timing Protocol (NTP/SNTP) to provide an accurate and consistent timestamp to all intranet switches.
		It shall support SNMPv1, SNMPv2c, and SNMPv3 and Telnet interface to deliver comprehensive in-band management, and a CLI-based management console to provide detailed out-of-band management
		It shall have support for Netflow/Jflow/Sflow and openflow v1.3
		Certificate
		Switch should have MTCTE, CE, FCC, UL
		OEM Criteria
		Country of Origin: Non-MIC
		OEM/Switch/OS should have IEC 62443 or equivalent Cyber security standard compliance
		OEM/Bidder should have ISO 9001 Certification for Quality Management System, ISO 27001 Certification for Information Security Management System, ISO 45001 Certification Health and Safety Management System and ISO 14001 Certification for Environmental Management System.
		The offered model should be latest. End of Sale or Model going to be End of Sale in next 6 months should not be quoted.
		OEM should have L2 & L3 technical support (TAC) in India and Repair centre in Telangana, should have Service Center Registration Copy On OEM Name (Property Tax / Electricity Bill / Telephone Bill / Registration agreement) for Service Center in Telangana.
		All Switches and Modules from Same OEM for better interoperability
		Should submit MAF from OEM for authorization
		Preferred Make: CISCO, Juniper, D-Link
		Warranty & Technical Support
		Minimum 3 Years On-Site Warranty
6.	8 Port PoE 2 SFP Port Switch	Switch Hardware Specification

	Switch with at least 8 X RJ-45 Gigabit Ethernet POE Ports and 2 100/1000 Mbps SFP ports
	Switching capacity should be 20Gbps or higher or non-blocking architecture.
	Switch packet forwarding rate should be 14.88Mpps or higher or non-blocking architecture.
	Switch MAC table should be at least 8K or higher.
	Switch should support 802.3at PoE+ and 802.3af PoE power to any of the RJ-45 ports.
	Switch should have POE Budget Min 65W or higher.
	Switch should be standard 19-inch 1U rack mountable.
	Support for the Energy Efficient Ethernet (IEEE 802.3az) standard.
	Operating temperature should be 0 degree Celsius to +50 degree Celsius.
	Certification: MTCTE, CE, FCC, UL.
	Switch Software Specification
	Should support Head of Line blocking prevention for lower latency and better performance.
	Support Jumbo Frame up to 10K Bytes or higher.
	Should support IGMP Snooping, Able to create 250 or more IGMP groups and require support for IGMP Snooping Fast Leave, IGMP Snooping Querier
	Should support MLD Snooping, Able to create 250 or more MLD groups, Per VLAN MLD Snooping and require support for MLD Snooping Fast Leave.
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.
	Should support Spanning tree Root restriction
	Should support Loopback detection (LBD) to detect the loop created by a specific port.
	Should support Multicast Filtering to filters or forward all unregistered groups.
	Switch should support IEEE 802.1Q VLAN tagging for Ethernet frames.
	Different type of VLAN like Port based, Auto Surveillance, Auto Voice, Asymmetric Vlan etc. should be available for configuration.
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin.
	Port based ingress / egress rate limit function should be available with limit in increments as low as 16 Kbps.
	Switch should support Neighbour Discovery (ND) protocol for IPv6.
	Switch should support to create at least 4 IP interface
	Should support default routing and static routing with minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries.

