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Basic Details										
Organisation Chain	Indian	Institute of Technolog	y Indore	e Inf	rastructure Develop	ment C	ffice	- IITI		
Tender Reference Number	IITI/ID	O/PR/C/FC/NIT/23-24	/23							
Tender ID		ITI_791058_2			rawal Allowed		Yes			
Tender Type	Open T	ender		-	of contract			m Rate		
Tender Category	Works				Covers		2			
General Technical Evaluation Allowed	No		E	valua	Vise Technical ation Allowed		No			
Payment Mode	Offline			s Mul OQ	ti Currency Allow	ed For	No			
Is Multi Currency Allowed For Fee	No		A	llow	Two Stage Biddir	ng	No			
Payment Instru	ments		Cov	ver	Details, No. Of	Cove	r s -	2		
Offline S.NoInstrun			Cov No	er	Cover	D	ocun	ient Type	Desci	riptio
			1		Fee/PreQual/Tech	nical .p	df		associ electri and fi alarm in POI and 1	cal re work D1A
			2		Finance		S		Provid and fi false of and associ electri and fi alarm in POI and 1	ling xing c ceiling ated cal re work D1A
Tender Fee Deta	ils, [Tota	al Fee in ₹ * - 0.0	00]	E	MD Fee Details	5				
Tender Fee in ₹	0.00			E	MD Amount in ₹	1,31,6	517	EMD through		No
Fee Payable To	Nil	Fee Payable At	Nil					BG/ST or EMD Exemption All		
Tender Fee	No			FI	MD Fee Type	fixed		EMD Percenta		NA
Exemption Allowed					MD Payable To	Regist IIT In		EMD Payable	At	IIT Indor
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Work /Item(s)										

Work Descri			Providing and and 1D.	fixing of fa	lse ceilin	g and a	associated	electri	cal and fi	re alarm woi	k in the co	orridor	of POD 1A
Pre Qualifica Details	ation	А	s per tender document										
Independen External Monitor/Rer		Ν	A										
Show Tende in Public Do		e Y	′es										
Tender Valu	e in ₹	6	5,80,843 Proc		Prod	uct Ca	ategory	Con Woi		Sub catego	ory		e ceiling electrical ⁻ ks
Contract Typ)e	Т	ender		Bid \	/alidit	y(Days)	180		Period Of (Days)	Work	90	
Location			POD 1A and 1 ndore	D at IIT	Pinc	ode		453	552	Pre Bid Me Place	eting	Gno Flr,/	Abhinanda Iwan, IIT
Pre Bid Mee Address	ting	F B K	· · ·			Pre Bid Meeting Date			Feb- 4 11:00	Bid Opening Place		IDC Ind) office, II ⁻ ore
Should Allov Tender	v NDA	Ν	lo		Allov Bidd		erential	No					
Critical Da	tes												
Publish Date				02-Feb-2024 04:00 PM Bid Openin			ning D	ing Date 13-F			2024 (04:30 PM	
Document D Date	ownlo	ad /	Sale Start	02-Feb-2024 05:00 PM			Docume Date	· · · · · · · · · · · ·				eb-2024 04:00 PM	
Clarification	Start	Date		NA Clarificatio			tion E	on End Date NA					
Bid Submiss	ion Sta	art D	ate	06-Feb-20	24 11:30	24 11:30 AM Bid Submission End Date				ate	12-Feb-2024 04:00 PM		
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Tender Do	cume	ents										1	
NIT Document			ument Nam				scription						ment (in KB)
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Work Item Documents	S.No	Doc	ument Type	1	Docum	ent Name Description			ription	ntion		ment (in KB)	
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<u>2</u> .			@iiti.ac.in								SHERIN JA	СОВ	
3.	chainik						hainika Malhotra CHAIN						
1.	snaller	iaraja	at@iiti.ac.in			snailer	dra Jat				SHAILEND	ka kui	MAK JA I
Tender Pro	opert	ies											
Auto Tender Process allo			No					1	Show Te	chnical bid	status		Yes
			Yes						Ch D:	ds Details			No

Show Finance bid				
status				
BoQ Comparative Chart model	Normal		BoQ Compartive chart decimal places	2
BoQ Comparative Chart Rank Type	L		Form Based BoQ	No
Show Bid Details in Publ Domain stage	ic Technical Bid C	Opening		
TIA Undertaking				
S.No Undertaking to O	rder	Tender complying with Order	Reason for non compliance of Order	
1 PPP-MII Order 2017		Agree	•	
		Agree		
		3		
		3		
2 MSEs Order 2012 Tender Inviting A		Agree		
2 MSEs Order 2012	uthority Project In Cha	Agree	IIT Indore, Khandawa road, Simrol, Indore, M	IP-453552
2 MSEs Order 2012 Tender Inviting A Name	uthority Project In Cha	Agree	IIT Indore, Khandawa road, Simrol, Indore, M	IP-453552
2 MSEs Order 2012 Tender Inviting A Name	uthority Project In Cha IDO Office, Gro	Agree	IIT Indore, Khandawa road, Simrol, Indore, M	IP-453552
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2 MSEs Order 2012 Tender Inviting A Name Address	uthority Project In Cha IDO Office, Gro etails	Agree rge ound Floor,Abhniandan Bhawan,:	IIT Indore, Khandawa road, Simrol, Indore, M	IP-453552



INDIAN INSTITUTE OF TECHNOLOGY INDORE

SIMROL, KHANDWA ROAD, INDORE 453552

www.iiti.ac.in



TENDER DOCUMENT FOR

Providing and Fixing of False ceiling and associated electrical & fire alarm work in the corridor of POD- 1A& 1D

NIT No: IITI/IDO/PR/C/FC-EF/NIT/2023-24/23

Last date of Submission: 12.02.2024



<u>Index</u>

Name of Work: - Balance work for Phase 1A (a)-Part A at IIT Indore

Serial No.	Contents	Page No.
 1.	Index	2
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4.	EMD submission procedure	7
5.	CPWD 6	8 - 12
6.	Form of Performance Bank Guarantee	13
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8.	General Conditions of Contract	18 - 20
9.	Special Conditions of Contract	21 - 28
10.	Proforma of Schedules	29 - 33
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12.	Technical Bid Documents	44 - 58
13.	Financial Bid	59 - 60
14.	Schedule of Quantity	61- 62

Note : This NIT contains 62 (Sixty-Two) pages. Pages marked from 1 to 62 pages (excluding GCC & correction slip of GCC).

DE(E)	Senior Engineer (C)	DEE(C)
	tender amounting Rs. 65,80,843/- (Rupees Sixty Hundred Forty Three Only) is hereby approved.	Five Lakhs Eighty

Project In Charge



INDIAN INSTITUTE OF TECHNOLOGY INDORE

NOTICE INVITING TENDER

The Project In-Charge, IIT Indore invites item rate bids in two bid system for following work:

NIT No.: IITI/IDO/PR/C/FC-EF/NIT/2023-24/23

Name of Work: "Providing and Fixing of false ceiling and associated electrical & fire alarm work in the corridor of POD 1A & 1D."

