



अखिल भारतीय आयुर्विज्ञान संस्थान,
All India Institute of Medical Sciences
Engineering Branch, Bhubaneswar (Odisha)-751019
www.aiimsbhubaneswar.edu.in

NOTICE INVITING e-TENDER

N.I.T. No.	AIIMS/BBSR/ENGG/ELECT/20/2026
Name Of Work:	SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.
Estimated Cost:	₹ 67,90,262.00
Earnest Money:	@ 2% of Estimated Value
Performance Guarantee:	@ 5% of the Estimated cost put to tender (ECPT) or contract amount whichever is higher. In case quoted amount is lesser than 80% of ECPT, the bidder shall be required to submit Additional Performance Guarantee (APG) equivalent to the difference between the 80% amount of the ECPT and quoted amount.
Security Deposit:	@ 2.5% of Contract Value
Contract Period:	3 Months
Type of work:	Electrical Work
Tender issue date:	10-07-2026
Last Date & Time of Submission of Tender:	20-07-2026 by 18:00hrs
Last Date & Time of Submission of Tender hard copy :	21-07-2026 by 17:00hrs

**Executive Engineer (Elect.)
AIIMS, Bhubaneswar**

Government of India, Ministry of Health & Family Welfare, AIIMS, Bhubaneswar

Name of Work	:	SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.
NIT No.	:	AIIMS/BBSR/ENGG/ELECT/20/2026

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NOTICE INVITING TENDER(NIT) for e-tender

TENDER NOTICE NO : AIIMS/BBSR/ENGG/ELECT/20/2026

The Executive Engineer (Elect.), AIIMS, Bhubaneswar, (Phone - 0674 2476083, Email - eeel@aiimsbhubaneswar.edu.in) invites on behalf of Executive Director, AIIMS, Bhubaneswar, Percentage Rate Tender in Two (02) Bid system (Technical cum Eligibility & Financial respectively) from eligible Agency of CPWD, MES, AIIMS, central Govt., State Govt., Central PSU, State PSU or any agency having successfully completed works of similar nature as per eligibility criteria for the following work: -

1. Brief details of work and step of Tendering :

a)	NIT No.	AIIMS/BBSR/ENGG/ELECT/20/2026
b)	Name of Work	SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.
c)	Work Location(s) & Pin Code (s)	All India Institute of Medical Sciences, Bhubaneswar- 751019
d)	Work/Product . Category	ELECTRICAL WORKS
e)	Tender inviting Authority	Executive Engineer (Elect.)
f)	Inviting Officer' Address	Executive Engineer (Elect.) , All India Institute of Medical Sciences, Bhubaneswar - 751019
g)	Estimated Cost	₹ 67,90,262.00 (Rupees Sixty-seven lakh Ninety Thousand Two Hundred Sixty-two only)
h)	Earnest Money	@ 2% of Estimated Value
i)	Cost of Tender Document	Nil.
j)	Tender Processing Fee	Nil.
k)	Period of Completion	3 Months
l)	Dates of availability of Tender Documents for download .	10-07-2026 on website https://eprocure.gov.in/eprocure/app . Detailed NIT is also available on website All India Institute of Medical Sciences, Bhubaneswar (aiimsbhubaneswar.nic.in) for view only.
m)	Start date and time of online Submission of tenders	10-07-2026
n)	Last date and time of online submission of Technical Bid and Financial Bid	20-07-2026 by 18:00hrs
o)	Last date for receiving Hard Copies of Original Documents (1) EMD, (2) Technical Bid eligibility document stamped in each page (3) NIT document stamped in each page	21-07-2026 by 17.00 Hours (Address for sending hard copy) Executive Engineer (Electrical) Office Room No. – 336, 3rd Floor, Academic Building All India Institute of Medical Sciences Sijua, Dumuduma, Bhubaneswar, Odisha - 751019 (In case the last day happens to be closed holiday, these Documents shall be

		submitted on the next working day failing which technical Bid will not be considered for Evaluation.)
p)	Time and date of opening of Tender (Technical Bid)	22-07-2026 on 11.00 Hours
q)	Time and date of opening of Online Financial Bids	Shall be informed to the Technically qualified Bidders.
r)	Bid Opening Place	All India Institute of Medical Sciences, Bhubaneswar- 751019
s)	Validity of Tender (in Days)	180 (One Hundred Eighty Days)

2.0 Eligibility Criteria for participation in tendering

1. Banker's certificate from a Commercial Bank or Net worth Certificate:

Banker's certificate of the amount equal to 40% (Rs.27,16,105.00) of the estimated cost put to tender (ECPT) not more than 1 year old from date of publication of the tender

OR

Networth certificate of minimum 10% (Rs.6,79,026.00) of the estimated cost put to tender (ECPT) issued by certified Chartered Accountant with UDIN not more than 1 year old from date of publication of the tender.

2. Average Annual Financial Turnover should be at least 30% of the estimated cost (Not less than ₹ 20,37,078.00), during the immediate last 3 consecutive financial years, ending 31st march 2025. This should be duly audited by a registered Chartered Accountant. 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.
3. The bidder should not have incurred any loss in **more than two (02) years during last five (05) consecutive years** ending 31st March , 2025 , duly certified by Chartered Accountant
4. Contractor /Agency who fulfilled the following requirement shall be eligible to apply . Joint venture is not accepted.
5. The bidder should have satisfactorily completed the works as mentioned below during the last seven (7) years ending on the previous day of last date of submission of bid .

i. one (01) similar work each costing not less than ₹ 54,32,210.00

OR

ii. Two (02) similar works each costing not less than ₹ 40,74,157.00

OR

iii. Three (03) similar works each costing not less than ₹ 27,16,105.00

Similar work means "SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN / FIRE HYDRANT/FIRE SPRINKLER /FIRE ALARM & DETECTION SYSTEM". The value of executed works shall be brought to current costing level by enhancing the actual value of the work at simple rate of 7% per annum; calculated from the date of completion to previous day of last date of submission of bid. The work experience submitted by the agency must be from any Govt organisation/PSU/State Govt.

7. Agreements shall be drawn with the successful bidders for item/items on prescribed format. Bidders shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.

8. The bid document consists of plans, specifications, the schedule of quantities of the various type of items to be executed and the set of terms & conditions of the contract to be complied with and CPWD GCC for construction work -2023 amended upto date .

9. Conditional Bids shall not be considered and will be out-rightly rejected at the very first instance.

10. The intending bidder must read the terms and conditions of Tender document carefully. He should submit his bid if he considers himself eligible and he is in possession of all the certificates / documents required.

11. Information and Instructions for bidders for e-tendering posted on website shall form part of bid document.

12. The bid document consisting of NIT, plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from <https://eprocure.gov.in> or www.aiimsbhubaneswar.nic.in free of cost.

13. Copies of eligibility documents and EMD as specified in the notice inviting tender shall be scanned and uploaded on the e-tendering website within the period of tender submission. Bidders can upload documents in the form of JPG format, PDF format and any other format as permissible by the e-tendering portal.

14. Bidders must ensure to quote rate of each item. The column meant for quoting rate in figures appears in dark yellow colour and the moment rate is entered, it turns sky blue. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO). After submission of the bid online the Agency can re-submit revised bid any number of times but before last time and date of submission of bid as notified.

15. After submission of bid online, it can be revised any number of times before specified time on last date of submission of bid. While submitting the revised bid, bidder can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.

16. Financial bids shall be opened online only for bidders for whom EMD and other documents are found in order and who are found to be eligible to bid for work. On opening date, the bidder can login and see the bid opening process. After opening of bids, he will receive the competitor bid sheets.

17. If the Agency is found ineligible after opening of bids, his bid shall become invalid.

18. The department reserves the right to reject any prospective Bid without assigning any reason and to restrict the list of qualified agencies to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.

**Executive Engineer (Elect.)
AIIMS, Bhubaneswar**

GENERAL RULES & DIRECTIONS OF CONTRACT

Name of Work: Tender for “SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.”

1. **Preparation & Submission of Tender through Online.** The Tender should be submitted in 02 (Two) parts i.e. Technical Bid and Financial Bid Respectively. The Bid shall be submitted by the Bidder through online for “SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.”
2. ***The Bidders shall have to submit original documents for Original Earnest Money Deposit and self-certified copies of all the scanned and uploaded documents before the date and time of opening of tender at Executive Engineer(Electrical) office 3rd floor Academic Block AIIMS Bhubaneswar.***
3. **List of Documents to be scanned and uploaded within the period of bid submission.**
 - (a) Earnest Money Deposit in Favour of “All India Institute of Medical Sciences, Bhubaneswar”.
 - (b) Certificates of Work Experience or Work Completion Certificate along with Work orders (clearly mentioning the BOQ) issued by the officer of the rank not below Executive Engineer.
 - (c) Certificate of Registration for GST and acknowledgment of up-to-date filed return if required.
 - (d) Copy of PAN card
 - (e) Banker certificate/Net worth certificate.
 - (f) The Bidder should have their Registered Office/Branch in Bhubaneswar. If not, an Office should be opened in Bhubaneswar within 30 (Thirty) Days of the award of Work. Details of Address Proof of Office located at Bhubaneswar should be given to EE(Elect).
 - (g) Declarations to be given by the Tenders.
 - (h) Profit/Loss: The bidder should not have incurred any loss (Profit after Tax should be positive) in more than two years during available the last five consecutive balance sheet, duly audited and certified by Chartered Accountant.
 - (i) Each page of the e-tender documents should be duly signed with seal otherwise the bid shall become invalid.
 - (j) **Affidavit as per Annexure – I**
 - (k) ***Scanned copy of original banker certificate/Net worth certificate to be uploaded.***
 - (l) Tender Document in PDF format.
4. **The bid submitted become invalid, if any discrepancy is noticed between the eligibility documents (as per Sl. No 03 para ‘a’ to ‘o’) as uploaded at the time of submission of bid.**
5. The intending bidder must read the terms and conditions of CPWD -7 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
6. **(a) Earnest Money Deposit.** The bidder shall be required to submit the Earnest Money Deposit in the form of Fixed Deposit Receipt/Demand Draft/BG from any Nationalized/Schedule Bank duly pledged in the name of the "All India Institute of Medical Sciences, Bhubaneswar". Bids received without submitting of EMD will be rejected.
7. No exemption from submitting EMD will be applicable to MSME firms for this work.
8. **Performance Guarantee.**

The successful Agency will be required to furnish a Performance guarantee of 05% (Five Percent) of Contract Value or estimated cost put to tender (ECPT) whichever is higher. **In case quoted amount is lesser than 80% of estimated cost put to tender (ECPT), the bidder shall be required to submit Additional Performance Guarantee (APG) equivalent to the difference between the 80% amount of the ECPT and quoted amount** in the form of DD/Fixed Deposit Receipt or Bank Guarantee from any Nationalized/Schedule Bank duly pledged in the name of the "**All India Institute of Medical Sciences, Bhubaneswar**" which shall be kept valid for a period of 180 days beyond all contractual obligations as per GCC. In case the time for completion of work gates enlarged, the contractor shall get the validity of performance guarantee extended to cover such enlarged time for completion of the work

After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, 50% of Performance Guarantee shall be retained as Security Deposit during the entire AMC/CMC/Warranty period. The same shall be returned year wise proportionately.

- (a) The security deposit or Performance guarantee or both can be forfeited by order of this Institute in the event of any breach or negligence or non-observance of any condition of contract or for unsatisfactory performance or non-observance of any condition of the contract. Performance guarantee will be discharged after completion of all contractual obligations. In case the Agency fails to deposit the said performance guarantee within the period including the extended period if any, the Earnest Money deposited by the Agency shall be forfeited automatically without any notice to the Agency. The earnest money deposited along with tender shall be returned after receiving the aforesaid performance guarantee.
9. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids, the means of access to the site and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder 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 bidders 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 bid by a bidder 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.
10. The Tender paper/documents can be seen/downloaded from Official website & submitted through on line. For any query, Executive Engineer, Electrical, Phone: **0674 2476083** AIIMS, Bhubaneswar, may be contacted.
11. The Executive Director, AIIMS, Bhubaneswar does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
12. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the agency who resort to canvassing will be liable to rejection.

13. The Executive Director, AIIMS, Bhubaneswar reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
14. The Agency shall not be permitted to bid for works in the AIIMS, Bhubaneswar responsible for award and execution of contracts, in which his near relative is posted as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazette officer in the AIIMS, Bhubaneswar. Any breach of this condition by the Agency would render him liable to be removed from the approved list of Agency of this Department.
15. No Engineer of Gazetted 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 Agency for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the Agency 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 bid or engagement in the Agency's service.
16. **The bid for the works shall remain open for acceptance for a period of 180 days from the date of opening of bids.**
17. This notice inviting bid shall form a part of the contract document. The successful bidder/ Agency, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of "The Notice Inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and rate quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
18.
 - (a) The quoted Rates shall be inclusive of GST.
 - (b) Security Deposit equal to 2.5% of the Contract Value will be deducted from the Bills of the Agency.
 - (c) The Income Tax as applicable shall be deducted from the Bill unless exempted by the Income Tax Department.
 - (d) Applicable labour cess will be deducted from each running bill and the final bill.
19. **Goods and Services Tax (GST).**
 - (a) **GENERAL REMARKS ON TAXES & DUTIES:** In view of GST Implementation from 1st July 2017, all taxes and duties including Excise Duty, CST/VAT, Service tax Entry Tax and other indirect taxes and duties have been submerged in GST. Accordingly, reference of Excise Duty, service Tax, VAT, Sales Tax, Entry or any other form of indirect Tax except of GST mentioned in the bidding document shall be ignored.
 - (b) Bidders are required to submit copy of the GST Registration certificated while submitting the bids wherever GST (CGST & SGST/UTGST or IGST) is applicable.
 - (c) "GST shall mean Goods and services Tax charged on the supply of material(s) and services. The term 'GST' shall be construed to include the integrated Goods and Services Tax (Hereinafter referred to as "IGST") or central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and services Tax (Hereafter referred to as "SGST") or union Territory Goods and services Tax (hereinafter referred to as "UTGST").

- (d) Quoted price/rate(s) should be inclusive of all taxes and duties, including GST (i.e. IGST or CGST and SGST /UTGST applicable in case of interstate supply or intra state supply respectively and cess on GST if applicable) on the final service. Please note that the responsibility of payment of GST (CGST & SGST or IGST or UTGST) lies with the supplier of Goods/services (service provider) only. Supplier of Goods/Service (Service provider) providing taxable service shall issue an invoice/Bill, as the case may be as per rules/regulation of GST. Further, returns and details required to be filled under GST laws & rules should be timely filed by supplier of Goods /services (Service provider) with requisite details.
- (e) The Agency(s) must submit GST Challan copy in original duly signed with stamp of firm, against each bill and before releasing Security Deposit (SD) .

20. **FRAUD AND CORRUPTION:**

19.1 The Engineer-in-Charge will reject a proposal for award if he determines that the bidder recommended for award has been engaged in corrupt or fraudulent practices in competing for the contract in question. He will report to the Officer Inviting Bid / next higher authority.

19.2 Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited & the tenders submitted by the agency who resort to canvassing will be liable for rejection.