	Support at least 700 access control entries. Each entry should be applied on single / multiple ports with permit / deny action.
	Should support port security to secures the access port based on MAC address.
	should have broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.
	Support Traffic Segmentation to restricted traffic flow from a single or group of ports, to another group of ports.
	Should have SSH and SSL for IPv4 and IPv6.
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan and TCP SYNFIN.
	Should support 802.1X port-based authentication.
	Should support ARP spoofing prevention.
	Should support DHCP snooping and DHCP server screening.
	Switch should be able to create a binding table for IP + MAC + Port to prevents a malicious user from spoofing or to restrict the unauthorized users.
	Should support 802.1X RADIUS and local server database authentication.
	Should have option to check the status of copper cables using the cable-diagnostics time domain reflectometer (TDR).
	Able to manage through Web-GUI, CLI and Telnet.
	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).
	Should have dual Image support to reduced down time for the switches.
	Switch should support dynamic host configuration protocol (DHCP) auto configuration of multiple switches through a boot server eases switch deployment.
	Should have SNTP/NTP protocol for time synchronization.
	Switch should be IPv6 Ready Compliance.
	Should support Link Layer Discovery Protocol (LLDP) and LLDP-MED.
	OEM Criteria
	Country of Origin: Non-MIC
	OEM/Switch/OS should have IEC 62443 or equivalent Cyber security standard compliance
	OEM/Bidder should have ISO 9001 Certification for Quality Management System, ISO 27001 Certification for Information Security Management System, ISO 45001 Certification Health and Safety Management System and ISO 14001 Certification for Environmental Management System.
	The offered model should be latest. End of Sale or Model going to be End of Sale in next 6 months should not be quoted.
	OEM should have L2 & L3 technical support (TAC) in India and Repair centre in Telangana, should have Service Center Registration Copy on OEM Name (Property Tax / Electricity Bill / Telephone Bill / Registration agreement) for Service Center in Telangana.

		All Switches and Modules from Same OEM for better interoperability
		Should submit MAF from OEM for authorization
		Preferred Make: CISCO, Juniper, D-Link
		Warranty & Technical Support
		Minimum 3 Years On-Site Warranty
	General Passive Specifications	All Copper & Fiber components should be from the same OEM.OEM should submit ISO 9001 and 14001 certificates for the manufacturing facilities related to all products involved in tender.
		All Passive Components should be RoHS (Restriction of Certain Hazardous Substances) compliant. Declaration for RoHS Compliance
		All the components should comply with their respective specifications stated below.
		OEM Should be present and registered in India from last 10 years and should have its own manufacturing unit in India (Documentary proof and incorporation certificate to be submitted along with the bid)
		OEM should submit the unpriced BOQ for offered products with its Model No/Part codes and country of origin
7.	Single Model SFP Module	Make. Model No / Product code
		1G Base LX (SM) Transceiver
		Form Factor: SFP. Duplex LC Connector, Hot Pluggable
		RoHS Compliant, CE, FCC, UL
		Distance Support: Min 10KM
		Transceivers from same OEM as switch
8.	LC LC 3 Mtr Fiber Patch Cord Armoured	Patch cord with LSZH jacket, F8 2.0x4.1 mm, yellow, single mode G652.D 9/125 μm (OS1, OS2)
		Mounted on both sides with LC-Duplex/LC-Duplex connectors in acc. with IEC 61754-20. Zirconia (ceramic) ferrule with a PC polished end face geometry
		connectors tuned in accordance with IEC 61755-3-1 and qualified in acc. with IEC 61753-1 for category U (uncontrolled environment)
		Cable Jacket Armor
		Blue connector housing (single mode)
		Blue duplex clip and white plastic dust cover
		Optical specifications (random mated): Performance acc. to IEC 61753-1 (Table A.12):
		Temperature range [°C : IEC 61300-2-22 -
		Storage: -25 up to +60 Installation: -10 up to + 50 Operation: -20 up to + 60
		Maximum tensile strength [mm]
		Installation :200
		Operation:100
		Minimum bending radius [mm]
		Installation: 50
		Operation: 25
		Vibration: 10-55Hz, 1 octave / min. 3 axis of 15 cycles, 0.5h / axis amplitude 0.75 mm
		Repeated bending [100 Cycles]; Cable: Load 5N (-90° / 0° / +90° / 0°C;
		Pigtail: Load 0.2N (-90° / 0° / +90° / 0°C)
		Insertion loss (IL) Grade B for 97% of the tested specimen: ≤ 0.25 dB / typical ≤ 0.12 dB