Estimated Cost: Rs. 65,80,843/- (Rupees Sixty Five Lakhs Eighty Thousand Eight Hundred Forty Three Only)

Earnest Money : Rs. 1,31,617 /- (Rupees One Lakh Thirty One Thousand Six Hundred Seventeen Only)

Time of Completion: 90 Days (Including rainy season and holidays)

Date of availability of tender document for download from 02.02.2024 to 12.02.2024 can be seen on website <u>https://www.iiti.ac.in/tender_estate</u>, and downloaded free of cost and shall be submitted online on website central public procurement portal (CPPP) <u>https://eprocure.gov.in/eprocure/app</u>.

Pre-bid meeting will be held on 05.02.2024 from 11:00 AM to 1.00 PM at IDO Office, Ground Floor, Abhinandan Bhawan.

Bid submission will start from **11:30 AM of 06.02.2024**.

Last date and time for submission of bids is up to 4.00 PM of 12.02.2024.

Time and date of opening of eligibility bid: **13.02.2024** at **4.30 PM**.

Note: Please note that since this is retender, bidders who have already submitted EMD (Earnest Money Deposit) of Rs. 1,31,617 while applying of following tender with details as mentioned below are not required to re-submit the EMD while applying for this tender but they have to submit the EMD receipt while uploading technical bid document which they have obtained earlier during submission of tender as detailed below.

<u>Tender Details:</u> Tender id: 2024 IITI 791058 1

<u>NIT No: IITI/IDO/PR/C/FC-EF/NIT/2023-24/23</u> <u>Tender Name: "Providing and Fixing of false ceiling and associated electrical & fire</u> <u>alarm work in the corridor of POD 1A & 1D."</u>



INFORMATION AND INSTRUCTIONS FOR BIDDERS

The Project in Charge, IIT Indore on behalf of IIT Indore invites online item rate tenders from eligible firms / contractors of repute in two bid system for the following work:

SI.	/2023-24/23	Name of work & Location	Estimated cost of work	Earnest Money	Period of Compl etion	Date & Time of Pre-Bid meeting	Start Date and Time for submission /uploading of eligibility and financial bids and other	Last date & Time of submission /uploading of eligibility and financial bids and other	Time & date of opening of Eligibility bid
1	,FC	"Providing and Fixing of false ceiling and associated electrical & fire alarm work in the corridor of POD 1A & 1D."	Rs.65,80,843 /-	Rs. 1,31,617 /-	(Includi	05.02.2024 from 11:00 AM to 1.00	From 11:30 AM of 06.02.2024.	up to 4.00 PM of 12.02.2024.	At 4.30 PM of 13.02.2024

- 1. Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.
- (a) Should have satisfactorily completed similar works in CPWD / MES / State PWD / Central PSUs / Central Government Educational Institutes/Railways/ Central government funded institutes/ Central or state government organization as mentioned below during the last seven years ending previous day of last date of submission of bids.

Three similar works each costing not less than Rs. 26.32 Lakhs

or

Two similar works each costing not less than Rs. 39.49 Lakhs

or

One similar work costing not less than Rs. 52.65 Lakhs

Eligible similar work shall mean works which include civil, electrical etc. Decision of Institute to accept or reject any work as eligible similar work shall be final.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to previous day of last date of submission of bids.

(i) Should have an average annual financial turnover of Rs. 33 Lakhs on construction works during the last five years ending March 31, 2023. In this regard a certificate



issued by a Qualified Chartered Accountant is to be attached. The certificate should be latest and to be issued only after the date of publishing of this tender.

- (ii) Should not have incurred any loss (profit after tax should be positive) in more than two years during the last five years ending March 31, 2023.
- (iii) Should have a solvency of Rs. 26.32 Lakhs .Bank solvency shall be latest and to be issued by the banks only after the date of publication of the tender
- (iv) Online deposited receipt against EMD.
- (v) Should submit seal and signed copy of complete tender documents along with corrigendum/addendum (If any)
- (vi) Should have valid GST registration certificate.
- (vii) Should have valid EPF registration certificate.
- (viii) Should have valid ESIC registration certificate.
- (ix) Should have valid PAN CARD registration certificate.
- (x) Should have valid company/firm registration certificate.
- (xi) Should have valid Building & other construction works (BOCW) registration certificate or undertaking that they will submit it if the work is awarded. .
- (xii) Should have valid labor license registration certificate or undertaking that they will submit it if the work is awarded.
- (xiii) Should submit on letter head as per clause 1.3 of CPWD-6 (Page-8).
- (xiv)Should submit the documents as per technical bid documents (From P-44 to P-58 of this tender).
- (xv) Should submit the self declaration certificate on their letter head that for any work in last five years performance bank guarantee has never been forfeited / encashed by the client.
- (xvi) Work Order copy fulfilling similar work condition shall be provided with Schedule of Rates and Scope of Works including Satisfactory Completion certificate by client (Seal and signed by Executive Engineer or equivalent) with executed value, date of completion of the job and reference work order number. In case executed value is not mentioned in the completion certificate issued by the client, work order value with amendments, if any, shall be considered for the purpose of evaluation.
- 2. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required and should submitted with technical bid.
- 3. The amount of EMD will be paid by online mode only.
- 4. Information and Instructions for bidders posted on website shall form part of tender and bid document.
- 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms & conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website stated above.



- 6. The tender shall only be submitted after uploading the mandatory scanned documents as per list given in tender document.
- 7. The Eligibility bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the eligibility bid shall be uploaded on CPP portal.
- 8. IIT Indore reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criteria.
- 9. Disqualification of Tenderer: Even if a Tenderer meets all the Eligibility Criteria and all other technical and commercial requirements, he is liable to be disqualified, without prejudice to IITI's rights to take legal actions as per applicable law, if he has made untrue or false representations in the forms, statements, translations and enclosures submitted in proof of eligibility and qualification requirements, and/or made any misrepresentation of facts in order to influence the tendering process and its outcome. There shall be no post tender negotiations except in case of negotiations with Tenderer of substantially responsive, reasonable and lowest evaluated (L-1) Bid.



EMD submission procedure

The tender shall be accompanied with the Acknowledgment of Earnest money paid of amounting Rs. 1,31,617 /- (Rupees One Lakh Thirty One Thousand Six Hundred Seventeen only) and the payment should be made through digital means only. The following payment gateway link (sbi collect) can be used for EMD payment:

https://www.onlinesbi.sbi/sbicollect/icollecthome.htm

While submitting the EMD only, following details to be mentioned on portal:

Tender number Name of work IITI/IDO/PR/C/FC-EF/NIT/2023-24/23 "Providing and Fixing of false ceiling and associated electrical & fire alarm work in the corridor of POD 1A & 1D."



CPWD – 6

Indian Institute of Technology Indore

Notice Inviting Tender

1. Project in Charge IIT Indore on behalf of IIT Indore invites item rate bids from eligible firms/contractors of repute in two bid systems for the work of "Providing and Fixing of false ceiling and associated electrical & fire alarm work in the corridor of POD 1A & 1D."

1.1 The work is estimated to a composite cost of: Rs.65,80,843 /-this estimate, however, is given merely as a rough guide.

1.2 Criteria of eligibility for contractors: Same as Mentioned in earlier pages.

1.3 To become eligible for participation in bidding process, the bidder shall have to furnish on letter head as under: -

I/We undertake and confirm that eligible similar works(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 IIT Indore 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 Deposit/Performance Guarantee.