19.3 The Agency shall be debarred for 1 year from participating in tenders of AIIMS, Bhubaneswar and the entire EMD amount will be forfeited by AIIMS, Bhubaneswar for the following reason-.

- (i) If the Agency submits false experience/completion certificates, **as mentioned in Sl. No. - 1 Page No. - 5 (refer under Eligibility Criteria)**. The department reserves the right to verify the particulars furnished by the applicant independently.
- (ii) If the Agency fails to commence the work on or before the scheduled date stated in the work order.
- (iii) Violates any important condition of contract.

21. Information & Instruction for Agency will form Part of NIT.

**Executive Engineer (Elect.)
AIIMS Bhubaneswar**

GENERAL CONDITIONS FOR CONTRACT

“SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.”

1. Prices quoted should be valid for the contract period from the date of opening of your offer. The prices quoted should be for the entire scope of work.

2. **Rates-** The prices quoted shall be inclusive of GST. Amount paid to the statutory authorities by the Agency shall be reimbursed on actual basis throughout the contract period on submission of the documentary evidence in the final bill.

3. Terms of Payment: -

3.1 Bill Payment:

The payments for the work shall be released by AIIMS, Bhubaneswar in following manner:-

- i. 60 % of amount will be released after Supply of Materials.
- ii. 40 % of amount will be released after installation testing and commissioning.

3.2 The Security Deposit @ 2.5% of gross amount of the bill shall be deducted from the bills, which shall be released after successful completion of warranty Period i.e. two year from the date of completion of work, without any interest thereupon.

3.3 The Following documents as applicable shall be produced and self-attested photo copy shall be submitted by the Agency during each running bills:

- (i) Delivery Challan of all the material supplied.
- (ii) Test Certificate of Equipment.
- (iii) Bank Account details/ e-payment details of the vendor.
- (iv) Warranty/Guarantee Certificate if applicable.
- (v) GST return up-to-date Voucher.
- (vi) Work Completion Certificate (Final bill)
- (vii) Noclain certificate (Final bill)

4 Transport

4.1) The transport required within the complex for carrying items inside the AIIMS complex for supply of materials, repairing work etc. shall be arranged by the Agency. The Agency may however seek the help of department to take permission to take replacement items outside the AIIMS, Bhubaneswar complex which is beared by the agency.

4.2) Agency's materials, transport, etc. shall normally be permitted to go out of the area between 9.00hrs.to 18.00hrs only. Agency may also be allowed to carry out the work beyond office hours (day and night) with special permission from the Executive Director AIIMS, Bhubaneswar. However, no movement of materials and transport out of site of works shall be permitted during night or during holidays unless special permission obtained from the Executive Director, AIIMS, Bhubaneswar.

5 Antecedents

The Agency shall employ only Indian Nationals as his representatives, work men and verify their antecedents and loyalty before employing them on the works. He shall ensure that no person of notorious antecedents and nationality is in anyway associated with the works and if for reasons of technical collaboration or other consideration, the employment of any foreign national is unavoidable, the Agency shall furnish full particulars to this effect to the accepting officer at the time of submission of tender. The Executive Director, AIIMS, Bhubaneswar shall

have full powers and without giving any reasons to the Agency immediately cease to employ in connection with this contract, any representative agency, servant and workman or employee whose continuous employment in his opinion is undesirable. The Agency shall not be allowed any compensation on this account.

6 **Penalty Clause:**

6.2 In case of any failure of / delay in services the penalty shall be invoked as per Clause-2 of GCC of CPWD works-2023, by the authority as per schedule F.

6.3 All melba/rubbish/waste, garbage etc generated due to any operation and maintenance work, the same shall be disposed of by the Agency to the authorized municipal dumping ground and nothing extra shall paid on this account. In case of non-removal/disposal in the specified period, a compensation of ₹ 1000/- (Rupee One Thousand only) per day shall be recovered from the Agency.

6.4 The Agency shall maintain the installations clean and tidy inside as well as around the installations and buildings. No rags and waste etc. shall be thrown near the building. This shall be deposited in the dustbins provided nearby. If Substation area mention in the scope is found untidy a lump sum amount (**Rs. 1000/- per day**) will be deducted from the Agency's bill.

7 The work shall be governed by CPWD GCC for construction work-2023 amended upto date.

8 The Executive Director, AIIMS, Bhubaneswar or any one or more officers authorized by him shall have the right to visit Agency/sub Agency premises to check the physical progress of work, inspection, testing etc. of the contract items or any part thereof at any time during all stages of operation & maintenance. The Agency shall extend all necessary facilities for carrying out such inspection and check of progress of work.

9 **Specifications and Standards**

The work shall be carried out as per CPWD general specifications for fire work and electrical works and relevant Indian standard specification, National Electrical codes including provisions of these specifications. In the event of any conflict between the provisions/clause for a particular item in the above-mentioned rules and specifications the most suited clause based on requirement shall be applicable.

10 It is the responsibility of the successful tenderer to hand over the entire system to the Executive Director, AIIMS, Bhubaneswar on completion of the warrenty period. Any damages/replacement etc. should be done at free of cost with the knowledge of the Executive Director, AIIMS, Bhubaneswar. The final taking over will be done after detailed joint inspection by the Executive Director, AIIMS, Bhubaneswar/ or his authorized representative and the Agency on completion of the warrenty period.

11 The price offered by the Agency shall include the charges for any minor job of maintenance which are obviously fairly intended and which may not have been referred to in these documents but are essential for this work. In case of difference of opinion as to whether or not a certain item of work constitutes minor details of maintenance or not included in agency prices, the decision of Executive Director, AIIMS, Bhubaneswar shall be final and binding.

12 **Risk Purchases:**

The cost of repairs/rectification's necessitated due to negligence of Agency's employee shall be recovered from the Agency as per assessment made by the Executive Director, AIIMS, Bhubaneswar. If the Agency fails to repair/rectify the defects in installations within the time given to him, the same will

be got repaired/rectified from other agency at the risk and cost of the Agency. The decision of Executive Director, AIIMS, Bhubaneswar shall be final and binding on both the parties.

13 **Breach of Terms and Conditions.**

Noncompliance of any terms and conditions enumerated in the contract shall be treated as breach of contract. Case in Case of breach of any terms and conditions as mentioned above, the Competent Authority, will have the right to reject the bid at any stage without assigning any reason thereof and nothing will be payable by AIIMS, Bhubaneswar in that event the EMD shall also stands for feited.

14 **Termination of Contract.**

AIIMS, Bhubaneswar has the right to terminate the contract, in case the work performance is not up to the standard, or in case there is any violation of the contract. The decision of Engineering- In-charge is final and binding in this regard.

15 **Arbitration.**

The Arbitration shall be held in accordance with the provision of the Arbitration and conciliations Act, 1996 and the venue of arbitration shall be at Bhubaneswar. The decision of the Arbitrator shall be final and binding on the both parties.

16 **Dispute Settlement.**

It is mutually agreed that all differences and disputes arising out of or in connection with this agreement shall be settled by mutual discussions and negotiations if such disputes and differences cannot be settled and resolved by discussions and negotiations then same shall be referred to the sole Arbitrator appointed by the Executive Director, AIIMS, BHUBANESWAR whose decision shall be final and binding on both the parties. The contract shall be governed by laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/ processing.

17 GST and other Taxes as applicable shall be recovered/ paid from the Agency's bill as per Govt. of India/AIIMS Rules.

18 Payment shall be made on after successful completion of work and due Certification of the Bills by the AE & Representative of Engineer-in-Charge.

**Executive Engineer (Elect.)
AIIMS Bhubaneswar**

ADDITIONAL CONDITIONS FOR WORKS

A. GENERAL CONDITIONS

1. **SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.**
2. For all items of Electrical, CPWD specifications with correction slips up to the date of receipt of tender shall be followed. For the items which are not covered under CPWD specifications; the special conditions /B.I.S. specifications shall be applied. In this regard the decision of Engineer-in- charge shall be final & binding.
3. Wherever any reference is made of any Indian Standard, it shall be taken as reference to the latest edition with all amendments / revision issued thereto up to the date of receipt of tenders.
4. Unless otherwise specified, the agreement rates for all items of work in the schedule of quantities are for all heights, depths, leads and lifts involved in the execution of work.
5. Other agencies working at site will also simultaneously execute the work entrusted to them and the Agency shall offer necessary co-operation wherever required to other agencies.
6. On account of security consideration, there could be some restrictions on the working hours, movement of vehicles for transportation of materials. The contractor shall be bound to follow all such restrictions and adjust the program for execution accordingly, for which nothing extra shall be paid.
7. The work shall be carried out in a manner complying in all respects with the requirements of relevant by laws of the local bodies, Labour Laws, minimum wages act, workmen compensation act and other statutory laws enacted by Central Govt. as well as State Govt.
8. No residential accommodation shall be provided to any of the staff engaged by the Agency. The Agency shall not be allowed to erect any temporary set up for staff in the campus.
9. No claims of the labours shall be entertained by the Department including that of providing employment, regularization of services etc.
10. The Agency shall have registration with Employee's Provident Fund commission and Employee's state Insurance Corporation for safe guarding interest of his workmen. He shall obtain all other necessary approvals from statutory bodies as per law in vogue.
11. Staff employed by the Agency should be well behaved, polite & courteous. Any complaint against staff on behaviour should be taken very seriously and such staff should be removed by the Agency immediately from the site with replacement of a suitable candidate.
12. All dismantled material will be removed from site by Agency after duly verification and measurement of the same by JE/AE and EE.
13. The Agency shall make all safety arrangements required for the labour engaged by him at his own cost. All consequences due to negligence or due to lapse of security/safety or otherwise, shall remain with the Agency. The department shall not be responsible for any mishap, injury, accident or death of the Agency's staff. No claim in this regard shall be entertained / accepted by the department. Also, Agency is responsible to the damage caused to any man/material other than his team during execution, and AIIMS will not be responsible for that.
14. Agency shall be fully responsible for any damages caused to govt. property by his or his labour in carrying out the work and shall be rectified by the Agency at his own cost.
15. GST and other Taxes as applicable shall be recovered/paid from the Agency's bill as per Govt. of India/AIIMS Rules.

16. In the case of discrepancy between the schedule of quantities, the Specifications and/or the Drawings, the following order of preference shall be observed: -
 - (a) Description of schedule of quantities.
 - (b) Additional specifications and special conditions, if any.
 - (c) Contract clauses of general conditions of contract for central P.W.D. works.
 - (d) Architectural drawings.
 - (e) Indian standards specifications/BIS. Any reference made to any Indian standards specifications in these documents, shall imply to the latest version of that standard, including such revisions/amendments as issued by the Bureau of Indian Standards up to last date of receipt of tenders. The Agency shall keep all such publications of relevant Indian Standards applicable to the worksite at his own cost.
17. The agency shall restore back the premises and other articles provided by the department to the department at the time of closure of the contract.
18. No permanently /temporary huts /structures shall be constructed by the Agency at the site of work or at any government land/premises. Such structures, if any, found at the site or at AIIMS Bhubaneswar land shall be demolished and removed at the cost of the agency without any notice.
19. Any damage to the building structure, fittings or any other articles etc. done by the Agency on his workman during the execution of the work shall be made good by the Agency at his own cost.
20. The Agency shall clear the site property after the completion of the work.
21. Major/Minor complaint shall be decided by the EE/Engineer-in-charge or AE/his representative. The decision of Engineer-In-charge shall be final & binding.
22. Payment shall be made on after successful completion of work and due Certification of the Bills by the Representative of Engineer-in-Charge.
23. The Agency shall have to provide Drinking water at the site.

B. SPECIAL CONDITIONS

1. Any facility not mentioned in this scope, but which is vital “**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.**” are assumed to be included in the scope of work.
2. Agency has to ensure safety and provide adequate supervision/precautions during the work.
3. During working at site, any Rule/restrictions may be imposed by Engineer-in-Charge/Security staff of Corporation or Local Authorities regarding safety and security etc., the Agency shall be bound to follow all such restrictions/instruction & nothing extra shall be payable on this account & no claim for delay on this account shall be entertained.
4. **The tender shall be based on Conditions of Contract and tenderers are required to quote their % rates against BOQ item in schedule of quantities, which is enclosed. All rates shall remain firm for the contract period/extended contract period.**
5. If the Agency fails to proceed with the work within the stipulated time as specified from the date of issue of letter of intent/letter to proceed with the work, the Department shall forfeit the earnest money deposited by him along with the tender.
6. All the works to be carried out in accordance with latest CPWD/BIS Specifications and as per

7. the directions of Engineer-in-charge.

8. **Packing:** The supplier shall provide such packing of the goods, as is required to prevent their damages or deterioration during the transit to their final destination as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit.

9. DRAWING AND SPECIFICATIONS

Before commencement of production of the required material, the drawing and specification should be approved by Engineer in Charge. A copy of tender documents and all relevant drawings and specifications viz. Indian standards, latest CPWD specifications etc. shall be made available at site if & when asked for reference.

9. COST OF TESTS

10. Cost of all tests are to be borne by the agency.

11. The cost of preparing samples and carrying out tests for quality of material or workmanship will be borne by the Agency except for such exclusions as are specifically mentioned in the specifications laid down in contract. The cost of all test carried out by Laboratories directed by the Engineer-in-Charge will be borne by the Agency.

12. The work shall be carried out strictly as per the attached technical specifications, relevant IS specifications, Indian Electricity Rules & National Electrical Code.

13. The Agency has to get approved all the material from the Engineer-in-Charge before its actual use at site of work.

14. The scope of work includes all minor building works required for execution work such as cutting of wall etc. and making good the same. Nothing extra will be paid to Agency for the same.

15. The watch and ward of material and installation shall rest on the part of Agency during execution of work and till handing over of the same after completion of work in accordance with schedule of work.

16. The Agency will take care of the building etc. while handling/installing the equipment to avoid damages to the building. If any damages occur during execution of work, it shall be made good by Agency without any extra cost.

17. The vendor shall submit colour photographs printed with glossy paper for showing different stages of work during the submission of final bill.

18. Minor welding work as and when required to be carried out by the Agency.

19. **Warranty/Guarantee: The warranty/Guarantee certificate shall be provided for one years. During the warrenty period if any fault is found ,it has to be rectified by the Agency at site without any extra cost.**

20. All safety appliances like Safety shoes, Safety gloves, Safety helmet, Safety belt, Safety goggles etc. shall be arranged before starting the job.

21. The tender shall be based on Conditions of Contract and tenderers are required to quote their own rates against each item in schedule of quantities (B.O.Q), which is enclosed. All rates shall remain firm for the contract period/extended contract period.

22. Site engineer as per clause 32 of Proforma of Schedules shall be deployed at site for supervising the work and during major break down/preventive maintenance.