		Return loss (RL) Grade 2: ≥ 45 dB
		Mechanical specifications:
		Mating cycles: Δ IL < 0.2 dB after 500 mating cycles
		Pull-out force patch cord: ≥ 100 N (per connector)
		Optional: Visual coding, mechanical coding and lock protection.
		All Passive items should be same Brand/Make.
		Supplier Should submit MAF certificate from OEM.
9.	Field Mountable Plug FM45 Cat 6 connector	Field terminated RJ45 connector (IP 20/ IP 67)
		Termination of unshielded cable (UTP) (Indoor/Outdoor)
		Termination of shielded cable (STP)
		Approved for solid and stranded wire AWG 22 to AWG 26
		Optional visual colour coding clip
		Plug FM45 Cat.5e/Cat.6/Cat.6A
		Plastic housing with nut
		Copper foil
		Installation instructions
		Standards:
		ISO/IEC 11801-1 Ed 1.0 2017-11
		ANSI/TIA-568-C.2
		PoE (IEEE 802.3af), PoEP (IEEE 802.3at), 4PpoE (IEEE 802.3bt)
		T568A and T568B
		TIA/EIA Approved
		Climatic Data:
		Operation temperature: -20 °C to $+70$ °C / -4 °F to $+158$ °F
		Certifications:
		UL certified
		GL approved (Germanischer Lloyd, ship building)
10.	15U 600mm depth rack with Fan, Shelf, 6 Socket 5AMPS PDU	
	Rack Standard	Conforms to DIN 41494 or equivalent standard
	Front Door	Lockable Toughened Tinted Glass Door
	Basic Frame	CRCA steel
	Construction	Welded
	Equipment Mounting	DIN Standard Slots
	Mounting Angle	19" Mounting angles made of formed steel
	Top and Bottom Cover	Welded to Frame, Vented and Field Cable entry exit cut outs on Top & Bottom
	Static Load	40 KGS Or Above
	Width	Width: 550mm
	Depth	Depth: 450mm
	Power Distribution Units.	Power Distribution Units.: Should supply with 6 Socket 5Amp PDU with Spike Buster required
	1U Horizontal Cable Manager + Fan 01 nos + Hardware Accessories	Should supply along with 90 CFM fan+1U Horizontal Cable manager with Plastic loops+ hardware packet of 20 nos
		Standard Color: Grey (RAL 7035/7037)
	OEM Criteria	Manufacturer should have ISO 9001:2015 Certification for Quality Management System and ISO 14001:2015 Certification for Environmental Management System.
		Bidder should attach Authorization certificate from the OEM.
11.	27U 800x1000mm depth rack with Fan, Shelf, 6 Socket 5AMPS PDU	
	Rack Standard	Conforms to DIN 41494 or equivalent standard
	Front Door	Lockable Toughened Glass Door