- 2. Agreement shall be drawn with the successful bidder on prescribed Form No. CPWD 8 modified / amended up to last date of receipt of tender, Bidder shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.
- 3. The time allowed for carrying out the work will be 90 Days (including rainy season and holidays) from the date of start as defined in Schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- 4. The site for the work is available at IIT Indore
- 5. The bid document consisting of 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.
- 6. Copy of certificate of work experience, Certificate of financial turnover from Chartered Accountant, Bank Solvency Certificate and other documents mentioned shall be submitted within the period of bid submission and all documents mentioned in Technical bid document (P-37 to P-50 of this tender) in the prescribed formats of Form 'A' to 'G' and Annexure 'A' to 'F' along with certified copies of supporting documents shall also be submitted At the time of submission of bid contractor must submit 'Affidavit / Certificate from CA mentioning Financial Turnover of last 3 years or for the period as specified in the bid document and further details, if required, may be asked from the Contractor after opening of Eligibility bid documents.
- 7. The bid submitted shall become invalid and shall not be refunded if:



- (i) The bidder is found ineligible.
- (ii) The bidder does not submit all the documents as stipulated in the bid document.
- (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
- (iv) 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) and the bidder shall be bound to execute that item without any cost implication. However, if a tenderer quotes nil rates against each item in item rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- 8. The contractor whose bid is accepted will be required to furnish performance bank guarantee of 5<u>% (Five Percent)</u> of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of Fixed Deposit Receipts or Guarantee Bonds of any Nationalized Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any,

The performance guarantee shall be valid up to successful completion of defect liability period. Further the claim period of the performance guarantee should be beyond one year from the date of validity of the performance guarantee. The performance guarantee shall be irrevocable in nature and shall be in the prescribed format given in the tender document. The performance guarantee shall be submitted directly by the Issuing bank to IIT Indore.

- 9. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses / registrations or proof of applying for obtaining labor licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. if applicable and also ensure the compliance of aforesaid provisions by the sub contractors, if any engaged by the contractor for the said work and program chart (Time and progress) within the period specified in Schedule 'F'.
- 10. The description of the work is as follows:
- 1. The scope of works includes_"Providing and Fixing of false ceiling and associated electrical & fire alarm work in the corridor of POD 1A & 1D."

Intending bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bids. 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 bidder 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 it has read this notice and all other contract documents and has made itself aware of the scope and specifications of the work to be done and of conditions and rates at which stores,



tools and plant, etc. will be issued to it by the Government and local conditions and other factors having a bearing on the execution of the work.

- 11. The competent authority on behalf of the Board of Governance of IIT Indore 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 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 bid submitted by the contractors who resort to canvassing will be liable to rejection.
- 13. The competent authority on behalf of Board of Governance of IIT Indore 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 contractor shall not be permitted to bid for works in the IIT Indore in which its near relative is posted as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive) responsible for award and execution of contracts. It shall also intimate the names of persons who are working with it in any capacity or are subsequently employed by it and who are near relatives to any Gazetted officer in the IIT Indore or in the Ministry of Education.

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 contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of its 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 contractor's service.

- 15. The bid for the works shall remain open for acceptance for a period of **180 days** (One Hundred Eighty days) from the date of opening of technical bid. If any bidder withdraws its bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then IIT Indore shall, without prejudice to any other right or remedy, be at liberty to forfeit 100% of Earnest Money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
- 16. The Eligibility bid shall be opened first on due date and time. The time and date of opening of financial bid of contractors qualifying the eligibility bid shall be uploaded on CPP portal.
- 17. This Notice Inviting Bid shall form a part of the contract document. The successful bidder, on acceptance of its tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:
 - a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b) Standard C.P.W.D. Form 8 amended / modified up to last date (or other Standard C.P.W.D. Form as applicable) of receipt of bid.



<u>TENDER</u>

I/We have read and examined the entire tender documents including notice inviting tender, schedule A, B, C, D, E & F, technical specifications, 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 Director, IIT Indore 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 eligibility bid and not to make any modification in its terms and conditions.

A sum of Rs. 1,31,617 /- is hereby forwarded in online is scanned and uploaded. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/we agree that the said Director, IIT Indore 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 Director, IIT Indore 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 tender form. 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 IIT Indore 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 there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated #	 		•••		•	•	•
Contractor							

Postal Address# Witness: # Address: # Occupation: # # To be filled in by the contractor/witness as applicable Signature of



ACCEPTANCE

The above tender (as modified vide letters mentioned and on behalf of the IIT Indore for a sum of \mathfrak{F} .	
(Rupees)
The letters referred to below shall form part of this cor	ntract Agreement: -
a)	
b)	
c)	
	For & on behalf of the IIT Indore.
	Signature
Dated	Designation



FORM OF PERFORMANCE BANK GUARANTEE BOND

As per CPWD GCC 2023 Construction works



Instructions for Online Bid Submission

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

More information useful for submitting online bids on the CPP Portal may be obtained at:

https://eprocure.gov.in/eprocure/app.

REGISTRATION

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

SEARCHING FOR TENDER DOCUMENTS

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



PREPARATION OF BIDS

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

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

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload\ the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected. The vendor/firm should fill the complete details as mentioned in BOQ and exclusion of any cell of BOQ (Financial bid), the cost will be treated as inclusive of GST and other charges as mentioned in the BOQ column.



- 4) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 5) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 6) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 8) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

GENERAL INSTRUCTIONS TO THE BIDDERS

- 1) The tenders will be received online through portal http://eprocure.gov.in/eprocure/app. In the Technical Bids, the bidders are required to upload all the documents in pdf format.
- 2) Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/appunder the link "Information about DSC".
- 3) Tenderer are advised to follow the instructions provided in the "Instructions to the Tenderer" for the e-submission of the bids online through the Central Public Procurement Portal for E- Tender at <u>http://eprocure.gov.in/eprocure/app</u>



Online Bid Form

The bidder shall complete the online bid form and the appropriate price schedule furnished in the online bidding documents.

Online Bid prices

The Bidder shall indicate on the Price Schedule the unit price and total bid prices of the goods/works/services it proposes to supply/execute under the Contract.

For taking assistance for bid submission, if any	CPP Portal website: www.eprocure.gov.in CPP Portal Help Desk Toll Free No.:18002337315, 180030702232



GENERAL CONDITIONS OF CONTRACT

GCC 2023 (Construction Works) of CPWD is a part of the tender document.

However, the designations of authorities concerned as per this GCC should be read as below:

Sr. No.	Name of Concerned authority as per GCC of CPWD	To be read as
1	2	3
1	President of India	Chairperson BOG, IIT Indore
2	Engineer-In-Charge	Project In charge
3	Director General	Director, IIT Indore
4	Department	Infrastructure Development Office, IIT Indore
5	Chief Engineer CPWD	Project In charge,
6	Director General (works)CPWD	Director, IIT Indore
7	Additional Director General	Dean of Infrastructure Development, IIT Indore
8	The Divisional Engineer	Executive Engineer, IIT Indore

• The word "CPWD" will remain intact, wherever the rules, forms, formats, annexures, appendices, clauses, rate analysis formats, specifications etc. published by CPWD are referred.