C. GENERAL CONDITIONS FOR SUPPLY OF MATERIALS

1. The materials shall be as per CPWD specifications with up to date correction slip and ISI specifications wherever mentioned and as per **list of approved makes (enclosed)**.
2. In the event of any variation between CPWD specifications and that in the IS code the former shall take precedent over the later. In the event of variation between the nomenclature of item as per schedule of quantities and specifications, the former shall prevail.
3. The sample of all the items shall have to be got approved by the Agency from the Engineer-in-Charge/Executive Engineer or his Representative before the supply commences. The approval of sample shall be only in respect of workmanship and finish, and shall be without prejudice to the right of Engineer-in-Charge to get random samples tested out of the actual lot received as per additional conditions. This decision is the prerogative of Engineer-in-Charge.
4. The Agency shall furnish the manufacture's certificate (if instructed) that the material supplied satisfy the requirements of the relevant specifications.
5. The Engineer-in-Charge shall be at liberty to test respective sample(s) of each item from schedule of quantity in any approved laboratory as decided by him. The sample for testing shall be provided by the Agency. The testing charge in respect of satisfactory test shall be borne by the Agency. All other expenditure required to be incurred for making available the sample conveyance and packing etc., shall be borne by the Agency himself. In case any sample of particular lot fails in testing the Agency shall be bound to replace the entire lot with fresh material of prescribed specifications and the rejected lot shall only be returned to the Agency after fresh lot is supplied.
6. After completion of work, the defective and damaged materials (Spare/Equipment/Scraps) shall be handed over to the AIIMS Authority or to be removed by the Agency at his own cost.
7. In case of any dispute regarding rejection of quantity of materials, the decision of Engineer-in-Charge shall be final and binding up on the Agency.
8. Specialized services as indicated in the contract must be done through authorized dealer or service centre or manufacturer only. The Agency will submit the GST invoice for the equipment's or spares purchased from manufacturer or authorized dealer. Similarly, for services the agency shall submit the service report from authorized service centre or dealer for processing the payment.

**Executive Engineer (Elect.)
AIIMS Bhubaneswar**

SPECIAL CONDITIONS (SCOPE OF WORK)

1. The work shall be carried out as per CPWD General Specifications for Electrical Works, Part V wet riser & sprinkler system-2020 & Part-VI Fire detection and alarm system-2018 with modification up to date.

2. The manufacturing year of all the items i.e Detectors,panels,MCP,Cable,Horn com strobe and RI should be 2026.
3. During laying of cable and installation of detectors there might be a requirement for cutting the false ceiling and refixing it after completion of the work which will be carried out by the agency without any extra cost.
4. The Agency shall be solely responsible for Installation and any required modification to upkeep of the equipment's in good conditions.
5. The adequate team of manpower shall be available at site as per quantum of the work. If necessary the work will be carried out in night shift.
6. Liaising work with Client for installation work will be the responsibility of the Agency without any extra cost.
7. Improper Panel installation can create fire incident & blast which will result in major loss to your Business & Property. Hence it has to be installed properly with insulated tools and proper safety precautions.
8. Service Engineers should be qualified & trained to maintain the Service level & Safety measures.
9. Engineer must have Personal Protective Equipment's (PPE's) for doing the panel installation & commissioning to ensure that no safety incidents.
10. The Agency shall keep himself fully informed of all acts and laws of the Central and State Govt., all order, decrees of statutory bodies, tribunals having jurisdiction or authority, which in any manner any affect their engaged or employed staff and anything related to carry out the work. All the rules and regulations and bye-laws laid down by the local bodies and any other statutory bodies shall be adhered to, by the Agency, during the execution of work.
11. In case of any fault in the installation covered under this work requiring immediate rectification of the same to put the installation in running condition, the firm have to rectify the fault and if any material is required in doing so, shall also arrange the same within a reasonable time.
12. Suitable test report should be provided to JE /AE /Engineering In charge before starting of the work.
13. **ID Pass:** The Contractor shall issue the ID cards of the selected manpower before the start the work.
14. Agency has to maintain the cleanliness of the entire installation area during execution of the work
15. The employees for the Agency shall be of good character and of sound. The service provider shall ensure proper conduct of its personnel in office premises, and enforce prohibition of consumption of alcoholic drinks / drugs, shewing of pan / Gutkha, smoking, using speakers for listening to music and loitering without any work. The workers should not be below the age of 18 years.
16. **Tools and Tackles:**
 - i. The Agency shall provide all the tools and tackles for the works including measuring instruments and safety gadgets for attending installation of equipment's. Cost of transportation of labour and material to AIIMS, Bhubaneswar premises shall have to be borne by the Agency.
 - ii. On completion of replacement of spares before commission of the system, the replacement shall be physically checked and properly tested. These checks and tests shall be conducted by the agency under the supervision of AIIMS, Bhubaneswar and agency shall furnish the final test result.
17. The maintenance of work during warrenty period shall be done as per rules and specification of CPWD and as per I.E. Rules & Acts, amended up to date.

18. All T&P, Scaffolding ladders/Hydra, Electrical instruments/meters for maintenance, consumable and Contingent Articles required for execution of the work shall be arranged by the Agency.
19. Chases, holes & drilling works etc. shall be done using power operated tools in the cost of Contract. No extra will be paid for the same.
20. laying of new cables and dismanteling of old cable is under the scope of the contractor.
21. **Approved Make:-**

List of approved make for Supply, Installation, Testing And Commissioning Of Fire Detection System in Main Hospital Building, Aiiims Bhubaneswar.		
1	Main Fire Panel	Siemens (Cerberus) /Honeywell (Notifier) Bosch/Siemens (Desigo)/JCI
3	Multicriteria Detectors	Siemens (Cerberus)/Honeywell (Notifier) Bosch/ Siemens (Desigo)/JCI
4	Thermal Detectors	Siemens (Cerberus)/Honeywell (Notifier) Bosch/ Siemens (Desigo)/JCI
5	Manual Call Point	Siemens (Cerberus)/Honeywell (Notifier) Bosch/ Siemens (Desigo)/JCI
6	Horn cum Storbe	Siemens (Cerberus)/Honeywell (Notifier) Bosch/ Siemens (Desigo)/JCI
7	Control Module	Siemens (Cerberus)/Honeywell (Notifier) Bosch/ Siemens (Desigo)/JCI
9	Response Indicators	Siemens (Cerberus)/Honeywell (Notifier) Bosch/ Siemens (Desigo)/JCI
10	Frls Armoured Copper Cable (1.5 Sqmm 2 Core)	Polycab / KEI/ Havell's
11	PVC Pipe	AKG/ Precision/ Supreme
12	Metal Junction Box	Anchor/ Legrand/ Havell's
13	Metal Flexible Pipe	Any ISI approved make
14	Motor and Pump	Kirloskar/ KSB/ Crompton Greaves
15	All Valves	Kirloskar/ Zoloto/ Kartar/SANT
16	B Class Pipe	Tata/ JSW
17	C Class Pipe	Tata/ JSW

Intelligent Addressable Fire Alarm System **General & System Engineering**

The latest development in fire alarm system, Detectors Technology is Intelligent Addressable Fire Alarm System over conventional system. It is now become almost necessary to install this system in every functional and

important building because the system has many advantages over conventional automatic fire alarm system such as:

- (i) Accurate quick response to emergencies.
 - a. Early fire warning
 - b. Individual Device identification / location
 - c. Analog Signal feed back
 - d. Pre-alarm notification
- (ii) Eliminates nuisance alarms
- (iii) Powerful operator interface Reliable
- (iv) Advance on line diagnostics i.e.
 - a. Continuous circuit supervision
 - b. Detection and isolation of faults
 - c. Continuous processing of analog value sensor data
 - d. Maintenance diagnostics
 - e. Panel test
 - f. Control Board self test
- (v) Reduction in maintenance costs by:
 - a. Remote testing and sensitivity adjustment.
 - b. Panel testing of smoke sensor to meet International Standard.
 - c. Individual sensor cleaning on need based only.

(vi) Flexible application

An intelligent addressable fire alarm system is provided to effect total control over the life safety services required in the building. The system is provided with addressable and analog fire alarm initiating, annunciating and control devices. The system is such that smoke /detectors, thermal sensors/detectors and manual call points etc. can be identified with point address. The system is capable of:

(a) Setting smoke sensor sensitivity remotely on a pre-programmed sequence. The system is able to recognize normal and alarm values that reveal trouble condition, pre alarm or need of maintenance.

(b) Provide a maintenance / pre-alert capability at smoke sensors to prevent the detectors from indications a false alarm due to dust, dirt, etc.

(c) Provide alarm verification of individual smoke sensors. Alarm verification printed on the in-built printer of the main fire alarm panel on the external printer attached.

(d) Provide outputs that are addressable i.e. output have a point address to be set from the main control station. The operator is able to assign such points to logical point groups (software zones) for pre-programmed operation.

(e) In the event of fire alarm but not in a fault condition, the exact location is shown on the main fire alarm panel, local sounder automatically sounded; the complete information is printed along with time and date of occurrence. Air handling units on the effected zones is automatically switched OFF and simultaneously respective fire dampers are closed. Pressurization fans on the evacuation shafts i.e. stairwells, etc. are automatically switched ON. All system output program assigned via control-byevent programs that are activated by a particular point in the alarm are executed, and the associated system output (alarm notification appliance and/ or relays) are activated. **The audio portion integrated to the system directs the proper signal (tone or Voice) to the appropriate speaker circuits. Pre-recorded alarm messages are played on the public address system. The Fire alarm control panel should indicate if any fault apeares/occurs in**

any one of the speaker. The controller for digital voice evacuation system should be included in the Fire Alarm Control Panel as mentioned in BOQ sl no.1 ,as it is a part of the BOQ. No separate payment will be made for the digital voice evacuation system controller.

(f) All the loop elements are able to isolate the short circuits on the loop wiring and thus no element is isolated in the event of single short circuit and the exact location of the short circuit is indicated on the respective fire alarm panel.

(g) The fire alarm panels have necessary interface units for intelligent addressable detectors alarm output modules for external actuations through fail safe programmable relays and communication interface.

(h) Fire alarm management system in an intelligent addressable Fire Alarm and Detection System comprises of Graphical Management System which is multi-user, with a lot of facilities. It has two screen display the left screen dedicated to display the graphic (building floor plans, Alarm panels etc.) and the right screen lists all events (alarm reports , Fault messages, information about disable detectors etc.)

(i) Building management system provides bidirectional monitoring and operation of the attach devices of the Fire Alarm and Detection Systems. Besides, other components/ devices in the building like AHU's Pressurization Doors , lifts etc. can also be monitored and operated from the graphical fire alarm management software.

MANUAL CALL POINTS

2.1 Scope

This section covers the requirements of manual call points (MCP) used in addressable intelligent fire alarm systems.

2.2 Constructional requirements of:

- a. It is used to trigger a fire alarm manually, and should be suitable for connection to the system loop technology. The alarm is raised by breaking the glass with the alarm carrying on until a replacement glass panel is fitted or alarm to be made silent from control panel. Suitable arrangement like scratching by a diamond bit shall be incorporated in the frangible element.
- b. A micro switch within the units is held "off" by the edge of the glass when glass is broken the switch is released and a signal is transmitted to control panel where the alarm is raised. The glass is preferably plastic coated to eliminate the damage of splinters causing injury.
- c. For testing without breaking the glass a test key, should be available so as to lower or remove the glass to release the micro switch. Full functional test is achieved accordingly.
- d. Facility for reset/adjustment of manual call point alarm triggering.
- e. The unit shall be made out of polycarbonate ABS blend with flame retardant & self extinguishing properties or cast aluminum or ASA plastic or as per manufacturer design and applicable standards.
- f. It shall preferably contain an integrated short circuit isolator which should ensure that a fault is localized and that the loop continues to function fully in the event of a wire break or a short circuit.
- g. The call box shall have suitable provision to knock out of termination of a 20mm conduit. This shall also have suitable provision for being fixed on surface or semi recessed in wall.
- h. The word 'FIRE' shall appear embossed in red color on the front.
- i. Acknowledgement LED displays –red for triggered alarm indication (flashing) and / or maintenance evacuation.
- j. Protective category shall be IP54 for indoors & IP65 for outdoors applications.

2.2.1 Installation Requirements

Same as given in Part 'A' for conventional type system.

INTELLIGENT ADDRESSABLE FIRE DETECTORS

3.1 Scope

The section covers the requirement of automatic intelligent addressable fire detectors.

3.2 General Features common to all Detectors:

3.2.1 Built-in-response Indicator:

Each detector shall incorporate indicator "LED" at the detector which shall blink on actuation of the detector to locate the detector which is operated while on fire. The detector shall not be affected by the failure of the response indicator lamp.

3.2.2 The detector shall have preferably 360⁰ visible view of the alarm LED or twin LEDs blink whenever detector is addressed.

3.2.3 The detector shall have preferably with integrated built in short circuit isolator or as per manufacturer design so that in case of any short circuit in the detector, the detector can be isolated so that loop should be able to retain the full functionality or in case built in short circuit isolator not available/ provided by the manufacturer a fault isolator unit shall be provided after every 20 detectors/ devices in a loop. But in later case isolator unit shall ensure that the loop is functional except the faulty detector. **The cost of fault isolator shall be borne by the bidder.No extra amount can be claimed by the bidder .**

3.2.4 The detector shall be with IP 54 protection category with base.

3.2.5 The detector shall be with built in microprocessor capable of making alarm on control panel based on the information stored in detector.

3.2.6 **The detector shall confirm to latest international standard i.e. NFPA -UL(FM) / EN-54,VDS Certification.**

3.2.7 The detector shall provide electronic address setting by means of configuration software.

3.2.8 The detector shall be plug-in-type and shall have common base to facilitate exchange for cleaning & maintenance. The base of the detector shall be interchangeable with other smoke detectors.

3.2.9 The detector shall be supplied fully tested and each detector should bear the SI. No. and seal of the approving laboratory/body.

3.2.10 The detectors and other devices including Manual call point, Control and Monitor Module, Sounder and response indicator and control panel shall be of same make

3.2.11 Reversed polarity or faulty zone wiring shall not damage the detector.

3.2.12 The detector shall be suitable for column/ceiling mounting.

3.2.13 The detector should have static voltage over load protection.

3.2.14 The detector shall be individually identifiable from the control unit by geographical location in the system.

3.2.15 The detector shall connect to the local control unit via a fully supervised two wire circuit.

3.2.16 The detector shall be inserted into or remove from the base by a simple push twist mechanism with an appropriate tool.

3.3 Addressable Heat Detector:

- (i) **Rate of rise-cum-fixed temperature detectors:** These detectors should be designed to operate within a given time. -
 - (a) When the rate of temperature rise at the detector exceeds a predetermined value regardless of the actual temperature and
 - (b) When temperature at detector exceeds a predetermined value
- (ii) The detector and transmission electronics in the detector head for easy exchange in the event of malfunction. Therefore, no electronics are permitted in base.
- (iii) It has maximum triggering temperature programmable from 58⁰ C to 81⁰ C.
- (iv) It has high level of immunity to electromagnetic influences.
- (v) The alarm signal when limit temperature is reached is given in Para (ii) above.
- (vi) Automatic addressing during initial set up or exchange of the detector, without making adjustment of detector.
- (vii) Adjustment of the maximum temperature value in combination with or without the temperature differential value.
- (viii) Theft protection to protect against unauthorized removal of the detector from base can be available.

3.4 **Addressable optical- Thermal (Multi Criteria Detector):**

1. The intelligent multi criteria detector shall have photo electric and thermal technologies in a signal sensing device.
2. The device shall include to combine the signal of the thermal sensor with the signal of the photoelectric signal in an effort to react in the event of a fire condition.
3. It shall have an ability to distinguish between a fire condition and a fire alarm condition by examining the characteristics of the thermal and smoke sensing chambers and comparing them to database of actual fire and deceptive phenomena.