	Rear Door	Metal Door-Vented
	Side Panels	Metal-Vented (Set of 2)
	Basic Frame	CRCA steel
	Construction	Welded
	Casters	set of 4
	Adjustable Levellers	set of 4
	Equipment Mounting	DIN Standard Slots
	Mounting Angle	19" Mounting angles made of formed steel
	Top and Bottom Cover	Welded to Frame, Vented and Field Cable entry exit cut outs on Top & Bottom
	Static Load	300 KGS Or Above
	Width	Width: 600mm
	Depth	Depth: 650mm
	Power Distribution Units.	Should supply along with Horizontal Power Distribution Unit with 6 x 5/15A sockets Round Pin, 230 Volts AC, 16 Amp with Plug
	1U Horizontal Cable Manager + Fan 02 nos + Hardware Accessories	Should supply along with FHU with 2 FAN 180CFM + 1U Horizontal Cable manager with Plastic loops+ hardware packet of 20 nos
	Standard Color	Black or Grey
	OEM Criteria	Manufacturer should have ISO 9001:2015 Certification for Quality Management System and ISO 14001:2015 Certification for Environmental Management System. Bidder should attach Authorization certificate from the OEM.
12.	Cat6 UTP Outdoor Double Jacketed Cable	Cat.6, UTP, 4P, Outdoor Cable
		Transmission frequency of 250 MHz (Minimum)
		Should be 4 pair with cross separator 23 AWG copper conductor
		Cable inner jacket material LSZH
		Cable outer jacket material PE
		Cable should be certified by UL
		Cable should support Applications ISO/IEC 11801 ed. 2.2; IEC 61156-5 2nd Ed.; EN 50173-1; EN 50288-6-1; EIA/TIA 568-C.2; Fire rating: IEC 60332-1; IEC 60754-2; IEC 61034;
		Cable jacket characteristics cable, metal-free
		Cable inner jacket characteristics zero-halogen
		Cable outer jacket characteristics flame-retardant, anti-termite
		Temperature range During operation -20°C...+ 90°C
		During installation 0°C...+ 50°C
		Bending radius ≥ 35 mm during operation (without load) ≥ 50mm during installation (with load)
		Cable overall diameter nominal value $\varnothing 7.3 \pm 0.3$ mm
		Conductor resistance $\leq 9.38 \Omega / 100$ m
		(at 20°C \pm 5°C) Resistance unbalance ≤ 5 %
		Test voltage DC, 1 min, core/core 1000 V
		Insulation resistance 500 V ≥ 5000 M Ω * km
		Mutual capacitance < 5.6 nF / 100 m
		Capacitance unbalance 330 pF / 100Mtrs; Mean characteristic impedance: $100 \pm 15 \Omega$
		Nominal velocity of propagation: Approx. 69%
		Delay skew ≤ 45 ns
		Color: Black
		Length (meter): 305
		NEXT: 38.3; Return Loss: 17.3; Insertion Loss: 32.8 @ 250MHz
		All Passive items should be same Brand/Make.

		Supplier Should submit MAF certificate from OEM.
13.	6 Core SM OFC Cable armoured	Cable should be direct burial, having Steel rod as a strength member, with 2 Rip cords as a Peripheral strength member, ECCS tape armoring work as a rodent protection with Single sheath of HDPE Layer. 1.8mm Black
		The cable should have identification marking at regular intervals of 1 meter which will be of permanent nature. The accuracy of the sequential marking will be within +/- 0.5%.
		Standards
		. IEC 60793-2-50 Category B.1.3; Telcordia GR-20
		• EN 60793-2-50: Class B1.3 EN 50 173-1: 2002, cat. OS1 + OS2
		• ITU Recommendation G.652.D; IEEE 802.3 - 2002 incl. 802.3ae.
		Physical Properties
		Tensile strength: 800 N & Crush Resistance: 2000 N
		Bending diameter (Dynamic):20XD
		Operation, Installation & Storage Temp. Range (-20°C to + 70°C)
		Outer Sheath HDPE Black 1.8mm (min) with ECCS Tape 0.150mm & Overall Cable Diameter: 8.3 ± 0.5 mm
		Attenuation
		1310 nm : < 0.36 dB/km and 1550 nm : < 0.23 dB/km
		Fiber properties
		Cladding diameter: 125+ 1 µm, Coating diameter: 245+10µm, Cut-off wavelength < 1260 nm Mode field diameter at 1310 nm: 9.2 ± 0.4 µm and at 1550 nm: 10.3 + 0.5 µm
		Polarization mode dispersion (PMD) coefficient, cabled (ps/√km): ≤ 0.5
		PMDQ Link Design Value (ps/√km): ≤ 0.2
		All Passive items should be same Brand/Make.
		Supplier Should submit MAF certificate from OEM.
14.	PVC Conduit medium class	All the PVC conduits should be FRLS shall be ISI marked, conduits and accessories should be of same make and shall be ISI marked. The conduits should be terminated at PVC/FRP/MS junction boxes with suitable glands/check nuts.
15.	Camera Back Box	PVC/FRP box
16.	Workstation	configuration 500W I7 14th Gen SKU INTEL i7-14700 20 Core 2.5 Ghz (Turbo Speed 5.4Ghz)/ 1x16GB DDR5 4800MHz nECC/ 512GB PCI NVMe SSD +1TB SATA /DVD-WR/Nvidia RTX T1000 with 4GB/ Win 11 Pro 64Bit /5-5-5 INTEL i7-14700 20 Core 2.5 Ghz (Turbo Speed 5.4Ghz) 28 Thread 33 MB cache / 1x16GB DDR5 4800MHz nECC/ 512GB PCI NVMe SSD +1TB SATA /DVD-WR/Nvidia RTX T1000 with 4GB With 3 mDP PortmDP to DP Adaptor/ Win 11 Pro 64Bit /5-5-5
17.	3KVA Online UPS with 30 min backup	UPS On-Line, 3kVA, Rackmount 2U, 230V, 3x India + 1x Hard wire 3-wire(1P+N+E) outlets, Intelligent Card Slot
	Mounting mode	Rack-mounted with kit
	USB compatible	Yes