DEFINITIONS

In the contract, the following expressions shall, unless the context otherwise requires, have the meanings hereby respectively assigned to them:

The CONTRACT shall mean the documents forming the tender and acceptance thereof together with the documents referred to therein including conditions, specifications, designs, drawings and instructions issued from time to time by the Engineer-in-Charge and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

The WORKS OR WORK shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works, by virtue of the contract contracted, to be executed whether temporary or permanent, and whether original, altered, substituted or additional.

The SITE shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.

The CONTRACTOR shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such



firm or company and the permitted assignees of such individual, firm or company.

General Condition of Contract for CPWD works 2023 as amended to the latest stage shall become parts & parcel of the tender documents

The Board of Governors of IIT Indore shall mean its successors also. The Engineer Incharge shall mean the Project in charge IIT Indore or his authorized representative.

The Institute shall mean the Indian Institute of Technology Indore or his nominee as notified.

The Accepting Authority shall mean the Director, IIT Indore on the behalf of Board of Governors IIT Indore.

The Expected Risks shall mean risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority.

The Market Rate shall mean the rate as decided by the Engineer-in-Charge on the basis of the cost of material and labor at the site where the work is to be executed plus 15% cover all the overheads and profits.

The Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender document and the Standard Schedule of Rates of the Institute with the amendments there to issued up to the date of issue of notice inviting tenders.

The Tendered Amount shall mean the amount of the work as stipulated in the letter of award.

Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall, whenever required, include feminine gender and vice versa.

Headings to the General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.

The contractor shall be furnished, free of cost one certified copy of the contract except standard specifications, Schedule of Rates and such other printed and published documents, together with all the drawings as may be forming part of the contract. None of these documents shall be used for any purpose other than that of this contract.

Governing language

The contract shall be written in English. All correspondence and other documents pertaining to the contract which are exchanged by the parties shall be written in the same language.



Applicable Law - The applicable laws shall be that of Union of India.

Notices

Any notices given by one party to the other pursuant to this Contract shall be sent to other party in writing or by E-mail, tele-fax, or facsimile and confirmed in writing to the other party's address as below with a copy to PMC:

Project in Charge

Infrastructure Development Office, IIT Indore.

A notice shall be effective when delivered or on the notice's effective date, whichever is later.

SUFFICIENCY OF TENDER

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all the matters and things necessary for the proper completion and maintenance of the works.



SPECIAL CONDITIONS OF THE CONTRACT

- 1. Since the given work is balance work in which some of the material is already installed at site, its integration with existing system shall be the responsibility of the contractor.
- 2. The contractor shall employ the required number of technical and non-technical manpower. During contract period, the contractor shall depute qualified, experienced and competent manpower as per the site set-up/staff requirement for executing the work. During execution of installation, commissioning, testing activities, in case some additional manpower is required, contractor shall provide the same free of cost. For entry in institute, contractor shall submit the details of the employees i.e. Address proof, I.D. proof, photo etc. for gate pass of all deputies.
- **3.** There are some jobs, viz., electrical & Fire alarm/Public address system that are specialised in nature, where system integration, testing and commissioning are involved. The successful tenderer shall have to prove his experience and expertise in these fields by documentary evidence, else he shall have to engage specialized agencies or OEM (if required) for these work by way of sub-contracting. Prior approval from client shall be obtained for engaging any agency on sub-contracting.
- **4.** Project monitoring / Supervision / Quality assurance and control shall be done by IIT Indore. All the bills with measurement sheets and other documents shall be certified/verified by IIT Indore.
- 5. Contractor shall maintain the following document at site during execution of work such as hindrance register, site order book, quality documents, Site test reports, measurement book etc. but not limited too and the copy of the same shall be submitted by contractor with respective RA bills. Original shall be submitted at the time of final bill.
- **6.** The contractor shall not be entitled for any additional payment during the tenure of the contract due to increase in cost of manpower or any other items.

7. Terms of Payment

Following payment terms shall be applicable. a) No advance payment shall be made. b)Following percentage of contract rates shall be payable against the stage of work shown herein:



 c) Payment related to "Providing and Fixing of false ceiling and associated electrical & fire alarm work in the corridor of POD 1A & 1D."

Sr. No.	<u>Stages</u>
1.	50% (Fifty Percent) of the value of executed BOQ items shall be payable on monthly pro-rata basis subject to satisfactory supply of material upon certification and verification by the Site Engineer of IIT Indore.
2.	40% (Forty Percent) on satisfactory installation of material upon certification and verification by the Site Engineer of IIT Indore.
3.	10% (Ten Percent) on satisfactory Testing, commissioning,handover and submission of all necessary documents such as as-built drawings, warrantee/guarantee certificate, test reports, program back up, passwords, inventory, equipment addressing details etc. of material upon certification and verification by the Site Engineer of IIT Indore.

Deduction of security deposit from above shall be governed by relevant clauses.

For further breakup, if required, the terms of payment will be decided by the Engineer-In-Charge and shall be binding on the contractor.

8. SECURITY DEPOSIT:

Security Deposit shall be deducted from each running bill and the final bill to the extent of 2.5% of the gross amount payable. The security deposit of the contractor shall be released after issuance of Completion certificate and completion of defect liability period.

9. Housekeeping: The contractor shall maintain the installations, commissioning, testing activities clean and tidy inside as well as around the installations and substation buildings. This shall also include sweeping, mopping, cleaning of cobwebs, removal of scrap generated during contract period, etc. in the substations building. All required materials for housekeeping like broom, cobweb broom, mop, bucket, soap, detergents, phenyl, etc. shall be arranged by the contractor. No rags and waste etc. shall be thrown near the building. This shall be deposited in the scrap yard and dustbins provided nearby, as per the department instructions. Also, furniture and fixture therein shall be maintained.

It is the responsibility of the contractor to hand over the entire system to IITI on completion of the contract period in working condition.

10. Accident or injury to workmen:

• IITI shall not be responsible for any injury or loss of any workers of the contractor that may take place while on work. Any compensation or expenditure towards treatment for such injury or loss of life shall be the sole responsibility of the contractor. The contractor is solely responsible for any damage or injury or accident that may occur to any of his personnel working under this contract. He will not claim any compensation from IITI.



• In order to meet any type of emergency, a dedicated vehicle along with driver shall be made available by the contractor in IIT Indore.

11. Theft of Parts:

Contractor shall be fully responsible for theft, burglary, fire or any mischievous deeds by his workers/ staff and shall replace the items under such category. Any loss occurred due to negligence will be recovered from the contractor. Security/ Safety of all installations will be the responsibility of contractor.

Security and safety of all the materials, equipment, tools and tackles etc. brought by contractor for this project shall be sole responsibility of contractor.

12. Materials, Consumables & Tools etc.:

For performance of contract, the Contractor will arrange all the materials/ consumables, tools & machines/ testing equipment's required for execution of said jobs, which will be included in quoted rates. No extra payment for the same will be made by the Institute. During the period of installations, commissioning, testing activities, no extra payment what so ever towards replacement of parts or consumables etc. shall be entertained. It shall be included in rates quoted.