3.5 **Detector Base:**

- (i) The detectors of all types shall fit into a common type of standard base.
- (ii) Once a base has been installed, it shall be possible to insert, remove and exchange different types of detectors by a simple push & twist movement.
- (iii) The standard base shall be equipped with screw less wiring terminals suitable for securing wire size upto 1.5sqmm and with built in strain limits to prevent permanent terminals deformation and weakening of contact pressure.
- (iv) It shall have a sealing plate, prevent dirt, dust condensation or water from the conduit reaching the wire terminals of the detector contact points.
- (v) All standard base shall be supplied with a removable dust cover to protect the contact area during installation and construction phase of the building. It must allow the inspection and verification of the zone wiring before insertion of any detectors.
- (vi) The standard base shall have a built in mechanism, which allows mechanical locking of any installed detector head, thus preventing unauthorized removal or tempering while maintaining.
- (i) Reversed polarity or faulty zone wiring shall not damage the detector.

3.6 **Intelligent Addressable Monitor Module**

- (i) The module shall be suitable to monitor the polling of up to minimum four potential free contacts by using a single or multiple housing and designed for surface or flush mounting.

- (ii) The operating mode can be selected and is assigned separately for each input the addressing of the module and the setting of parameters should be carried out using PC software, via the fire alarm control panel.
- (iii) The module should contain an integrated short circuit isolator which ensures that the fault is localized and the loop continues to function fully in the event of a wire break or a short circuit.
- (iv) The module should be minimum IP 40 protection category when housed in a case or as per manufacturer design.
- (v) The module should be with soft addressing to be set with a PC via fire alarm panel at the time of programming.
- (vi) The module should have integrated buzzer for signaling maintenance alarms.
- (vii) An LED shall be provided that shall flash under normal condition indicate that module is operational.

3.6.1 The monitor module shall confirm to latest international standard i.e. NFPA -UL(FM) / EN-54,VDS Certification.

3.7 Intelligent Addressable Relay / Control Module

- (i) Relay module may contain upto four relays each with a potential free changeover contact.
- (ii) Each relay contact should be FAIL/ SAFE programmable, means it should be possible to program each contact to operate in three conditions viz. NO FIRE CONDITION, FIRE CONDITION AND LOOP POWER FAILURE CONDITION.
- (iii) Both the addressing of the module and setting of parameters to be carried out using PC software via the fire alarm control panel.
- (iv) The module contains a short circuit isolator, which ensures that the fault is localized and that the loop continues to function fully in the event of a wire break or a shot circuit.
- (v) The module should be minimum with IP 40 protection category when housed in a case or as per manufacture design.
- (vi) It should have integrated buzzer for signaling maintenance alarms.
- (vii) Its housing have is designed for surface or flush mounting.

3.7.1 The control module shall confirm to latest international standard i.e. NFPA -UL(FM) / EN-54,VDS Certification.

ADDRESSABLE FIRE ALARM CONTROL PANEL

4.0 Scope:

This section covers the requirements of main fire alarm, control panel, repeater panel, graphical management system, response indicator etc. used in addressable fire alarm system.

4.1 Functional Requirement.

4.2 General

- i. In the event of fire alarm but not in a fault condition, the exact location shall be shown on the Main Fire Alarm Panel (MFAP).
- ii. Local sounder should sound automatically.
- iii. Complete information shall be printed with time and date of occurrence.
- iv. Air handling units on the effected zones shall be automatically switched OFF and respective fire dampers shall also be closed.
- v. Pressurization fans of staircase shall automatically be switched ON.
- vi. The audio portion integrated to the system shall direct the proper signal (tone or voice) to the appropriate speaker circuits.
- vii. Pre-recorded alarm messages shall be played on the Public Address System.
- viii. The panel shall have the facility to process the input signals and control the output functions either directly or through interface modules as per the requirements.
- ix. The panels shall have necessary interface units for addressable detectors alarm output modules for external actuations through fail safe programmable relays.
- x. The processor shall interact with the other modules through a common bus.
- xi. The system shall store all basic information and job specific data in memory.
- xii. Different password shall protect any change to system operations.
- xiii. The design of the panel hardware and software shall incorporate the capability to accept additional input from fire protection system such as sprinkler and water flow switch, operation of fire dampers, pressurization fans etc.
- xiv. The panel shall have an extra loop card to serve as standby in case of burn out or malfunctioning of any operating loop cards.
- xv. The panel shall be totally enclosed, dust and vermin proof.

4.3 Type of control and indicating panels:

Following are the types of control and indication panels in Addressable Fire Alarm Control Panel:

- (i) Intelligent Addressable Main Fire Alarm Control and Indicating Panel.
- (ii) Graphical Fire Alarm Management System.
- (iii) Intelligent Repeater Panel.
- (iv) Intelligent Response Indicator
- (v) Talk Back System / Fire Fighter Telephone Systems.

4.4 Addressable Fire Alarm Control Panel (FACP)

1. The addressable Fire Alarm Control Panel (FACP) shall function as a network panel & also as a fully standalone panel. FACP shall have its own microprocessor, software and memory. In the event of failure of panel or communication breakdown

- between the networked panels the FACP shall automatically operate on stand-alone mode without sacrificing any functions (The networking should be peer to peer). Information of all panel in the network should be available on all individual panels.
2. The panel should be modular microprocessor based in nature and should be expandable from single loop up to 10 loops.
 3. FACP shall supervise detection circuits and shall generate an alarm in case of abnormal conditions.
 4. FACP shall provide general purpose inputs for monitoring such functions as low battery on AC power failure. FACP's shall provide tamper protection and command able outputs, which can operate relays or logic level devices.
 5. Smoke detectors shall be powered using the FACP based smoke detection circuits FACP's shall provide control for resetting smoke detectors, fault isolation and sensor loop operations. It shall be possible to mix different fire devices within same FACP to optimize field wiring.
 6. It shall be possible for the panel to have a loop length with different modules offering 1.5 km length of devices from the panel.
 7. FACP shall provide monitoring and control of one floor or area or for multiple floors or areas. FACP shall meet the following requirements to assure the integrity and reliability of the system:
 - (a) The FACP shall have proper listing and / or approval from the following recognized agencies:
NFPA -UL(FM) / EN-54,VDS Certification.
 - (b) The FACP should have integrated power distribution module and fixed cabling done internally to guarantee a clear and tidy cable feed
 - (c) The panel should have an LCD display with minimum 300 characters and keypad. The Display should enable a flexible design of the operating menu with variable keys and message windows fixed keys should be used for standard operating steps e.g. for fire alarm securities supervisory trouble and other events. The current status of the system should be displayed by LED's interfaces (RS232) enable the connection to a PC.
 - (d) The panel should have a 230V AC power supply unit in plug in design with rack and panel connector and 24VDC /6Amp. single output power supply. The module should be protected against over voltage and reverse polarity. The output voltage is monitored and regulated externally.
 - (e) LCD display at the FACP shall be provided to indicate point of alarm or trouble. In Such systems means for manually scanning the points in trouble shall be provided and a trouble and alarm LED shall be used to indicate that there are points in alarm / trouble. The alarm /trouble LED shall only get switched off when all alarm / trouble are cleared from the loop.
 - (f) It shall be possible to command test, reset and alarm silence from the FACP.
 8. FACP switches shall allow authorized personnel to accomplish the following, independent of the central console.

- (a) Acknowledge a general alarm condition.
- (b) Silence the local audible alarm.
- (c) It shall be possible to silence the alarm indicating devices (hooters).
- (d) Reset all zones (logical Point Group) / points, after all initiating devices have returned to normal.

Perform a complete operational test of the memory with a visual indication

- (e) Test all panel LED's for proper operation without causing a change in the condition of any zone (Logical Point Group).
 - (f) Walk test –The system shall provide both a basic and advanced walk test for testing the entire fire alarm system including testing of all devices, detectors module etc. in the complete system.
9. Software zones/loops shall be circuited and protected by fault isolators such that in the event of a zone/ loop short –circuit, smoke and thermal sensors shall be located and shall report alarm and fault isolator unit after every 20 detector or devices in a loop isolates the part.
 10. Monitoring modules shall be provided to monitor and address contact-type input devices. The monitor module shall be housed in the FACP supervised by FACP.
 11. The FACP shall have drift compensation facility to compensate for environment. When a detector accumulates dust in the chamber and reaches an unacceptable level but still below the allowed limit, the control panel shall indicate a maintenance alert warning. When the detector accumulates dust in the chamber above the allowed limit, the control panel shall indicate a maintenance urgent warning.
 12. The FACP should be NFPA listed approved to provide the sensitivity measurement and documentation required.
 13. FACP shall be backed up with its built in UPS power or can be powered separately.
 14. The display on FACP shall provide indication for AC power, system alarm, system trouble/security alarm, display trouble and signal silence to this would mean that in the event of change of any detector/zone sequence alterations, the operator can initiate these by use of the LCD & alpha –numeric keys on the FACP panel to reconfigure the above parameters.
 15. Power supply unit of FACP shall have following characters:
 - (a) The main power supply shall be 230V AC $\pm 10\%$ 50Hz $\pm 3\%$ and shall in turn provide all necessary power of FACP.
 - (b) It shall provide a separate battery control module with charger. The battery should last for 48 hours minimum in normal operation upon power failure & 30 minutes in alarm condition.
 - (c) For ease of service, all wiring terminal blocks shall be plug-in type.
 - (d) The fire alarm panels shall have a possibility of being interlinked by direct connectivity or an optical cable link between the various locations and should further have connectivity to the main control center.
 16. **Each loop shall have minimum 240 devices (out of which minimum 120 detectors).**
 17. There shall be minimum 20% spare capacity in the looping system for future expansions. The firm has to intimate the maximum number of devices/ detectors

can be connected in one loop based on the manufacturer design. Some devices need external supply and some devices supported by loop power.

18. The length of loop shall not exceed more than 3000 meter for wire size 1.5sq mm. as per manufacturer recommendations.
19. Each loop should not be divided into more than 8 fire zones.
20. **The audio portion integrated to the system directs the proper signal (tone or Voice) to the appropriate speaker circuits. Pre-recorded alarm messages are played on the public address system. The Fire alarm control panel should indicate if any fault appears in any one of the speaker connected with the controller. The controller for digital voice evacuation system should be included in the Fire Alarm Control Panel as mentioned in BOQ sl no.1 as it is a part of the BOQ. No separate payment will be made for the digital voice evacuation system controller. Ceiling speaker and amplifier is not in the scope of this tender.**

4.5 **Intelligent Repeater Panel**

- (i) The repeater panel shall be active repeater panel with all the controls and monitoring as on the main fire alarm panel.
- (ii) The panel shall be functioning as a controller.
- (iii) The panel shall allow remote command in the system reset, trouble and alarm silence and manual alarm.
- (iv) A keyed switch shall enable or disable the keys.
- (v) The panel shall be compatible with the analog fire detection and alarm main control panel.
- (vi) It shall be programmable to display information for the entire system i.e. all panels in the network.
- (vii) It shall have minimum 80 characters LCD display (display system status). The back lit display repeats the status, trouble and alarm messages displayed at the fire detection and alarm panel in English text.
- (viii) The system text displays shall include: Alarm missing point trouble; system test, service, local system test, extra custom test by polling circuit and address.
- (ix) It shall have an internal trouble buzzer.
- (x) It shall be possible to connect up to 4 repeater panels with each fire detection & alarm panel.
- (xi) It shall annunciate alarm and trouble conditions.

Application:

The repeater panel can be installed in the guard rooms/security room at the entrance of a building or complex which may have one or more buildings so that in case of emergency the security personnel can rush straight to the trouble point.

4.5.1 Installation requirement of repeater panel:

- (i) No panel or management system shall be located inside any room the building or in a room of severe environment conditions.
- (ii) The panel shall be positioned in "Fire Alarm Control Room" in a building or any other conspicuously sited location so as to be visible without effort on entering a building and as per the drawing approval by the department /consultant architect.

(iii) The panel shall be either wall mounted or floor mounted.

4.6 **Response indicator:**

- (i) The response indicator shall be used to locate a fire alarm if the detector's LED cannot be seen (i.e. it is hidden by false floors, false ceilings etc.). When a detector is set off, as well as the alarm message being sent, unit response indicator is also activated and flashes red.
- (ii) The response indicator shall loop powered and separate power supply shall not be required.
- (iii) Remote response indicator shall be installed outside the areas normally kept closed to identify the detector response even if the room is locked. These indicators shall be able to indicate the status of the corresponding detectors in these areas.

4.6.1 Installation of Response Indicator: -

- (i) Response indicator shall be installed on wall such that its top is at door level and by the side of the entrance to the respective premises.
- (ii) Response indicators for detectors installed over a false ceiling in a corridor shall be installed directly under the false ceiling.
- (iii) Response indicators for detectors under a false floor shall be installed at a height of 1 mtr. above false floor level. Additionally, a marking of an arrow pointing downwards shall be made by the side of the response indicator.

The installation shall be such that visual indications from the response indicators are conspicuous and the affected area is spotted without difficulty.

4.7 Talk Back System/Fire Fighters Telephone Systems:- **(This controlling system of Talk Back System/Fire Fighters Telephone Systems should be integrated to the Fire Alarm control panel as mentioned in BOQ sl no.1).It is the part of the Fire Alarm control panel.No separate amount can be claimed by bidder. Fire fighter telephone hand set and telephone jact is not in the scope of this tender.**

- (i) Fire Fighters Telephone System Panel:- Fire Fighters Telephone System Panel shall be microprocessor based with its own microcontroller, memory, communication modules, intelligent initiating and indicating devices and suitable SMPS. The panel shall be suitable for required number talk back unit connections. The fire fighters telephone system will have integral talk back system to provide a 2 way voice communication between the fire fighters telephone. The talk back system shall include fire fighter master control console with a backlit LCD display for status display and a fire fighters telephone handset, standby battery for 24 hours in operation and half an hour alarm condition. The Fire Fighter Telephone System shall also include the following: A red colored master telephone handset with flexible coiled self winding five feet cord placed within the fire fighters telephone system panel housing:- The Fire Fighters Telephone Systems Panel shall include:- - Indicating High power LEDs - Input power supply : 230 volts AC 50Hz single phase supply 17-28V DC through rectifier, sealed maintenance free battery including trickle/Booster battery charger. Fire fighters telephone system panel housing shall be Dust and vermin proof cold rolled steel sheet 16 gauge powder coated with see through glass 0 0 front Fire fighters Telephone system

shall be able to withstand 10 to 490 C and upto 93 % RH non condensing type. Fire fighter Telephone system shall be able to be integrated with building and control system and Public Address System.

- (ii) Talk back Units/Fire Fighters Telephone:- Red Colored fire fighters telephone of rugged ABS plastic construction with 1500 mm coiled cord, a hook switch and the telephone jack placed in a surface mounted cabinet of 18 gauge CRC sheet steel construction with a hinged lockable door and a break glass full front panel labeled. Fire Fighters Telephone including painting with two coats of red synthetic enamel paint over one coat of primer.

ADDRESSABLE INTELLIGENT SOUNDERS **AND SILENCING SWITCHES**

5.1 SCOPE

This section covers the requirements of sounders and silencing switches used in fire alarm systems:

5.2 Type of Sounders:

- (i) Panel Sounders
- (ii) Addressable Loop Fire Alarm Sounders.