	Input voltage limits	110...280 V half load 160...280 V full load
	Input protection type	Circuit breaker
	Output	
	Maximum configurable power in VA	3000 VA
	Maximum configurable power in W	2400 W
	Output frequency	50/60 Hz +/- 3 Hz sync to mains
	Harmonic distortion	3 %
	UPS type	Double conversion online
	Wave type	Sine wave
	Efficiency	90 % (full load)
	Additional information	Configurable for 220 : 230 or 240 nominal output voltage
	Bypass type	Internal bypass (automatic and manual)
	Crest factor	3 : 1
	Product certifications	BIS
	Ambient air temperature for operation	0...40 °C
	Relative humidity	0...95 % non-condensing
	IP degree of protection	IP20
	Battery type	External battery system
	Battery voltage	72 V
	Battery charger power	700 W rated
	Alarm	Alarm when on battery: distinctive low battery alarm : overload continuous tone alarm
	Emergency power off	Yes
	Control panel	Multifunction LCD status and control console
	Surge energy rate	600 J
	Mercury free	Yes
18.	600VA Online UPS	Back-UPS 600VA, 230V, 3 India outlets
	Main Input Voltage	230 V
	Rated power in W	360 W
	Rated power in VA	600 VA
	Output connection type	3 India 3-pin 6A
	Battery type	Lead-acid battery
	Battery voltage	12 V
	Battery power in VAH	53 VAh runtime
	USB compatible	No
	Input	
	Network frequency	45...65 Hz auto-sensing
	Input voltage limits	145...290 V
	Output	
	Maximum configurable power in W	360 W
	Output frequency	50 Hz sync to mains
	UPS type	Line interactive
	Wave type	Stepped approximation to a sinewave
	Full load runtime	360 W

	Maximum configurable power in VA	600 VA
	Transfer time	10 ms typical: 12 ms maximum
	Ambient air temperature for operation	0...40 °C
	Relative humidity	0...95 %
	Control panel	LED status display with online: on battery: replace battery and building wiring fault
	Alarm	Alarm when on battery: distinctive low battery alarm: overload continuous tone alarm
	Surge energy rate	255 J
19.	65" TV	
	Diagonal Size	Class: 65, Measured: 64.5
	Resolution	3,840 x 2,160 (16:9)
	Brightness (Typ.)	500 nit
	Orientation	Landscape/Portrait
	Haze	25%
	Contrast Ratio (Typ.)	4,000:1
	Type	VA
	Active Display Area	1,428.48 (H) x 803.5 2(V)
	Pixel Pitch (mm)	0.372 x 0.372
	Color Gamut	NTSC 72%
	Operation Hour	24/7
	Input	
	Video	DP 1.2 (1), HDMI 2.0 (3)
	Audio	N/A
	USB	USB 2.0 x 2
	Tuner	N/A
	Output	
	Video	N/A
	Audio	Stereo mini-Jack
	Wi Fi / BT	O/O
	External Control	RS232C (In/Out), RJ45
	Speaker	10W 2ch
	Bezel Width (mm)	11.5 (Even)
	Key	UHD Signage with Built-in MagicInfoS10, SSSP 10.0
	Internal Player	
	Operating System	Tizen 7.0
	Processor	CA73 1.6GHz Quad-Core
	Storage (FDM)	16GB (10GB should be available)
	H/W	2nd Gen. B2B Design Center IR Temperature Sensor Ambient Sensor Auto Level Wi-Fi (2.4/5.0GHz dual) & BT
		Signage New Home Workspace