- 13. During the contract period IIT Indore/PMC may handover some of the materials for installation at IIT Indore site. After the handing over the responsibility of store, safety & security will be under contractor scope. It shall be contractor's responsibility to shift these handed over material from IIT Indore store to contractor store or site.
- **14.** Institute shall provide space to contractor for site office, store and laboratory. However, It shall be contractors responsibility to develop site office, store and laboratory on allocated space at his own cost.
- **15.**Contractor shall provide Bar-chart and work program within one week from date of awa<u>r</u>d of work. Also, the contractor shall provide weekly progress report and method statement.
- **16.** It shall be contractor's responsibility to provide Mock-up / training of systems commissioned by them. Water and electricity required for such activity shall be contractor's scope and no payments shall be made in this regard.
- **17.** For similar items, the rates quoted by the bidders shall be same in complete boq. However, if the different rate are noted for the similar items, lower quoted rate will be considered for payment of all such items.
- **18.** No extra payment will be made against tools and tackles, scaffolding etc. which will be required for execution of any works.



- 19. Contractor shall be solely responsible for payment of wages/salaries and allowances to their personnel as per the rules or act applicable under government order. All central, state, local laws & bye laws applicable will be observed by the contractor and IIT Indore will be kept indemnified of such payable by the contractor.
- **20.** Any unauthorized person (or visitor) shall not be allowed to come inside the campus without the approval of Engineer in charge and Security officer. Staff deployed at IIT Indore will get the temporary ID card and which shall be available with the concern at the time of duty. For the purpose of proper identification of the employees of the contractor deployed for the work, contractor shall issue identity cards bearing their photographs/ identification etc. and such employees shall display their identity cards at the time of duty.
- **21.**Contractor should understand that some buildings are occupied and they shall work in these buildings according to flexibility of the users with prior permission.
- **22.** For performing the assigned work, the contractor shall deploy medically and physically fit persons (Preferably below the age of 50). The contractor shall ensure that the persons are punctual and disciplined and remain vigilant in performance of their duty. Persons so engaged by the contractor shall be from amongst properly trained electrician of high integrity and good conduct and shall be conversant in the local language i.e. Hindi. In no circumstances, persons below 18 years of age should be employed.
- 23. The contractor shall further keep the IIT Indore indemnified against any loss to the IIT Indore property and assets. IIT Indore shall have further right to adjust and/or deduct any of the amounts as aforesaid from the payments due to the contractor under this contract.
- 24. The contractor shall ensure that the persons deployed do not allow any property of the IIT Indore related to Equipment's to be taken out of the premises without a Gate Pass signed by the Engineer in-charge of the IIT Indore. In case, any staff not found up to the mark and not able to work properly or behave improperly, he will have to be changed as per the instruction of the Engineer in charge, IIT Indore.
- **25.** The persons deployed by the contractor for the services mentioned above shall be the employees of the contractor for all intents and purposes and that the persons so deployed shall remain under the control and supervision of the contractor.
- 26. The contractor shall, at his own cost, take necessary insurance cover up to the handing over of the services/work covered under this tender. He shall also comply with the statutory provisions of Contract Labor (Regulation & Abolition) Act, 1970; Employees State Insurance Act; Workman's Compensation Act, 1923; Payment of Wages Act, 1936; The Employees Provident Fund (and Miscellaneous Provisions) Act, 1952; Payment of Bonus Act, 1965; The Minimum Wages Act, 1948; Employer's Liability Act,



1938; and/or any other rules/ regulations and/ or statues that may be applicable to them. The contractor shall indemnify the Institute against all claims which may be made upon the Institute whether under the aforesaid statutes or any other statute in force during the currency of this contract.

- **27.** Contractor shall deploy his persons in such a way that they get weekly rest. The working hours / leave, for which the work is taken from them, do not violate relevant provisions of Shops and Establishment Act. The contractor shall arrange to provide reliever equally qualified in case of absence/leave/off etc. The contractor shall in all dealings with the persons in his employment have due regards to all recognized festivals, days of rest and religious or other customs. In the event of the contractor committing a default or breach of any of the provisions of the Labor Laws including the provisions of Contract Labor (Regulation and Abolition) Act, 1970 as amended from time to time or in furnishing any information, or submitting or filling any statement under the provisions of the said regulations and rules which is materially incorrect, he shall without prejudice to any other liability pay to the Director, IIT Indore, a sum as may be claimed by IIT Indore.
- **28.**Contractor shall keep the IIT Indore indemnified against all claims whatsoever in respect of the employees deployed by the contractor, in case any employee of the contractor so deployed enters in dispute of any nature whatsoever, it will be the primary responsibility of the contractor to contest the same. In case IIT Indore is made party and is supposed to contest the case, the IIT Indore will be reimbursed for the actual expenses incurred towards Counsel fee and other expenses, which shall be paid in advance by the contractor to IIT Indore on demand. Further, the contractor shall ensure that no financial or any other liability comes on IIT Indore in this respect of any nature whatsoever and shall keep IIT Indore indemnified in this respect.
- **29.** No accommodation & transportation facility will be provided by the IIT Indore.
- **30.** Contractor is informed that the items or quantity mentioned in BoQ/SoQ are tentative and may be decreased or deleted completely as per the requirement of IIT Indore during the time of execution. Due to such reductions, any loss to contractor shall not be the responsibility of IIT Indore and no damages to the contractor shall be entertained in this regard.
- **31.** Before procurement of any item, Contractor shall take prior approval in writing from IIT Indore. Otherwise IIT Indore may not accept it and contractor shall be solely responsible for such losses.
- **32.** It shall be contractor's responsibility to prepare and submit As-built drawings for all the works done by the contractor.



33.DEFECT LIABILITY PERIOD – This period means the period of validity of the warranties given by the contractor commencing form the date mentioned in Completion Certificate, during which the contractor is responsible for defects with respect to the work provided under the contract.

The contractor shall be responsible for any defects for **12 months** for complete system executed under this project from the date of issue of Completion certificates:

The tenderers are advised to quote their rates taking into account the responsibilities against defect liability. No additional claim shall be admissible on account of any service that is rendered to meet the requirement during defect liability period.

The contractor shall maintain and satisfactorily execute at his own cost all such works of repair, amendment, reconstruction, rectification, replacement and any other work to make good the faulty work during above stipulated defect liability period.

If the contractor fails to commence rectification of such defects within 15 (fifteen) days from the date of notice by IITI or does not complete the said rectification with diligence and within mutually agreed time, IITI shall be entitled to carry out such work by their own workmen or by other contractor and IITI shall also be entitled to recover the cost thereof from any money due or that becomes due to the contractor under the Contract.

- **34.JURISDICTION:** Disputes of any nature that may be arise in connection with the execution of this order shall be governed by the laws of India and subject to the jurisdiction of courts situated in Indore, India only.
- **35. TIME FOR COMPLETION -** Time is of the essence of the Contract. The Works will be completed in 90 days (Including rainy season and holidays) from the Effective Date of the Contract. The contractor must inform in writing and obtain all the required information / records from IIT Indore before award of issue of Letter of Commencement of Work so that there should be no delay on account of gathering of information and records in relation to start and execution of work.