5.3 Functional requirements:

- (i) Panel Sounder shall be provided in specified fire alarm panel, repeater panel if any so as to draw attention of the caretaking personnel in a building to a fault in the FAS wiring and a fire condition in the protected premises.
- (ii) Fire alarm sounder of low intensity type shall be installed to signal to the occupants of the building to evacuate in the event of a fire.
- (iii) Fire alarm sounders cum strobe of high intensity types shall be installed to draw the attention of the firefighting personnel towards the main location of fire in the premises where a fire has erupted. The strobe should have a light intensity of 15cd. To 100cd.
- (iv) Fire alarm sounders shall not be used for any purpose other than for fire operations.
- (v) Silencing facility shall be provided only for panel sounders and not for fire alarm sounders.
- (vi) It shall be designed Suitable for ceiling mounted or wall mounted.

5.4 Operation of sounders and silencing:

- (i) Panel sounders shall be actuated automatically from the control panel.
- (ii) Panel sounders shall be actuated automatically as soon as fire alarm signal is initiated from any trigger device connected to them. These shall also be sounded when there is a fault alarm signal within their areas of control.
- (iii) A silencing switch shall be provided in the panel. Operation of this switch shall mute the audio output from the panel sounder in this panel and in its repeater panel, if any. Silencing switch shall also be provided in repeater panel which when

actuated shall mute the audio output in the panel only.

- (iv) Fire alarm sounders in a zone affected by a fire shall be actuated automatically as soon as fire alarm signal is initiated from any trigger device in that zone. All other fire alarm sounders shall be actuated only automatically from the fire alarm panel.

5.5 Specification Requirements:

5.5.1 Sounders

- (i) The frequency of sound from sounders shall lie in the 500-1000 Hz band. The sound level shall be at least 65dB (A) or 5dB (a) above or any other noise likely persists for a period longer than 30 second at any part of the building sounders with a level greater than 120 dB (A) shall not be provided.
- (ii) The sound shall be continuous although the frequencies and amplitude may vary and of the same characteristics from the fire alarm sounders in a building. Coded fire alarm signaling from sounders shall not be provided which may cause hearing damage.
- (iii) 'Fault alarm' and 'Fire alarm' in a panel sounder shall be distinctly different.
- (iv) The sounder shall be with IP 54 protection category.
- (v) It shall conform to **NEPA -UL(FM) / EN-54,VDS Certification**
- (vi) The volume of sounders can be adjusted from the fire detectors control panel. Minimum three volume setting from fire alarm control panel shall be available.
- (vii) The strobe cum hooter are two wire devices that offer tone choices of either continuous horn or temporal tone when constant voltage from fire alarm control panel is applied. Each tone has minimum three volume levels that can be selected for installation.
- (viii) The strobe cum hooter installed at entrance of building should have three tones programmable from the fire detector control panel so that at least one of these tones can be selected to comply with at least 110dB (A) frequency range of 440Hz to 2850 Hz. The Volume should be adjustable from control panel.
- (ix) The strobe should have a light intensity from 15 cd to 110 cd.

5.6 Installation Requirements:

- (a) Low intensity fire alarm sounders may be installed on surface of ceilings, suspended from ceiling or recessed in flush with the ceiling, depending on the construction of the sounder and ceiling height.
- (b) These shall be installed at a height not lower than 2.4 mtrs. except when recessed in a false ceiling of lower height. In such cases the sounders shall be recessed at false ceiling level.
- (c) When installed flush with a false ceiling these shall match the ceiling surface. Necessary provisions such as wooden boxing or frame work to accommodate the sounders shall be made in the ceiling in advance.
- (d) High intensity sounders shall be mounted on substantial supports. Provisions for terminating the electrical wiring cables shall be such as not to permit entry of rain water through the wiring conduits or cable runs.

POWER SUPPLY EQUIPMENT AND WIRING

7.0 SCOPE :

This section covers the requirements of power supply equipment for the addressable Fire Alarm System (AFAS) and the wiring for the system.

7.1 Main Supply

Power supply at $230 \pm 10\%$ V, 50Hz, AC single phase shall be provided by the department, terminating directly into the incoming switches of the C&I panel. Earth wire shall also be provided with the power supply. Rectification of the input AC supply into DC and further stabilization of the voltage as may be necessary shall form part of the FAS equipment.

7.2 Stand by battery supply

7.2.1 Standby battery shall be provided with Fire Alarm Control Panel.

7.2.2 Battery supply shall be arranged to automatically feed the FAS in the event of variation of input A.C. voltage beyond preset values on high and low sides.

7.2.3 The battery shall be sealed completely maintenance free. The battery shall be conforming to relevant Indian/International Standard. The normal voltage shall be suitable for the AFAS. The Capacity of the battery shall be suitable to feed the fire alarm panel and other addressable loop elements for a period of 48 hours upon a normal power failure and after which sufficient battery shall remain to provide full load operation for at least 30 minutes in line with IS 2189.

7.2.4 Installation:

Battery shall be located in the main fire alarm panel.

7.3 Battery Charger

7.3.1 The power supply in the fire alarm panel shall be in-built automatic battery charger suitable to charge the batteries as per the requirements of relevant standard.

7.3.2 The charger shall be complete with necessary voltmeter, ammeter, indicating lamps, fuses etc.

7.3.3 It shall have protection from overloads and short circuits on both AC & DC sides.

7.3.4 It shall have protection to prevent discharge through the charger.

7.4 Wiring for FAS/AFAS

7.4.1 Circuit Design:

The loop element (Smoke Detectors Heat Detectors, Manual Call Points, Monitor Modules Control Modules, Loop Sounders) wiring in AFAS shall be closed circuit loop type (Class A type), so that if the communication fails from one side, it is restored automatically from the other side. The wiring shall be independent of the detector zoning. The Zones shall be software based.

- (i) The design of the system wiring shall match the control and indicating equipment in the system.

7.4.2 **Wiring Materials:**

- (i) The wiring shall be PVC insulated 2 core 1.5 Sq. mm FRLS shielded copper Conductor stranded cables in red/black color and generally confirming to IS-694-2010 and meet the signal cabling requirements.
- (ii) The strand of cables shall not be cut to accommodate & connect to the terminals. The terminals shall have sufficient cross sectional area to take all the strands.

7.4.3 **Installation requirements:**

- (i) The electrical work connected with a FAS shall be carried out in conformity with CPWD general specification for electrical works Part-I (Internal) 2023, and part-II (external) 2023, both amended up to date.
- (ii) In no case the FAS equipment or connections be mounted in or on boxes, cover plates or blanks carrying the accessories or connections of any other service.
- (iii) FAS wiring shall be exclusive to the FAS and be physically separated from wiring for any other service in the building.
- (iv) Wiring for different circuit voltages in a FAS shall be in separate conduits.
- (v) To minimize possible disruption due to fire or other causes, fire alarm circuits should be separated as much as possible from each other. Where practicable, the different fire alarm circuit shall be run through different routes.
- (vi) The metal body of all control and indicating panels shall be loop earthed using 2.5 sq. mm copper wire and bonded to the earthing system in the building.

II. INSTALLATION & COMMISSIONING

1. Installation and commissioning procedure of the new panel shall be carried out as per approved OEM SOPs or manual.
2. Installation and commissioning of new panel at site to be done by successful vendor.
3. Unloading of the new panel and erection/installation and commissioning shall be within the scope of the Vendor (Contractor).
4. Technical literature, instruction Manual & routine maintenance, test and calibration certificate if needed shall be provided by the agency.
5. No space shall be allotted to the agency for storing the panel. Transportation of the panel from the storage area to the substation for installation and commissioning is under the scope of the vendor.
6. Delivery, Installation & Commissioning: The panel shall be delivered, installed & commissioned at:
All India Institute of Medical Sciences, Bhubaneswar, At- Sijua, Po- Dumuduma, Bhubaneswar, Pin code 751019.

III. Warranty:

The warranty shall be 24 months reckon from the date of commissioning of the Panel. Warranty shall cover free replacement of faulty or defective items supplied under this contract. Warranty shall also cover rectification of any defect in workmanship without any cost to AIIMS, Bhubaneswar. The cost of transportation for replacement/repairing of equipment during warranty period is under the scope of the agency.

IV. COMPLIANCE OF SAFETY MANAGEMENT SYSTEM:

The vendor must comply to various guidelines on safety management system being followed in AIIMS, Bhubaneswar for executing works under the scope. Salient points of this Safety Management System are mentioned below:

1. The vendor shall engage only skilled, capable, and competent personnel who are fully conversant with the system for installation & commissioning (I&C) and repair/maintenance jobs. The Vendor shall ensure that the personnel engaged for I&C activities have prior experience of the same and provide documentary proof or undertaking of the same.

2. The vendor shall ensure complete safety of the equipment and personnel deployed by him and must take full responsibility for their safety.
3. The vendor shall provide the necessary safety gadgets and personal protective devices and Personnel Protective Equipment (PPEs) to his personnel.
4. The vendor's personnel shall follow and take necessary work permit before carrying out any work.
5. The vendor's personnel shall take every possible care to keep the environment clean and free from pollution during delivery & I&C of the material.
6. The vendor's personnel should understand the implication of the known hazards related to the work undertaken by them and the necessity of having an emergency plan ready to counter them, should anything go wrong.
7. While providing the services, the vendor's personnel shall follow the procedures and systems taking all control measures in all the stages of works to avoid any untoward incidents.
8. The vendor shall fully understand AIIMS, Bhubaneswar 's safety policy and should take necessary steps to align their safety policy with AIIMS, Bhubaneswar 's; so as to accommodate and implement AIIMS, Bhubaneswar 's safety policy in the jobs undertaken by them.
9. The vendor shall have to report all sorts of near mishap, incidents and accidents to AIIMS, Bhubaneswar Engineer immediately. For any clarification with regard to the above, the Vendor may contact concerned AIIMS, Bhubaneswar Engineer.

V. Instructions to the Bidder

1. The bidder shall provide detailed technical literature and the datasheet of the panel to be supplied indicating all the parameters as per technical Specifications along with their bids.
2. The Panel shall be designed for high integrity and long life.
3. The bidder has to strictly comply with the technical specifications as per BOM, tender document and deviation, if any, may lead to rejection of the bid.
4. The Warranty of the items supplied shall be minimum 24 months from the date of commissioning .
5. The quote for installation and commissioning charges shall be included in the quote of the panel and accessories.
6. The bidder has to take the make and design approval of the panel from Engineer in charge after which panel manufacturing will be started.

**Executive Engineer (Elect.)
AIIMS Bhubaneswar**

Technical Bid (Eligibility Criteria)

The scanned copies of the following mandatory documents to be uploaded on e-Tendering Portal in the following format.

Sl. No.	Details/ Particulars	Uploaded (Yes/No)	Page No.
(A)	Submitting Earnest Money Deposit.		
(B)	Proforma – III, IV, VI duly filled in and signed with stamp.		
(C)	Certificates of Work Experience to be issued by the officer of the rank not below Executive Engineer.		
(D)	Certificate of Registration for GST and acknowledgement, up to date filed return if required		
(E)	Attested Copies of PAN No.		
(F)	Copies of IT return last 3 Years.		
(G)	The Bidder(s) should have their Registered Office/Branch in Bhubaneswar. If not, an Office should be opened in Bhubaneswar within 30 (Thirty) Days of the award of Work. Details of Address Proof of Office located at Bhubaneswar should be given to EE(Elect.)		
(H)	Declarations to be given by the Tenderer(s) (as per Page 41).		
(I)	Profit/Loss : The bidder should not have incurred any loss (Profit after Tax should be positive) in more than two years during available the last five consecutive balance sheet , duly audited and certified by Chartered Accountant.		
(J)	Each page of the e-tender documents should be duly signed with seal otherwise the bid shall become invalid.		
(K)	Affidavit as per <i>Proforma-VII</i>		
(L)	<i>Scanned copy of original solvency to be uploaded.</i>		

PROFORMA OF SCHEDULES - F (ELECTRICAL)

SCHEDULE 'A'

Schedule of quantities : **Attached**

SCHEDULE 'D'

Extra schedule for specific requirements/
document for the work, if any. : **Nil**

SCHEDULE 'E'

Reference to General Conditions of contract : CPWD General Conditions of Contract 2023 (Construction) modified and amendment up to the last date of submission of tender.

Name of work : **SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.**

Estimated cost of work : **₹ 67,90,262.00**

(i) Earnest money : 2% of estimated value.

(ii) Performance Guarantee : **5% of the Estimated cost put to tender (ECPT) or contract amount whichever is higher. In case quoted amount is lesser than 80% of ECPT, the bidder shall be required to submit Additional Performance Guarantee (APG) equivalent to the difference between the 80% amount of the ECPT and quoted amount.**

(iii) Security Deposit : 2.5% of the gross amount of each running and final bill till the sum deducted will amount to security deposit of 2.5 % of tendered amount of the work.

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS:

Officer inviting tender : **Executive Engineer (Electrical), AIIMS Bhubaneswar on behalf of Executive Director AIIMS Bhubaneswar.**

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. : See below

Definitions:

2(v) Engineer-in-Charge : **Executive Engineer, AIIMS Bhubaneswar (Odisha)**

2(viii) Accepting Authority : **Executive Director, AIIMS Bhubaneswar (Odisha)**

2(x) Percentage on cost of materials and labour to cover all overheads and profits.

: 15%

2(xi) Standard Schedule of Rates

: As per Market Rates and DSR -2023

2(xii) Department

: Engineering Department, AIIMS Bhubaneswar.

9(ii) Standard CPWD contract Form

: CPWD GCC 2023 Construction Works as modified & corrected up to last date of receipt of Bid/tender.

CLAUSE 1

(i) Time allowed for submission of Performance

Guarantee, Thereof from the date of issue of letter of acceptance

: 07 Days

(ii) Maximum allowable extension with late fee

: 15 Days

@ 0.1% per day of Performance Guarantee

amount beyond the period Provided in (i) above

CLAUSE 2

Authority for fixing compensation under clause 2

: Executive Director, AIIMS Bhubaneswar.