	S/W	(Microsoft371/VMWare/RDP) Custom Home Auto Source Switching & Recovery Dicom Simulation Mode Director Mode SmartView+ Upgradable Web-Engine Tizen Enterprise Platform Video Conference Solution Smart Calibration
	Safety	60950-1/62368-1
	EMC	Class B
	IP Rating	IP5x
	Security	802.1 x (WPA2 Enterprise) : EAP-TLS, EAP-TTLS, EAP-PEAP
	Power Supply	AC 100 - 240 V, 50/60 Hz
	Temperature	0°C~ 40°C
	Relative Humidity	10~80%
20.	Fibre Joint Enclosure (IP 68 rated)	It shall be a butt type enclosure with a dome and base (IP 68 rated)

Approved Makes List

Material/Item	Approved Makes
Dome camera	Honeywell Model No.HC35WER3 /Bosch/ Axis/ Pelco/Panasonic/Hanwha Techwin (Approved Equivalent Models)/
Bullet camera	Honeywell Model No. HC35WB3R3/Bosch/Axis/ Pelco/Panasonic/Hanwha Techwin (Approved Equivalent Models)
64 CH 8 SATA NVR	Honeywell Model No.HN35640800NR/Bosch/ Axis/ Pelco/Panasonic/Hanwha Techwin(Approved Equivalent Models)
UPS	APC/Vertiv/Socomec
TV	Sony/Samsung/LG
SATA HDD	Seagate Model: ST10000VE001/WD/HP(Approved Equivalent models)
Fibre Switch	D Link Model : DGS-3630-28SC /HP-Aruba/Cisco/Allied-Telesis(Approved Equivalent models)
Fiber Patch Cord	R&M/CommScope/BELDEN/Panduit
RJ45/FM45 Plug connectors	R&M/CommScope/ BELDEN/Panduit
Network Racks	NetRack/Panduit/RITTAL/APW-VERO
CAT6/CAT6A cable	R&M/CommScope/ BELDEN/Panduit
OFC Cable SM/MM	R&M/CommScope/ BELDEN/Panduit
Workstation	HP/DELL/Lenovo
HDMI cable	Honeywell/NT/Cadyce
PVC conduit (FRLS) & Accessories (ISI approved)	Precision/AKG/BEC/Polycab

Note: Any other item if not specified in the NIT then the same has to be got approved from the Engineer In charge (EIC) before any procurement on site. The contractor shall also take prior TDS and sample approval from the Engineer-in-Charge before any procurement of material at site.

ANNEXURES

ANNEXURE-I

On non-judicial stamp paper of minimum Rs. 100

Guarantee offered by Bank to IITH in connection with the execution of contracts) Form of Bank Guarantee for Earnest Money Deposit /Performance Guarantee/Security Deposit/Mobilization Advance/ Refund of milestone with held amount

1. Whereas the Executive Engineer (name of division)....., IITH on behalf of the President of India (hereinafter called "The Government") has invited bids under (NIT number)..... dated for (name of work)..... The Government has further agreed to accept irrevocable Bank Guarantee for Rs. (Rupees only) valid up to (date)*...as Earnest Money Deposit from (Name and address of contractor) (hereinafter called "the contractor") for compliance of his obligations in accordance with the terms and conditions of the said NIT.

OR**

Whereas the Executive Engineer (name of division)....., IITH on behalf of the President of India (hereinafter called "The Government") has entered into an agreement bearing number with (name and address of the contractor)..... (hereinafter called "the Contractor") for execution of work (name of work) The Government has further agreed to accept an irrevocable Bank Guarantee for Rs. (Rupees only) valid upto (date)..... as Performance Guarantee/Security Deposit/Mobilization Advance/Refund of mile stone withheld amount from the said Contractor for compliance of his obligations in accordance with the terms and conditions of the agreement.

2. We, (indicate the name of the bank)..... (herein after referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs. (Rupees.....only) on demand by the Government within 10 days of the demand.