The Contractor shall attain Completion of the Works within the time as stated herein above or within such extended time as may be granted by the IITI under the Contract. The Works shall be considered as completed when Completion Certificate has been issued by the Project In charge in accordance with provisions of the Contract for the entire Works under the scope.

36.SUBCONTRACTING - The Contractor shall not sub-contract the Contract Work in whole or part thereof to third parties for the performance of this Contract without written consent of the Project In-charge / Project Management Consultant.

Selection of any sub-contractor/sub-supplier by the Contractor, in respect of discharge of his contractual responsibilities and obligations shall be subject to prior approval of the Project In charge / PMC. However the Contractor shall alone be responsible and



liable for discharge of his obligations and responsibilities including that of his subcontractor(s) and sub-supplier(s) in terms of the Contract. The Contractor shall remain solely liable for any action, deficiency, and/or negligence on the part of his subcontractors, his agent, and his workmen as fully as if they were the acts, defaults or neglects of the Contractor.

The Contractor and/or his sub-contractor/sub-suppliers shall be under contractual obligations to submit any such information/document including but not limited to inspection / Test reports of materials to be incorporated and / or incorporated in the works, to the Project In-charge / PMC for his approval/review/perusal, which the Project In-charge / PMC may consider it deemed necessary in respect of discharge of contractual obligations/responsibilities by the Contractor and/or his sub-contractor/sub-supplier.

The Contractor shall submit un-priced copies of purchase orders / work orders with technical specifications included in all orders placed on sub-contractors, if requested by the Project In charge /PMC.

In no event shall the IITI be deemed to have any contractual obligations whatsoever in respect of Contractor's/ sub-contractors and/or title-holders of any sub-orders placed by him.

37. Work at Night and on Holidays - As and when the Project In-charge considers it necessary to carry out work on extended hours / three shift basis or on Public Holidays so as to meet the Time for Completion and request the Contractor to carry out work on three shifts or on Public Holidays, the Contractor shall carry out the work accordingly to meet the Time of Completion but labour laws related to weekly off etc. and other rules must be followed.No additional cost shall be paid to the Contractor for working on extended hours/three shift basis or on public holidays.

38. Power Supply

In partial modification to GCC, power supply may be provided by the department, if available, to contractor at one point (nearest substation) for installation at site. Termination switchgears with energy meter however, shall be provided by the contractor. Further extension if required shall be done by the contractor. For final system

commissioning & handing over, power supply of 3 Phase, 415 volts, or 1Phase, 230 V, 50 Hz as applicable shall be made available in the control room(s) of the respective systems. The recovery of electricity so consumed shall be made as per tariff decided by the Institute from time to time from their bill or any other amount due or payable to the contractor or available with the Institute.

The contractor shall not use the power supply for any other purpose than that for which it is intended for. No major fabrication work shall be done at site. Power supply shall be used only for welding/ cutting works. Power supply shall be disconnected in case of such defaults and the contractor shall then have to arrange required power supply at his cost.

It may be noted that IITI is not bound to provide Power.



39. Quality of Materials and Workmanship

- i) The components of the installation shall be such design so as to satisfactorily function under all conditions of operation.
- ii) The entire work of manufacture/fabrication, assembly and installation shall conform to sound engineering practice.
- iii) All equipments and material to be used in work shall be manufactured in factories of good repute having excellent track record of quality manufacturing, performance and proper after sales service.
- iv) All equipments and materials to be supplied in the work shall be brand new having its date of manufacturing not more than 6 months old from the date of delivery at site with manufacturer's certificates, warrantee cards, technical catalogues, instructions, manuals and wiring diagrams, drawings etc.
- v) In order to ensure genuineness of equipments/materials, copy of invoice of each equipments/materials, custom clearance paper in case of imported materials duly authenticated by bidder shall be invariably produce to engineerin-charge.

40. Liaising and Co-operation with other agencies:

The successful tenderer shall co-ordinate with other contractors and agencies engaged in the operation and maintenance of the building so as to make the execution of this works contract smooth. If any unreasonable hindrance is caused to other agencies / damage is caused to the existing installation resulting in loss of work or disruption in services during the course of work, such expenditure incurred upon restoration and loss of work shall be recovered from the successful tenderer.

41. TENDERERS ARE ADVISED TO VISIT THE SITE BEFORE QUOTING THE RATES. OTHERWISE IT WILL BE ASSUMED THAT THE PARTY HAS ALREADY VISITED THE SITE BEFORE QUOTING THE TENDER.

Place:

Date:

Name of Authorized representative: Seal and Signature of contractor:



<u>PART –II</u>

PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of quantities (as per CPWD.3)

As per enclosed BOQ.

SCHEDULE 'D'	
Extra schedule for specific requirements/ document for the work, if any.	NIL
SCHEDULE 'E'	GCC for Central PWD Works, 2023 (Construction
Reference to General Conditions of contract.	Works) incorporating amendment up to last date of submission of tender.
Name of Work	"Providing and Fixing of false ceiling and associated electrical & fire alarm work in the corridor of POD 1A & 1D."
Estimated cost of work	Rs.65,80,843 /-
Earnest money	Rs. 1,31,617 /- (to be returned after receiving performance guarantee)
Performance guarantee	5% of tendered value
Security deposit	Deduction @ 2.5% of gross amount payable (from each running bill)
SCHEDULE 'F'	
GENERAL RULES & DIRECTIONS: Officer inviting tender	Project In-Charge, IIT Indore
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 under Clause 12
Definitions:	
2(v) Engineer-in-Charge	Project In-Charge, IIT Indore
2(viii) Accepting Authority	BOG, IIT Indore
2(x) Percentage on cost of materials and labour to cover all overheads and profits:	15%
2(xi) Standard Schedule of Rates	For Civil DSR 2021 & For Electrical, Fire alarm and public address system DSR 2022 with up to date correction slip and market rates
2(xii) Department	Infrastructure Development Office
9(ii) Standard CPWD contract Form GCC 2019, CPWD Form 7/ 8 as modified & corrected upto	General Conditions of Contract for Central PWD Works 2023 (Construction Works) incorporating amendments upto last date of submission of tender.