Clause 2A

Whether Clause 2A shall be applicable

: NA

CLAUSE 5

Number of days from the date of issue

of letter of acceptance for reckoning

date of start

: 07 Days

Time allowed for execution of work –

: 3 Months

Authority to decide:

(i) Extension of time

: Executive Engineer, AIIMS Bhubaneswar

(ii) Rescheduling of mile stones

: Superintending Engineer,
AIIMS Bhubaneswar

(iii) Shifting of date of start in case

of delay in handing over of site

: Superintending Engineer,
AIIMS Bhubaneswar

PROFORMA OF SCHEDULES

CLAUSE 5

Schedule of handing over of site

Part	Portion of Site	Description	Time Period for handing over reckoned from date of Completion
Part A	Portion without any hindrance	All works	07 days
Part B	Portions with encumbrances	NA	NA
Part C	Portions dependent on work of other agencies	NA	NA

CLAUSE 6A applicable

: Yes

Clause 7

: Rs 1 Cr

CLAUSE 7 A

Whether clause 7A shall be applicable

: Yes

CLAUSE 10A

: Applicable

CLAUSE 10B (i)

Whether Clause 10 B (i) shall be applicable : **Applicable**

CLAUSE 10C

Component of labour expressed as
percent of value of work : **Applicable**

CLAUSE 10CC : **Not Applicable**

Clause 11

Specifications to be followed for
execution of work : **(i) CPWD General Specifications for Electrical Works,
Part VI Fire Detection and Alarm System – 2018 with
modification up to last date of tender submission.**

CLAUSE 12

Authority to decide deviation : **Superintending Engineer, AIIMS Bhubaneswar**

12.2&12.3

Deviation Limit beyond which clauses
12.2 & 12.3 shall apply for building work : **50%,**

12.5

(i) Deviation Limit beyond which clauses
12.2 & 12.3 shall apply for foundation work
(except items mentioned in earth work subhead : **N/A**
in DSR and related items)

(ii) Deviation Limit for items mentioned in earth
work subhead of DSR and related items : **N/A**

CLAUSE 16

Competent Authority for deciding reduced rates. : **Superintending Engineer**

CLAUSE 18

List of mandatory machinery, tools & plants to be : **As required by Engineer -in- Charge
deployed by the contractor at site**

CLAUSE 19 C.....Engineer- in charge

CLAUSE 19 D..... Engineer- in charge

CLAUSE 19 G Engineer- in charge

CLAUSE 19 K Engineer- in charge

CLAUSE 25 **(i) Conciliator-** Dispute Redressal Committee (DRC) to be constituted by
Executive Director, AIIMS, Bhubaneswar

(ii) Arbitrator appointing authority- **Executive Director, AIIMS,
Bhubaneswar**

(iii) Place of Arbitration- Bhubaneswar

: **AIIMS, Bhubaneswar**

CLAUSE 32 : **Applicable**

Requirement of Technical Representative(s) and recovery Rate

SNo	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical / Technical representative)	Minimum experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32(i)	
						Figures	Words
1	Graduate Engineer	Electrical	Principal Technical Representative	2 - years	ONE	Rs. 15,000/- PM	Rupees Fifteen Thousand Per Month each
OR	Diploma Engineer	Electrical	(Project Planning/ Site/ billing Engineer)	5-years	ONE	Rs.15000/- PM.	Rupees Fifteen Thousand Per Month each

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

CLAUSE 38

:

Not Applicable

Provision of Independent External Monitors

- i) Threshold value (Estimated cost put to tender) at and above which Integrity Pact would be applicable – ₹50 Lakhs
- ii) Particulars of IEMs appointed by CVC –

SL No.	Name of IEM	Address
1.	Shri Santanu Mukherjee	Flat no.- 303, E-Tower My Home ABHRA Opp - Inorbit Mall, Madhapur Hyderabad, Telengana - 500 032 Email ID - santanu96@gmail.com

List of Mandatory Documents to be filled in by the bidders in various forms to be scanned and uploaded within the period of bid submission

1	Scanned Copy of EMD (Original to be submitted as mentioned in Information and Instructions for Bidders for e-Tendering)
2	Letter of transmittal (Annexure-A)
3	Vendor Details as per (Annexure-B)
4	Structure & Organization (Annexure-C)
5	Declaration by Bidder (Annexure-D)
6	Consent Letter (Annexure-E)
7	Self Certification under Preference to “MAKE IN INDIA” Policy (Annexure –F)
8	GST Registration Certificate
9	Proof of Average Annual Financial Turnover should be at least 50% of the estimated cost put to tender during the immediate last three consecutive financial years (Proforma III)
10	Details of The Similar Works Completed In Last Seven Years (Performa-IV)
11	Details of ongoing/existing works (Proforma-VI)
12	Affidavit on non-judicial paper of Rs. 100/- duly attested by Notary/ Magistrate for PAST CONTRACTUAL PERFORMANCE (Proforma-VII)
13	Attested Copies of PAN No.
14	Submit 3 years IT return till Assessment year 2024-25.
15	The Bidder should have their Registered Office/Branch in Bhubaneswar. If not, an Office should be opened in Bhubaneswar within 30 (Thirty) Days of the award of Work. Details of Address Proof of Office located at Bhubaneswar should be given to EE(Elect).

LETTER OF TRANSMITTAL

From:

To

The Executive Engineer,
AIIMS, Bhubaneswar (Odisha)

Subject: Submission of bids for the work of “Supply, Installation, Testing And Commissioning Of Fire Detection & alarm System in Main Hospital Building, Aiims Bhubaneswar.”

Sir,

Having examined the details given in the bid document for the above work, I/we hereby submit the relevant information.

1. I/we hereby certify that all the statement made and information supplied in the enclosed forms A to H and accompanying statement are true and correct.
2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/we authorize Engineer-In-Charge or his representative to approach individuals, employers, firms and corporation to verify our competence and general reputation.
4. I/we submit the requisite certified net worth or solvency certificate and authorize the Executive Engineer, AIIMS, Bhubaneswar to approach the Bank issuing the solvency certificate to confirm the correctness there of. I/we also authorize the Executive Engineer, AIIMS, Bhubaneswar to approach individuals, employers, firms and corporation to verify our competence and general reputation.
5. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works:

Name of work	Certificate from

Certificate: It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I / We shall be liable to be debarred, disqualified / cancellation of enlistment in case any information furnished by me / us is found to be incorrect.

Enclosures:

Date of submission:

Signature(s) of Bidder(s)
Seal of bidder

Annexure-A

FORM FOR DETAILED INFORMATION BY BIDDER**(Vendor Details)**

1.	Name of the Bidder	
2.	Permanent Account No (PAN)	
3.	Particulars of Bank Account	
4.	a) Name of the Bank	
	b) Account Number	
	c) Name of the Branch	
	d) Branch Code	
	e) Address	
	f) City Name	
	g) Telephone No	
5.	Legal status of the bidder (attach copies of original document defining the legal status)	
	a) An Individual	
	b) A proprietary firm	
	c) A firm in partnership	
	d) A limited company or Corporation	
6.	GST Registration Certificate No	
7.	Valid Email ID of the Bidder	
8.	Complete Postal Address of the bidder	

(Authorized Signature of the Bidder with Seal)

Annexure-B**STRUCTURE & ORGANISATION**

1. (a) Name
 - (b) Address of the bidder
2. (a) Telephone no.
 - (b) Telex no.
 - (c) Fax no.
 - (d) E-mail
3. Legal status of the bidder (attach copies of original document defining the legal status)
 - (a) An Individual
 - (b) A proprietary firm
 - (c) A firm in partnership
 - (d) A limited company or Corporation
4. Particulars of registration with various Government Bodies if any (attach attested photocopy)
Organization/Place of registration Registration No.
 - 1.
 - 2.
 - 3.
5. Names and titles of Directors & Officers with designation to be concerned with this work.

Signature of Bidder(s) with Seal

DECLARATION

It is to certify that:

- 1) I/We agree with the terms and conditions of it and understood that it will form part of the agreement.
- 2) I hereby certify that none of my Relative(s) are employed in AIIMS Bhubaneswar, Odisha. In case at any stage, it is found that the information given by me is false/incorrect, AIIMS shall have the absolute right to take any action as deemed fit without any prior intimation to me”.
- 3) I/We undertake and confirm that eligible Work(s) has/have not been got executed through another contractor on back to back basis. Further, it is stated that, if such a violation comes to the notice of Department, than I/We shall be debarred for bidding in AIIMS in future forever. Also, if such a violation comes to the notice of AIIMS, Bhubaneswar before date of start of work, the Engineer-In-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.
- 4) I / We have signed (with stamp) uploaded documents of the tender before submitting the same.
- 5) All the information and documents given/ uploaded for bids are true.
- 6) I / We have provided our e-Mail id for any communication in this regard.
- 7) I have read carefully & understood the important instructions to the all bidders.

Date.....

E-Mail: _____

Contractor
(Sign with Seal)

CONSENT LETTER**“SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.”**

I/We hereby give my/ our consent to work as contractor till the completion of work and I/we will be responsible for execution of work only by skilled persons in the field of **related work** as per satisfaction of Engineer-In-Charge.

I/We have experience to technically execute, take measurements and will produce computerized measurement sheets of work before covering hidden work / job and other exposed works in time as per clause 6 otherwise measurement will be recorded by the representative of Engineer-In-Charge which will be bound to me. Final measurement with bill will be produced by me/us within one month after completion date otherwise representative of Engineer-In-Charge will prepare the same which will be acceptable and bound to me/us and no any claim in this regard will be made by me/us.

I/We will provide all invoices and related test certificates of materials as required by E-In-C. All Analysis of rates for Extra, Deviation items etc. will be produced by me/us in consultation with representative of Engineer-In- Charge on time for getting approval from Competent Authority of AIIMS before execution of work or otherwise the same will be prepared by the department and will be bound to me/us.

I/we will also engage suitable and skill Engineer(s) for the work as per Clause 32 of General Condition of Contract.

I further certify that the above particulars pertaining to me are correct.

I/We will produce all uploaded documents in original for physical verification before issue of Letter of Acceptance or / and as demanded by Engineer-In Charge before the payment.

I/We will submit “No Claim Certificate” in the approved format in company letter head after receiving final bill payment.

Signature of contractor with seal

ANNEXURE-E**Self Certification under Preference to “MAKE IN INDIA” Policy****CERTIFICATE**

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15/06/2017, its revision dated 04/06/2020 and any subsequent modifications/Amendments from time to time and as applicable on the date of submission of tender, we hereby certify that we _____ (Name of Contractor/Firm/ Agency) are local Contractors and will meet the requirement of minimum Local content (50%) as defined in above orders for the material against Tender No _____, if selected as Lowest Bidder.

Details of location at which local value addition will be made is as follows:

The information furnished hereinafter is correct to the best of my knowledge and belief and I undertake to produce relevant records before the procuring entity or any other Government authority for the purpose of assessing the local content of goods/services/works supplied by me.

In the event of the local content of the goods/services/works mentioned herein is found to be incorrect and not meeting the prescribed supplier class categorization criteria as per said order, based on the assessment of procuring agency(ies)/Government Authorities for the purpose of assessing the local content, action shall be taken against me in line with the PPP-MII order and provisions of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rule for which for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

Thanking You

Seal and Signature of Authorized Signatory

Date: _____

I. Financial Analysis – Details to be furnished duly supported by figures in balance sheet/profit & loss account for the last three financial years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

Financial Years	2021-22	2022-23	2023-24
Gross Annual Turn over			

(i) Gross Annual Turn Over on construction works.

(ii) Profit/Loss.

II. Financial arrangements for carrying out the proposed work.

Signature of Bidder (s)

PROFORMA-IV

**DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE
LAST SEVEN YEARS ENDING PREVIOUS DAY OF LAST DAY OF SUBMISSION OF
TENDERS**

Ser. No.	Name of the Work/Project and Location	Owner or sponsoring organization	Cost of work in corers of rupees	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation/ arbitration cases pending/ in progress with details*	Name and address/telephone No of officer to whom reference may be made	Whether work was done on back to back basis Yes/No
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)
1.									
2.									
3.									
4.									
5.									
6.									
7.									

***Indicate gross amount claimed and amount awarded by the Arbitrator.**

Note:

- 1. The Bidder shall submit the attested Copies of the Completion Certificates from the Client i.e. Department(s) of Govt./Semi Govt./PSU/Autonomous Bodies of Govt..**

Signature of Bidder(s)

PROFORMA-VI**DETAILS OF ON-GOING/EXISTING WORKS**

Ser. No.	Name of the Work/Project and Location	Owner or sponsoring organization	Cost of work in corers of rupees	Date of commencement as per contract	Stipulated date of completion	Anticipated date of Completion of work	Any other Relevant information
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1.							
2.							
3.							
4.							
5.							
6.							
7.							

Note:

1. The Bidder shall submit the attested Copies of the Completion Certificates from the Client i.e. Department(s) of Govt./Semi Govt./PSU/Autonomous Bodies of Govt..

Signature of Bidder(s)

PROFORMA-VII**AFFIDAVIT**

(To be submitted on Rs. 10/- Indian Non-Judicial Stamp Paper)

I/We hereby certify that, the above firm has not been ever blacklisted by any Central/State Government/Public Undertaking/Institute on any account.

I/We also certify that, Firm will supply the item(s) as per the specification given by Institution and also abide all the Terms & Conditions stipulated in Tender.

I/We also certify that, the information given in Bid is true and correct in all aspects and in any case at a later date, it is found that any details provided are false and incorrect, any contract given to the concerned firm or participation may be summarily terminated at any state, the firm will be blacklisted and Institute may impose any action as per e-Tender Rules.

“I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another Agency on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in future forever. 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 Performance Guarantee”.

Business Address: -

Name:

(Signature of Bidder with Firm's Seal)

Place: _____

Dated: _____

DECLARATIONS TO BE GIVEN BY THE TENDERERS

It is to certify that: -

- (a) I /We have gone through CPWD W-8 amended up to correction Slip No.6 as available on website www.eprocure.gov.in / www.aiimsbhubaneswar.edu.in or in the office of Superintendent Engineer and I/We agree with the terms and conditions of it and understood that it will form part of the agreement.

Date: _____

Signature of the Tenderer

- (b) “I, S/o Shri resident of hereby certify that none of my Relative(s) as defined in Paragraph 14 of CPWD W-6 is/are employed in AIIMS Electrical Zone, Odisha. In case at any stage, it is found that the information given by me is false/incorrect, AIIMS shall have the absolute right to take any action as deemed fit without any prior intimation to me”.

Date: _____

Signature of the Tenderer

NOTE: - (To be certified by all the partners in case of partnership firms, by all the Directors in case of companies).

- (c) “I/We undertake and confirm that eligible similar Work(s) has/have not been got executed through another Agency on back to back basis. Further, it is stated that, if such a violation comes to the notice of Department, then I/We shall be debarred for bidding in AIIMS in future forever. Also, if such a violation comes to the notice of AIIMS, Bhubaneswar before date of start of work, the Superintending Engineer shall be free to forfeit the entire amount of Performance Guarantee”.

Date: _____

Signature of the Tenderer

All India Institute of Medical Sciences
Engineering Branch, Bhubaneswar (Odisha)-751019
www.aiimsbhubaneswar.edu.in

BIDDERS UNDERTAKING

E-Tender for the work of: Tender for “**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR.**”

To be submitted online by: **as above mention date**

TENDER

I/We have read and examined the notice inviting tender, schedule, A,B,C,D,E & F, specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the AIIMS Bhubaneswar within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

I/We agree to keep the tender open for **One Hundred Eighty (180) days** from the due date of opening of financial bid and not to make any modification in its terms and conditions.

A sum of **Rs.....** is hereby forwarded in Receipt Treasury Challan/ Deposit at Call Receipt of a Scheduled Bank/ Fixed Deposit Receipts of a Scheduled Bank/ Demand Draft of a Scheduled Bank/ Bank Guarantee issued by a Scheduled Bank as earnest money. A copy of the earnest money in Receipt Treasury Challan/ Deposit at Call Receipt of a Scheduled Bank/ Fixed Deposit Receipts of a Scheduled Bank/ Demand Draft of a Scheduled Bank/ Bank Guarantee issued by a Scheduled Bank is submitted with tender. If I/We, fail to furnish the prescribed performance guarantee within prescribed tender, I/we agree that the said President of India 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 President of India or his successors in office shall without 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 guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the General Conditions of Contracts (CPWD). Further, I/we agree that in case of forfeiture of earnest money or performance guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

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 for tendering in AIIMS Bhubaneswar in future forever. 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 Deposited / Performance Guarantee.