3. We, (indicate the name of the Bank)....., do here by undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees..... only).

4. We, (indicate the name of the Bank)....., further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending On non-judicial stamp paper of minimum Rs. 100 before any Court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.

5. We, (indicate the name of the Bank)..... , further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. We, (indicate the name of the Bank)....., further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, (indicate the name of the Bank)....., undertake not to revoke this guarantee except with the consent of the Government in writing.
9. This Bank Guarantee shall be valid up to..... unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs..... (Rupees.....only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date

Witnesses:

1. Signature.....

Authorized signatory

Name and address

Name

Designation Staff code no.

2. Signature

Bank seal

Name and address

* Date to be worked out on the basis of validity period of 90 days where only financial bids are invited and 180 days for two/three bid system from the date of submission of tender.

**In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for performance guarantee/security deposit/mobilization advance/Refund of mile stone withheld amount, as the case may be.

ANNEXURE-II

INDEMNITY BOND (VIOLATION OF LAWS, NORMS, ACCIDENTS, DAMAGES ETC)
(On Non-Judicial Stamp Paper of Rs.100/-only)

Name of work:

KNOW all men by these presents that I/We _____ (Name of Contractor with address) do hereby execute Indemnity Bond in favour of Indian Institute of Technology (IIT) Hyderabad having their office at Kandi, Sangareddy-502284, Telangana, India and for the project IIT Hyderabad under consideration.

On this day of2025

THIS DEED WITNESSETH AS FOLLOWS:

I/We, (Name of Contractor) hereby do indemnify and save harmless IITH having their office at Kandi-502284, Sangareddy, Telangana, India from the following: -

1. Any third party claims, civil or criminal complaints/liabilities/material/life loss during site mishaps and other accidents such as snake bites etc or disputes and/or damages occurring or arising out of any mishaps at the site due to faulty work, negligence, faulty construction and/or for violating any law, rules and regulations in force, for the time being while executing/executed civil works by me/us.
2. Any damages, loss or expenses due to or resulting from any negligence or breach of duty on the part of me/us or any sub-Contractor/s if any, servants or agents.
3. Any claims by an employee of mine/ours or of sub-Contractors if any, under the workman compensation act and employers' Liability act, 1939 or any other law rules and regulations in force for the time being and any acts replacing and/or amending the same or any of the same as may be in force at the time and under any law in respect of injuries to persons or property arising out of and in the course of execution of the Contract work and/or arising out of and in the course of employment of any workman/employee.
4. Any act or omission of mine/ours or sub-Contractor/s if any, our/their servants or agent which may involve any loss, damage, liability, civil or criminal action.

IN WITNESS WHEREOF THE HAS SET HIS/THEIR HANDS ON THIS DAY OF SIGNED AND DELIVERED BY THE AFORESAID IN THE PRESENCE OF WITNESSES:

- 1.
- 2.

ANNEXURE-III

Proforma for Authorization certificate from Approved OEM

REF.No. _____

Dated _____

To,
The Executive Engineer-Electrical,
Indian Institute of Technology (IIT) Hyderabad
Kandi-502284, Sangareddy, Telangana, India

Dear Sir,

We _____ who are established and reputable manufacturers/Technology Providers of _____ having factory/ factories at _____ (*address of factory*) do hereby authorize M/s _____ (*Name and address of bidder*) to submit a bid, negotiate and receive the order from you against your Tender enquiry no. IITH/CMD/ELE/NIT/2024-25/ 28 for the work of

Name of Work:

We ensure that we shall support/ facilitate the M/s _____ on regular basis with technology/product updates for up-gradation / maintenance/repairing/servicing of the CCTV at IIT Hyderabad (if awarded) as per the terms and conditions mentioned in this tender document on direct payment basis from the successful bidder.

We hereby extend our full guarantee for the services offered by the above firm.

Yours faithfully,

(Name of authorised signatory with signature)

(Name of manufacturer with stamp)

Note: This letter of authority should be on the letter-head of the OEM and should be signed by an authorized person. It should be enclosed by the Bidder with the tender documents.