Clause 1						
 (i) Time allowed for submission of performance guarantee, programme chart (time and progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance. 			15 Days			
(ii) Maximum allowable extension with late fee at 0.1% per day of performance guarantee amount beyond the period provided in (i) above			15 Days			
Claus	e 2					
	ity for fixing compensation clause 2		Director IIT Indore			
Claus	e 5					
Number of days from the date of issue of letter of acceptance for reckoning date of start			8 Days			
Table			Milestone(s)			
Milest one No.	Description of Milestone			Time allowed from date of start (Days)	Amount to be withheld in case of non achievement of	
					milestone	
1	Electrical / FAS wiring & False ceiling	g wor	'k	50	milestone 3%	
1 2	Installation of light fixture & fire alarm			50 25		
2 3	Installation of light fixture & fire alarm equipments. Testing and commissioning of comple	syst	em	25 10	3% 3% 2%	
2	Installation of light fixture & fire alarm equipments.	syst	em	25	3% 3%	
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net payment / adiu	ustment of advances					
	ted, if any, since the					
	for being eligible to					
interim payment	0 0					
Clause 7A		Yes				
	A shall be applicable					
Clause 8A						
account if contract submit completion		Director, IIT Indore				
	pment to be provided by of Engineer-in-charge.	the contractor at site lab.				
CLAUSE-2A	Incentive for Early Com	pletion:- Not Applicable				
CLAUSE-10B	CLAUSE-10B Secured Advance on Non-Perishable Materials: - Deleted					
CLAUSE-10B	CLAUSE-10B Mobilization Advances: Deleted					
<u>CLAUSE-10C</u> :	Payment on Account of Increase in Prices / Wages due to Statutory Order(s) Deleted					
CLAUSE-10CC	CLAUSE–10CC Payment due to Increase / Decrease in Prices / Wages after Receipt of Tender for Works - Deleted					
Clause 11 Specifications to be followed for execution of work – For Civil item of work: CPWD specifications 2019 Vol.1 & Vol.2 with upto date correction slips (Hereinafter called CPWD specifications also) For Electrical item of work: CPWD General Specifications for Electrical Works with upto date correction slips Clause 12						
Type of work : Project & Original work (Civil & Electrical)						
Clauses12.2 & 12.3 Deviation Limit		2.2 & 12.3 shall apply for building work	100%			
Clause 12.4 (i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work 100% (except items mentioned in earth work subhead in DSR and related items)						
(ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items 100%						
Clause 16 Competent Authority for deciding reduced rates Director, IIT Indore						
Clause 18						

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site is inclusive but not limited too.



Sr. No.	Equipment brought by main contractor	Quantity
1	Earth Tester	1 nos.
2	Multimeter	1 nos.
3	Tong tester	1 nos.
4	Continuity tester	1 nos.

Clause 19C Director, IIT Indore

Clause 19D Director, IIT Indore

Clause 19G Director, IIT Indore

Clause 19K Director, IIT Indore

Clause 25

Constitution of Dispute Redressal Committee (DRC)

Chairman – Dean, Infrastructure Development Member - Project In-charge

Member - Executive Engineer

Clause 32

Requirement of Technical Representative(s) and recovery Rate -

SI. No	Minimum Qualification of Tech. Representativ e	Discipline	Designation (Principal Technical/ Technical Representative)	Minimum Experienc e	Nu mbe r	Rate at which recovery shall be made from the Contractor in the event of not fulfilling provision of clause 36(I) Figures Words (Per	
						(Per Month)	Month)
1	B- Tech/BE/Dipl oma	Civil	Site Engineer	5 Years	1	Rs 15,000 /-	Rupees Fifteen Thousand Only
2	B- Tech/BE/Dipl oma	Electrical	Site Engineers	5 Years	1	Rs 15,000 /-	Rupees Fifteen Thousand Only
3	Diploma/Engi neering (Safety)	Safety	Safety Engineer	5 Years	1	Rs 15,000 /-	Rupees Fifteen Thousand Only
4			Labour (Skilled/Unskilled			15	

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

 (i) (a) Schedule/statement for determining theoretical quantit of cement & bitumen on the basis of Delhi Schedule of Rates printed by C.P.W.D. 	
(ii) Variations permissible on theoretical quantities:(a) Cement	
For works with estimated cost put	
to tender not more than Rs. 25 lakh.	3% plus/minus.
For works with estimated cost put to	
tender more than Rs. 25 lakh.	2% plus/minus.
(b) Bitumen All Works (c) Steel Reinforcement and structural steel	2.5% plus & only & nil on minus side.
sections for each diameter, section and category (d) All other materials.	2% plus/minus Nil
	1111



SCOPE, TECHNICAL SPECIFICATIONS AND APPROVED MAKES

A. <u>SCOPE OF WORK:</u>

- a) Supply, Installation, Testing and Commissioning of light fixture.
- b) Testing of existing wiring done for light fixture.
- c) Supply and laying of circuit/loop wires.
- d) Supply, Installation, Testing and Commissioning of smoke detector with base with its wiring.
- e) Supply, Installation, Testing and Commissioning of response indicator with wiring.
- f) Supply, Installation, Testing and Commissioning loop cards in existing FAS Panel (Honeywell- Notifier).
- g) Integration of newly installed FAS devices (Honeywell- Notifier) with existing FAS panel and up-gradation of software in existing FAS panel.
- h) Disconnection and shifting of existing PA speakers (Honeywell) to nearest false ceiling with extension of wiring, if required.

B. INTERNALWIRING

a. System of Wiring

The system of wiring shall consist of PVC insulated copper stranded conductor flexible FRLS wires in metallic conduits in exposed and FRLS PVC conduit shall be used in concealed above false ceiling or as called for.

b. General

Prior to laying and fixing of conduits, the contractor shall mark the conduit route, carefully examine the working drawings prepared by him and approved by the Consultant indicating the layout, satisfy himself about the non-interference in the route, sufficiency of number and sizes of conduits, location of junction boxes, sizes and location of switch boxes and other relevant details. Any discrepancy found shall be brought to the notice of the Owner's site representative. Any modifications suggested by the contractor should get written approval before the actual laying of conduits is commenced.

In laying of conduits it is important that not more than two right angle bends are provided for each circuit without a pull box. No junction box shall be provided in the entire length of conduit run for drawing of wires. Only switch outlets, lighting fixture outlets, equipment power outlets and socket outlets shall be considered for drawing of wires.

c. Metal Conduits & Accessories

i. Conduits:

Conduits and Accessories shall conform to latest edition of Indian Standards IS-9537 part 1 &2. 16/14 (16 gauge upto 32 &14 gauge above 32 mm) gauge screwed GI or MS conduits as specified on BOQ shall be used. Joints between conduits and accessories shall be securely made by standard accessories, as per IS-2667, IS-3837 and IS-5133 to ensure earth continuity. All conduit accessories shall be threaded type only.

Only approved make of conduits and accessories shall be used.

Conduits shall be delivered to the site of construction in original bundles and each length of conduit shall bear the label of the manufacturer.

ii. Joints:

All jointing shall be subject to the approval of the Owner's site representative. The threads and sockets shall be free from grease and oil. End termination of conduit on



GI boxes shall be by means of hexagon check nuts & spring washer on both sides of the conduit. The joints in conduits shall be free of burrs to avoid damage to insulation of conductors while pulling them through the conduits.

iii. Flexible Conduits:

Flexible conduits shall be made of heavy gauge MS strip galvanized after making the spiral. Both edges of the strip shall have interlocking to avoid opening up. Flexible conduit shall be heat resistant, lead coated steel, water leak, fire and rust proof. The flexible conduit shall be heat resistant on continuous temperature up to 150 deg. C and intermittent temperature up to 200 deg. C. The flexible conduit shall be corrosion resistant as per IS-3480 & BS-731.

d. PVC Conduit and Accessories

i. PVC Conduit:

Conduits and accessories shall conform to latest edition of IS-9537 part 3 and shall be heavy duty wall thickness of 2.0 mm rigid tubes which are unscrewed without coupling and with plain ends. All conduits used shall not be less than 20 mm diameter.

Heavy duty Low smoke FRLS PVC conduit shall be used.

PVC conduit shall be used for all concealed / embedded installation.

ii. PVC Conduit Accessories:

Accessories used for conduit shall be of an approved make complying to relevant IS code. All accessories used shall be of standard white or black colour, identical to conduit used.