I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom 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 Contractor

Postal Address

Witness:

e-Mail id

Address:

Occupation: (To be filled in by the contractor/witness as applicable)

ACCEPTANCE

The above tender (as modified vide letters mentioned hereunder) is accepted by me for and on behalf of the AIIMS Bhubaneswar for a sum of ₹. _____ *

(Rupees _____ * _____)

The letters referred to below shall form part of this contract Agreement:-

a) _____ *

b) _____

c) _____

For & on behalf of the AIIMS Bhubaneswar.

Signature.....

Dated

Designation.....

FORM OF EARNEST MONEY DEPOSIT

(Bank Guarantee Bond)

WHEREAS, contractor..... (Name of contractor) (Hereinafter called "the contractor") has submitted his tender dated..... (date) for the construction of (name of work) (hereinafter called "the Tender")

KNOW ALL PEOPLE by these presents that we (name of bank) having our registered office at (Hereinafter called "the Bank") are bound unto (Name and division of Executive Engineer) (hereinafter called "the Engineer-in-Charge") in the sum of Rs. (Rs. in words) for which payment well and truly to be made to the said Engineer-in-Charge the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank thisday of 20... . THE CONDITIONS of this obligation are:

- (1) If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of Tender;
- (2) If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:
 - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required; OR
 - (b) fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor,

We undertake to pay to the Engineer-in-Charge either up to the above amount or part thereof upon receipt of his first written demand, without the Engineer-in-Charge having to substantiate his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by him is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date* after the deadline for submission of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer-in-Charge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATESIGNATURE OF THE BANK

WITNESS

SEAL (SIGNATURE, NAME AND ADDRESS)

*Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.

FORM OF PERFORMANCE SECURITY (BANK GUARANTEE)

To
EXECUTIVE ENGINEER (Electrical),
AIIMS BHUBANESWAR,
SIJUA, DUMUDUMA,
BHUBANESWAR-751019

1. In consideration of the Executive Director, AIIMS, Bhubaneswar (hereinafter called "the Government") having offered to accept the terms and conditions of the proposed agreement between and (hereinafter called "the said Agency(s)") for the work (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees only) as a security/ guarantee from the Agency(s) for compliance of his obligation in accordance with the terms and conditions in the said agreement. I/We (hereinafter referred to as Bank) hereby (Indicate the name of the Bank) undertake to pay to the Government an amount not exceeding Rs. _____ (Rupees _____ only) on demand by Government.
2. I/We do hereby undertake to pay the (Indicate the name of the Bank) 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 Agency(s). 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).
3. I/We the said bank undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the Agency (s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.
4. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the Agency (s) shall have no claim against us for making such payment.
5. I/ We further agree that the guarantee herein contained (Indicate the name of Bank) shall remain in full force and effect during the period that would be taken for the performance of the said agreement and it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid, and its claims satisfied or discharged, or till Engineer-in-charge on behalf of the Government, certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Agency (s) accordingly discharges this guarantee.
6. I/We further agree with the Government that the (Indicate the name of Bank) Government shall have the fullest liberty without our consent, and without affecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Agency(s) 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 Agency (s) and to forebear or enforce any of the terms and conditions relating to the said agreement & we shall not be relieved from our liability by reasons of any such variation or extension being granted to the said Agency (s) or for any forbearance, act of omission on that part of the Government or any indulgence by the Government to the said Agency (s) 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.
7. The guarantee will not be discharged due to the change in the constitution of the Bank or the Agency (s). We lastly undertake not to revoke this (Indicate the name of Bank) guarantee except with the previous consent of the Government in writing.
8. This Guarantee shall valid up to _____ unless extended on demand by 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 six months of the date of expiry or the extended date of expiry of this Guarantee all our liabilities under the Guarantee shall stand discharged.

Dated the _____ day of _____ for _____

NO CLAIM CERTIFICATE

(On company letterhead)

To,
Executive Engineer (Electrical),
AIIMS, Bhubaneswar

Name of Work :

Agreement No. :

Workorder No. :

Sub: No claim declaration / certificate

We have claimed the sum of Rs. (Rupees only) as full and final settlement of all the payments due for the above stated work under the above-mentioned contract agreement, between us and AIIMS, Bhubaneswar. We hereby unconditionally, and without any reservation whatsoever, certify that with this payment, we shall have no claim whatsoever, of any description, on any account, against Procuring Entity, against aforesaid contract agreement executed by us. We further declare unequivocally, that with this payment, we have received all the amounts payable to us, and have no dispute of any description whatsoever, regarding the amounts worked out as payable to us and received by us, and that we shall continue to be bound by the terms and conditions of the contract agreement, as regards performance of the contract.

Yours faithfully,

Signatures of contractor

or Officer authorised to sign the contract documents

on behalf of the contractor

(Company stamp)

Date:

Place:

WORK COMPLETION

(On company letterhead)

To,
Executive Engineer (Electrical),
AIIMS, Bhubaneswar

Name of Work :

Agreement No. :

Workorder No. :

Sub: Work Completion certificate.

Certify that the work is completed on _____ as per term and conditions of work order and no defect are present. No surplus material or garbage are available at this site of our work.

Yours faithfully,

Signatures of contractor

Date:

Place:

PBG Release Certificate

(On company letterhead)

To,
Executive Engineer (Electrical),
AIIMS, Bhubaneswar

Name of Work :

Agreement No. :

Workorder No. :

Sub: Release of PBG submitted against the work.

Dear Sir,

With reference to above cited workorder for the job “**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF FIRE DETECTION & ALARM SYSTEM IN MAIN HOSPITAL BUILDING, AIIMS BHUBANESWAR.**” has been completed. We request you to release our PBG submitted against the job, for which we will be grateful to you.

Yours faithfully,

Signatures of contractor

Date:

Place:

SD Release Certificate

(On company letterhead)

To,
Executive Engineer (Electrical),
AIIMS, Bhubaneswar

Name of Work :

Agreement No. :

Workorder No. :

Sub: Release of SD deducted against the work.

Dear Sir,

With reference to above cited workorder for the job “**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF FIRE DETECTION & ALARM SYSTEM IN MAIN HOSPITAL BUILDING, AIIMS BHUBANESWAR.**” has been completed. We request you to release our SD submitted against the job, for which we will be grateful to you.

Yours faithfully,

Signatures of contractor

Date:

Place:

Format for Integrity Agreement **(To be made on Rs 100/- Judicial Stamp Paper)**

This Agreement is made at.....on this.....day of.....yyyy.

BETWEEN

AIIMS, Bhubaneswar represented through Executive Engineer (Electrical), AIIMS, BHUBANESWAR,, (Hereinafter referred as the) (Address) **“Principal/Owner”**, which expression shall unless repugnant to the meaning or context hereof include its success or sand permitted as signs)

AND

..... (Name and Address of the Individual/firm/Company) through..... (Hereinafter referred to as the) (Details of duly authorized signatory) **“Bidder/Contractor”** and which expression shall unless repugnant to the meaning or context hereof include its success or sand permitted as signs)

Preamble

WHEREAS, the Principal/Owner has floated the Tender (NIT No. **AIIMS/BBSR/ENGG/ELECT/20/2026**) (here in after refer red to as **“Tender/Bid”**) and intends to award, under laid down organizational procedure, contract for: **“SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF FIRE DETECTION & ALARM SYSTEM IN MAIN HOSPITAL BUILDING, AIIMS BHUBANESWAR.”** herein after referred to as the **“Contract”**.

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the Land, Rules & Regulations, Economic use of resources and of fairness/ transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose afore said both the parties have agreed to enter to this Agreement (hereinafter referred to as **“Pact”**), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, inconsideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under: -

Article - 1: Commitment of the Principal/Owner.

1. The Principal/Owner commit itself to take all measures necessary to prevent corruption and to observe the following principles:

(a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

(b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the Tender processor the Contract execution.

(c) The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

2. If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC)/Prevention of Corruption Act, 1988 (P C Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article - 2: Commitment of the Bidder(s)/Contractor(s)

1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standard and makes, and report to the Government/Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.

2. The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution: -

(a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind what so ever during the Tender process or during the execution of the Contract.

(b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

(c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly, Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

(e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to, or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.

3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a wilful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.**

5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may be fall upon a person, his/her reputation or property to influence their participation in the tendering process).

Article - 3: Consequences of Breach.

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right: -

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article-2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. **Such exclusion may before vigor for a limited period as decided by the Principal/Owner.**
2. **Forfeiture of Performance Guarantee/Security Deposit :** If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contractor has accrued the right to terminate/determine the Contract according to Article-3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Performance Guarantee and Security Deposit of the Bidder/Contractor.
3. **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article - 4: Previous Transgression.

1. The Bidder declares that no previous transgressions occurred in the last 05 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender processor action can be taken for banning of business dealings/holiday listing of the Bidder/Contractor as deemed fit by the Principal/Owner.
3. If the Bidder/Contractor can prove that he has resorted/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/ Owner may, at its own discretion, revoke the exclusion prematurely.

Article - 5: Equal Treatment of all Bidders/Contractors/Sub-contractors.

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all sub-contractors a commitment in conformity with this Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
2. The Principal/Owner will enter in to Pacts on identical terms as this one with all Bidders and Contractors.
3. The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article - 6: Duration of the Pact.

1. This Pact begins when both the parties have legally sign edit. It expires for the Contractor/Vendor 12 months after the completion of work under the contractor till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

2. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, AIIMS, Bhubaneswar.

Article - 7: Other Provisions.

1. This Pact is subject to Indian Law, place of performance and jurisdiction is the **Bhubaneswar** of the Principal/Owner, who has floated the Tender.
2. Changes and supplements need to be made in writing. Side agreements have not been unmade.
3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
4. should one or several provisions of this Pact turnout to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
6. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Agreement/Pact, any action taken by the Owner/Principal in accordance with this **Agreement/Pact or interpretation thereof shall not be subject to arbitration.**

Article - 8: LEGAL AND PRIOR RIGHTS.

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Pact.

THIS AGREEMENT will take effect from the _____ day of _____ Month of _____ 2026(Two Thousand Twenty-five) and shall be valid till completion of work.

This day of _____ 2026, both the parties here to have caused their respective common seals to be hereunto affixed (or have hereunto set their respective hands and seals) the day and year mentioned above in Bhubaneswar in the presence of the witness: -

For and on behalf of the 'AIIMS, Bhubaneswar'

For and on behalf of the 'Agency'

Signature of the Authorized Official
(Name of the Official with Seal)

Signature of the Authorized Official
(Name of the Official with Seal)

By the said _____
_____ (Name)
_____ on behalf of 'Agency'
in presence of Witness _____
Name _____
Address _____

By the said _____
_____ (Name)
_____ on behalf of
'Agency'
in presence of Witness _____
Name _____
Address _____

BANKERS CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/S/Shri Having marginally noted address, as a Customer of our bank are/is respectable and can be treated as good for any engagement up to a limit of Rs.(Rupees.....)

This certificate is issued without any guarantee or responsibility on the Bank or any of the officers.

(Signature) For the Bank

NOTE

1. Bankers Certificates should be on letter head of the Bank, addressed to tendering authority.
2. In case of Partnership firm, certificate should include names of all partners as recorded with the Bank.

PERFORMANCE REPORT OF WORKS REFERRED TO IN FORMS 'C'

1. Name of work/project & Location:
2. Agreement No:
3. Estimated Cost:
4. Tendered Cost:
5. Date of Start:
6. Date of completion:
- (i) Stipulated date of completion:
- (ii) Actual date of completion:
7. Amount of compensation levied for delayed completion, if any:
 - (a) Whether case of levy of compensation for delay has been decided or not - Yes/No
 - (b) If decided, amount of compensation levied for delayed completion, if any:
8. Amount of reduced rate items, if any
9. Performance Report:

(1) Quality of work	:	Outstanding/Very Good/Good/Poor
(2) Financial Soundness	:	Outstanding/Very Good/Good/Poor
(3) Technical Proficiency	:	Outstanding/Very Good/Good/Poor
(4) Resourcefulness	:	Outstanding/Very Good/Good/Poor
(5) General Behaviour	:	Outstanding/Very Good/Good/Poor

Dated :

Executive Engineer or Equivalent

Financial Bid

Name of Work: - “SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR”

NIT No: AIIMS/BBSR/ENGG/ELECT/20/2026

SI No	Description Of Item	Unit	QTY.	Per Unit Rate	Total Amount
1	Supply, installation, testing and commissioning of electrically driven high pressure centrifugal fire Drencher pump, suitable for automatic operation consisting of the following: 1. Horizontal end suction centrifugal pump, suitable for operation on 415 volts $\pm$ 10 %, 3 phase, 50 HZ A.C supply. The installation shall be complete with flexible coupling and coupling guard as required. Fire pump shall have C.I. casing, CS diffusers, bronze impeller (hard finished and dynamically balanced) and S.S. (304) Shaft with Mechanical seal (Tungston to Ceramic)., capable for delivering a minimum pressure of 2.0 Kg/Sqcm at the farthest or topmost hydrant. The installation shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side. (The pump should be tested for duty point test at factory and shall be got approved by the Local Fire Authority). The cost shall be inclusive of the installation of vibration mounts, foundation, bolts, Anti Vibration Pads for pump mounting with all accessories etc. required for installation. 2. Pump shall be capable of furnishing not less than 150% of rated discharge at a head of not less than 65% of the rated head. The shut off head shall not exceed 120% of rated head. 3. Squirrel cage IE2 induction motor, TEFC type suitable for operation on 415 volts, 3 phase 50 HZ A.C supply, for the above pump with synchronous speed of 2900 RPM, conforming to IP 55 protection & class F insulation. The motor shall conform to IS 325-1978 (up to date) with flexible coupling and coupling guard. Flow : 4500 LPH, Head : 57 Meter	Nos.	1	₹ 5,59,910.00	₹ 5,59,910.00
2	Providing, installation, testing and commissioning of 150 mm stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange.	Nos.	1	₹ 11,682.00	₹ 11,682.00
3	Supplying, fixing, testing and commissioning of 150 mm butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095.	Nos.	17	₹ 9,737.00	₹ 1,65,529.00

4	Providing 150 mm Wafer type check valve including rubber gasket, flanges, union, nuts, bolts, washers & painting complete as required. The MOC and Construction type shall be as per specifications. MOC: • Body : Cast Iron • Plate : SS 316 • Seat : EPDM	Nos.	6	₹ 11,634.80	₹ 69,808.80
5	Providing 150 mm PN 1.6 rating heavy duty double flanged Expansion/Flexible bellows of standard length as per manufacturers specs including rubber gaskets, flanges, nuts, bolts and washers complete as required. (MOC : Flexicon Rubber)	Nos.	2	₹ 10,691.98	₹ 21,383.96
6	Providing & fixing of pressure switch in M.S. pipe line including connection etc. as required.	Nos	1	₹ 1,670.00	₹ 1,670.00
7	Providing and fixing in position industrial type pressure gauges with gun metal / brass valves complete etc. as required.	Nos	5	₹ 1,491.00	₹ 7,455.00
8	Providing & fixing 25 mm Brass air release valve with silicon rubber seal, high temperature resistant polyethylene, having maximum working pressure of 10 bar in the pipeline includes isolating valve with all necessary accessories all complete as per direction of the Engineer in charge.	Nos.	1	₹ 2,348.20	₹ 2,348.20
9	Providing 15 mm dia heavy quality Ball valve with forged brass hard chrome plated ball & teflon seat of approved quality with all accessories as required.	Nos.	3	₹ 873.20	₹ 2,619.60
10	Providing 25 mm dia heavy quality Ball valve with forged brass hard chrome plated ball & teflon seat of approved quality with all accessories as required.	Nos.	1	₹ 1,345.20	₹ 1,345.20
11	Supplying, installation, testing & commissioning of 150 mm dia deluge valve (to be used for water curtains) UL listed with wet pilot basic trim assembly for DVA with test and alarm, drip and drain valve with water motor gong complete as required.	Nos	5	₹ 1,21,301.00	₹ 6,06,505.00
12	Providing, installation, testing & commissioning of water curtain nozzle 15mm dia nickel chrome plated brass, BSPT, K-factor as per design consideration complete as required.	Nos	190	₹ 787.00	₹ 1,49,530.00
13	Providing, installation, testing & commissioning of electric release trim assembly for deluge wall with two way solenoid valve, weather proof operation on 24 volts DC supply complete as required.	Nos	5	₹ 7,755.00	₹ 38,775.00
14	Providing, laying, testing & commissioning of 'C' class 25 mm dia heavy duty MS pipe conforming to IS 1239/Class - II of IS: 3589 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting (Providing two coats of synthetic enamel paint of approved shade over a coat of suitable primer as per paint manufacture recommendation. Prior to application of primer the surface should be cleaned for any dirt, rusts, rough substance etc. Including painting of legends both direction arrow as per the approval of the EIC. Total film thickness of paint shall not be less than 100 microns as per the IS1477).	Mtr	48	₹ 920.00	₹ 44,160.00

15	Providing, laying, testing & commissioning of 'C' class 50 mm dia heavy duty MS pipe conforming to IS 1239/Class - II of IS: 3589 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting (Providing two coats of synthetic enamel paint of approved shade over a coat of suitable primer as per paint manufacture recommendation. Prior to application of primer the surface should be cleaned for any dirt, rusts, rough substance etc. Including painting of legends both direction arrow as per the approval of the EIC. Total film thickness of paint shall not be less than 100 microns as per the IS1477).	Mtr	96	₹ 1,557.00	₹ 1,49,472.00
16	Providing, laying, testing & commissioning of 'C' class 100 mm dia heavy duty MS pipe conforming to IS 1239/Class - II of IS: 3589 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting (Providing two coats of synthetic enamel paint of approved shade over a coat of suitable primer as per paint manufacture recommendation. Prior to application of primer the surface should be cleaned for any dirt, rusts, rough substance etc. Including painting of legends both direction arrow as per the approval of the EIC. Total film thickness of paint shall not be less than 100 microns as per the IS1477).	Mtr	162	₹ 3,077.00	₹ 4,98,474.00
17	Providing, laying, testing & commissioning of 'C' class 150 mm dia heavy duty MS pipe conforming to IS 1239/Class - II of IS: 3589 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting (Providing two coats of synthetic enamel paint of approved shade over a coat of suitable primer as per paint manufacture recommendation. Prior to application of primer the surface should be cleaned for any dirt, rusts, rough substance etc. Including painting of legends both direction arrow as per the approval of the EIC. Total film thickness of paint shall not be less than 100 microns as per the IS1477).	Mtr	648	₹ 4,299.00	₹ 27,85,752.00
18	Supply Installation, of Structural Steel Support	Kg	2000	₹ 167.56	₹ 3,35,120.00
19	Supply Installation, of MS Fitting Materials	Lot	1	₹ 1,94,700.00	₹ 1,94,700.00
20	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS/HFFR outer sheath complete as required.	Mtr	1200	₹ 192.00	₹ 2,30,400.00
21	Supply of 70 sq. mm 3 core 1.1 KV XLPE FR armoured aluminum cable, PVC inner sheathed, overall PVC sheathed cable in conformity to the technical specification and as per IS 7098	Mtr	110	₹ 1,254.34	₹ 1,37,977.40
22	Providing and Fixing MCC (Motor Control) Panel	Nos.	1	₹ 2,53,700.00	₹ 2,53,700.00

23	Supplying, installation, testing & commissioning of intelligent analog addressable photothermal detector complete with mounting base complete as required.	Nos	50	₹ 3,004.00	₹ 1,50,200.00
24	Supplying, installation, testing & commissioning of addressable fire control module complete as required.	Nos	5	₹ 3,156.00	₹ 15,780.00
25	Supplying, installation, testing & commissioning of addressable manual call point complete as required.	Nos	5	₹ 4,063.00	₹ 20,315.00
26	Supplying, installation, testing & commissioning of addressable horn cum strobe complete as required.	Nos	5	₹ 3,682.00	₹ 18,410.00
27	Supplying, installation, testing and commissioning of micro processor based intelligent addressable main fire alarm panel, central processing unit with the following loop modules and capable of supporting not less than 240 devices (including detectors) and minimum 120 detectors per loop and loop length up to 2 km, network communication card, minimum 320 character graphics/ LCD display with touch screen or other keypad and minimum 4000 events history log in the non volatile memory (EPROM), power supply unit (230 ± 5 % V, 50 hz), 48 hrs back-up with 24 volt sealed maintenance free batteries with automatic charger. The panel shall have facility to connect printer to printout log and facility to have seamless integration with analog/digital voice evacuation system (which is part of the schedule of work under SH: PA System) and shall be complete with all accessories . The panel shall be compatible for IBMS system with open protocol BACnet/ Modbus over IP complete as per specifications. (i) Two loop panel	Nos	1	₹ 2,50,420.00	₹ 2,50,420.00
28	Supplying, fixing, testing & commissioning of 150 mm double flanged sluice valve of rating PN 1.6 with non rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming to IS 780.	Nos	2	₹ 23,968.00	₹ 47,936.00
29	Providing, installation, testing and commissioning of 150 mm non-return valve conforming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc. as required.	Nos	1	₹ 18,884.00	₹ 18,884.00
Total (inclusive GST)				₹ 67,90,262.16	
Total Amount(Say)				₹ ₹ 67,90,262.00	

PERFORMA FOR QUOTING RATES

Name of Work:- “SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WATER CURTAIN AT AIIMS BHUBANESWAR”	
e-NIT No: AIIMS/BBSR/ENGG/ELECT/20/2026	
Total Estimated Amount (including GST) in Rs. - ₹ 67,90,262	
Name of Contactor -	
Total Estimated Amount of SITC work (including of GST) in Rs.	₹ 67,90,262
Percentage above/at par/below the total estimated cost	<i>This is the Sample .Donot quote rate here.</i>
% in words	<i>This is the Sample .Donot quote rate here.</i>
Total Amount Including GST- (Rs.)	<i>This is the Sample .Donot quote rate here.</i>
Percentage above/at par/below the total estimated cost	<i>This is the Sample .Donot quote rate here.</i>
% in words	<i>This is the Sample .Donot quote rate here.</i>
Total Amount Including GST- (Rs.)	<i>This is the Sample .Donot quote rate here.</i>

(Rupees _____ *This is the Sample .Donot quote rate here.* _____ only)

Note: -

- MR = To be read as Market Rate.**
- The Bidder must submit Financial Bid in On-Line Mode.
- I/We have gone through the terms & conditions as stipulated in the tender and confirm to accept and abide the same.
- No other charges would be payable by the Institute
- Quantity mentioned above is tentative, it may increase or decrease as per site requirement.
- Agency has to bring samples as per above preferred brands only and Engineer-In-Charge shall approve one sample out of the samples brought by the Agency. The Agency has to use material of that approved sample only. No claim in this regard shall be entertained.
- In case of non-availability of material of approved make, prior approval from Engineer-In-Charge shall be obtained for another make.
- The quoted should be inclusive of GST as applicable.

I, the contractor certify that I am filling this template after understanding all the items of schedule of Quantity of e-NIT page no.-----

Name : _____

Business Address: _____

Signature of the Bidder: -

Date : _____

Place : Bhubaneswar

Seal of the Bidder _____

E-TENDERING INSTRUCTIONS TO BIDDERS

General. The Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as given in this Tender Document. Submission of Online Bids is mandatory for this Tender. E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Suppliers / Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, AIIMS BHUBANESWAR has decided to use the portal <http://eprocure.gov.in/AIIMSBBSR> website.

Instructions.

1. **Tender Bidding Methodology.** Two Stage Online Bidding.
2. **Broad outline of activities from Bidders prospective:**
 - (a) Procure a Class III Digital Signature Certificate (DSC).
 - (b) Register on the e-Procurement portal <http://eprocure.gov.in/AIIMSBBSR> website.
 - (c) Create Users on the above portal.
 - (d) View Notice Inviting Tender (NIT) on the above portal.
 - (e) Download Official Copy of Tender Documents from the above portal.
 - (f) Seek Clarification to Tender Documents on the above portal. View response to queries of bidders, posted as addendum, by AIIMS, Bhubaneswar.
 - (g) Bid-Submission on the above portal.
 - (h) Attend Public Online Tender Opening Event (TOE) on the above portal - Opening of Technical Part.
 - (j) Post-TOE Clarification on the above portal (Optional) – Respond to AIIMS, Bhubaneswar's Post-TOE queries.
 - (k) Attend Public Online Tender Opening Event (TOE) on the above portal - Opening of Financial Part (Only for Technical Responsive Bidders).

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the above portal.

3. **Digital Certificates.** For integrity of data and authenticity / non-repudiation of electronic records, and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC), also referred to as Digital Signature Certificate (DSC), of Class III, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].
4. **Registration.** To use the Electronic Tender portal <http://eprocure.gov.in/AIIMSBBSR> website, vendors need to register on the portal. Registration of each organization is to be done by one of its senior persons vis-à-vis Authorized Signatory who will be the main person coordinating for the e-tendering activities. In the above portal terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit the website/portal, and follow further instructions as given on the site. Pay Annual Registration Fee as applicable.

Note : After successful submission of Registration details and Annual Registration Fee, please contact to the Helpdesk of the portal to get your registration accepted/ activated.

- (a) The Bidder must ensure that after following above, the status of bid submission must become - "Submitted".
- (b) Please take due care while scanning the documents so that the size of documents to be uploaded remains minimum. If required, documents may be scanned at lower resolutions say at 150 dpi. However, it shall be sole responsibility of bidder that the uploaded documents remain legible.
- (c) It is advised that all the documents to be submitted are kept scanned or converted to PDF format in a separate folder on your computer before starting online submission.
- (d) The Financial part/BOQ may be downloaded and rates may be filled appropriately. This file may also be saved in a folder on your computer. Please don't change the file names & total size of documents (Preferably below 5 MB per document) may be checked.

5. Bid submission. The entire bid-submission would be online on the Tender wizard portal i.e. <https://eprocure.gov.in/AIIMS>, Bhubaneswar.

6. Broad outline of submissions are as follows: -

- (a) Submission of Bid Parts (Technical & Financial).
- (b) Submission of information pertaining to Bid Security/ EMD.
- (c) Submission of signed copy of Tender Documents/Addendums.

7. The TECHNICAL PART shall consist of Electronic Form of Technical Main Bid and Bid Annexure. Scanned/Electronic copies of the various documents to be submitted under the Eligibility Conditions, offline submissions, instructions to bidders and documents required establishing compliance to Technical Specifications and Other Terms & Conditions of the tender are to be uploaded.

8. The FINANCIAL PART shall consist of Electronic Form of Financial Main Bid and Financial Bid Annexure, if any. Scanned copy of duly filled price schedule (Section VII) for both packages are to be uploaded. If required, additional documents in support of taxes, quoted duties etc may also be uploaded.

9. Tender Processing Fee. As per applicable.

10. Public Online Tender Opening Event (TOE). The e-Procurement portal offers a unique facility for 'Public Online Tender Opening Event (TOE)'. Tender Opening Officers as well as authorized representatives of bidders can attend the Public Online Tender Opening Event (TOE) from the comfort of their offices. For this purpose, representatives of bidders (i.e. Supplier organization) duly authorized. Every legal requirement for a transparent and secure 'Public Online Tender Opening Event (TOE)' has been implemented on the portal. As soon as a Bid is decrypted, the salient points of the Bids are simultaneously made available for downloading by all participating bidders. The medium of taking notes during a manual 'Tender Opening Event' is therefore replaced with this superior and convenient form of 'Public Online Tender Opening Event (TOE)'. The portal a unique facility of 'Online Comparison Statement' which is dynamically updated as each online bid is opened. The format of the Statement is based on inputs provided by the Buyer for each Tender. The information in the Comparison Statement is based on the data submitted by the Bidders. A detailed Technical and / or Financial Comparison Statement enhance Transparency. Detailed instructions are given on relevant screens. The portal has a unique facility of a detailed report titled 'Online Tender Opening Event (TOE)' covering all important activities of 'Online Tender Opening Event (TOE)'. This is available to all participating bidders for 'Viewing/Downloading'. There are many more facilities and features on the portal. For a particular tender, the screens viewed by a Supplier will depend upon the options selected by the concerned Buyer.

Important Note. *In case of internet related problem at a bidder's end, especially during 'critical events' such as – a short period before bid-submission deadline, during online public tender opening event it is the bidder's responsibility to have backup internet connections. In case there is a problem at*

the e-procurement / e-auction service-provider's end (in the server, leased line, etc) due to which all the bidders face a problem during critical events, and this is brought to the notice of AIIMSBBBSR by the bidders in time, then AIIMS, Bhubaneswar will promptly reschedule the affected event(s).

9. Other Instructions. For further instructions, the vendor should visit the home-page of the portal. The complete help manual is available in the portal for Users intending to Register / First-Time Users, Logged-in users of Supplier organizations. Various links are also provided in the home page.

Important Note. : It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups and minimize teething problems during the use of the said portal.

The following 'FOUR KEY INSTRUCTIONS for BIDDERS' must be assiduously adhered to :-

1. Obtain individual Digital Signature Certificate (DSC) well in advance of your first tender submission deadline on the portal.
2. Register your organization on the portal well in advance of your first tender submission deadline on the portal
3. Get your organization's concerned executives trained on the portal well in advance of your first tender submission deadline on the portal
4. Submit your bids well in advance of tender submission deadline on the portal (There could be last minute problems due to internet timeout, breakdown etc.)
5. While the first three instructions mentioned above are especially relevant to first-time users on the portal, the fourth instruction is relevant at all times. Minimum Requirements at Bidders end Computer System with good configuration (Min P IV, 1 GB RAM, Windows XP) Broadband connectivity. Microsoft Internet Explorer 8.0 or above. Digital Certificate(s) Vendors Training Program Necessary training to each and every registered bidder under this portal shall be impacted by the ASP, M/s. ITI, Bhubaneswar, if required, before participation in the online tendering.
6. For any further Assistance <http://eprocure.gov.in/AIIMSBBBSR> website for E-tendering queries contact representative NIC helpdesk.