Plain conduits shall be joined by slip type of couplers with manufacturer's standard sealing cement.

All conduit entries to outlet boxes, trunking and switchgear are to be made with adaptors female thread and screwed male bushes.

PVC-switch and socket boxes with round knockouts are to be used. The colours of these boxes and the conduits shall be the same.

Standard PVC circular junction boxes are to be used with conduits for intersection, Tee-junction, angle-junction and terminal. For the drawing-in of cables, standard circular through boxes shall be used.

Samples of accessories shall be submitted for approval prior to installation.

All jointing of PVC conduits shall be by means of adhesive jointing. Adequate expansion joints shall be allowed to take up the expansion of PVC conduits.

e. Bends in Conduit

Where necessary, bends or diversions may be achieved by means of bends and / or circular cast iron boxes with inspection cover and with adequate and suitable inlet and outlet screwed joints. In case of recessed system each junction box shall be provided with a cover properly secured and flush with the finished wall surface. No bends shall have radius less than 7.5 cms or three times the outside diameter of the conduits. For metallic conduits, bends of defined radius shall be made by compactly filling fine sand inside the conduit length, to avoid non-uniform shape, once the bend is done. Proper jigs shall be used to ensure that the Enameling /Galvanizing of the Conduit is not damaged.



f. Fixing of Conduits

All conduits shall be installed so as to avoid direct exposure to steam, hot water or any other process pipes. After the conduits, junction boxes, outlet boxes and switch boxes are installed in position, their outlets shall be properly plugged or covered so that water, mortar, insects or another foreign matter does not enter into the conduit system. Surface conduits shall be fixed by means of heavy gauge GI saddles secured at intervals not more than 1000 mm, but on either side of couplers or bends or similar fitting saddles shall be fixed at a distance of 300 mm from centre of each fitting. For conduit fixing suitable PVC/Nylon fasteners shall be used.

Recessed conduiting shall be done by making chase in the masonry by chase cutter, the conduit shall be fixed in the chase by means of GI hooks not more than 600 mm apart. After fixing of conduit the chase shall be filled with cement mortar after fixing of chicken mesh and brought to the original finish level of the surface.

g. Inspection Boxes

50 mm dia inspection boxes and pull boxes of cast iron shall have smooth external and internal finish to facilitate removal and replacement of wires, where required.

h. Fish Wire

To facilitate subsequent drawing of wires in the conduit, GI fish wires of 2.0 mm (14 SWG) shall be provided along with the laying of recessed conduit.

i. Conductors

All PVC insulated copper conductor flexible FRLS wires shall conform in all respects to Standards as listed under sub-head Regulations and Standards and shall be IS approved and ISI marked.

j. Bunching of Wires

Wires carrying current shall be so bunched that the outgoing and return wires are drawn into the same conduit. Wires originating from two different phases shall not run in the same conduit. All wires shall have ferrules for identification. Lighting and power circuits shall be separate. Each Power/ Light Circuit's Neutral shall be individual per Circuit and shall not be looped from any other Circuit.

k. Drawing Conductors

The drawing and jointing of PVC insulated copper conductor wires shall be executed with due regard to the following precautions. While drawing wires through conduits, care shall be taken to avoid scratches and kinks which may cause breakage of conductors. There shall be no sharp bends. Wire reel stands to be used for pulling of wires to avoid kinks. . Care shall be exercised while drawing the wires from reels, by taking appropriate measures to ensure that wires are not spread on ground, causing dust and dirt accumulation on the new wires.

Maximum permissible numbers of 1100 volt grade FRLS insulated wires that may be drawn into metallic Conduits are given below:

Size of wires Nominal Cross		imum numl (mm)	per of wir	es within	conduit
sectionArea (Sq. mm.)	20	25	32	40	50
1.5	5	10	14		
2.5	5	8	12		



Maximum permissible number of 1100 volt grade PVC insulated wires that may be drawn into rigid non-metallic conduits are given below:

Size of wires Nominal Cross		imum numł (mm)	per of wire	es within o	conduit
section Area (Sq. mm.)	20	25	32	40	50
1.5	7	12	16		
2.5	5	10	14		

Insulation shall be removed by insulation stripper only. Strands of wires shall not be cut / reduced for convenience in connecting into terminals. The terminals shall have sufficient cross sectional area to take all strands and it's connecting brass screws shall have flats ends. All looped joints shall be connected through

terminal block/connectors. The pressure applied to tighten terminal screws shall be just adequate, neither too much nor too less. All light points shall be terminated through a connector.

Conductors having nominal cross sectional areas exceeding 10 sq.mm shall always be provided with cable sockets. At all bolted terminals brass flat washer of large area and approved steel spring washer shall be used. Brass nuts and bolts shall be used for all connections.

Only licensed wiremen (Before doing the work or before appointing him on site contractor has to submit his wiring license to Owner) and cable jointers shall be employed to do jointing work. Before entrusting cable jointing work to any technician, or before appointing Cable Jointers or Wiremen on Site, Contractor has to submit such Technicians' / Wireman's / Cable Jointer's licensee to Owner.

All wires and cables shall be embossed with the manufacturer's label with ISI mark and shall be brought to site in original packing. For all internal wiring, FRLS PVC insulated wires of 1100 volts grade shall be used.

The sub-circuit wiring for point shall be carried out in loop system and no joints shall be allowed in the length of the conductors. No wire shall be drawn into any conduit until all work of conduit installation of any nature that may cause injury to wire is completed. Care shall be taken while pulling out the wires so that no damage occurs to conduits/wire itself, the conduits shall be thoroughly cleaned of moisture, dust, dirt or any other obstruction. The minimum size of PVC insulated copper conductor wires for all sub-circuit wiring for light points shall be minimum 1.5 sq.mm copper (as specified in BOQ). Separate neutral to be pulled for each circuit.

I. Joints

All joints shall be made at main switches, distribution boards. Socket outlets, lighting outlets and switches boxes only. No joints shall be made in conduits and in junction boxes. Conductors shall be continuous from outlet to inlet.

C. LIGHTING FIXTURES

1. Lighting Fixtures & Accessories

The light fixtures and fittings shall be assembled and installed in position complete and ready for service, in accordance with details, drawings, manufacturer's instructions and to the satisfaction of the Engineer In Charge.



2 <u>Scope</u>:

Scope of work under this section shall include inspection at suppliers/manufacturer's premises at site, receiving at site, safe storage, transportation from point of storage to point of erection, erection and commissioning of light fittings, fixtures and accessories including all necessary supports, brackets, down rods and painting etc. as required.

3 Standards:

The lighting and their associated accessories such as lamps, reflectors, housings, ballasts etc., shall comply with the latest applicable standards, more specifically the following:

- 1. IS 16101: 2012: General Lighting LEDs and LED modules Terms and Definitions
- 2. IS 16102 (Part-1): 2012 Self- Ballasted LED Lamps for General Lighting Services Part-1 Safety Requirements
- 3. IS 16102 (Part-2): 2012 Self-Ballasted LED Lamps for General Lighting Services Part-2 Performance Requirements
- 4. IS 16103 (Part-1): 2012 Led Modules for General Lighting Part-1 Safety Requirements
- 5. IS 16103 (Part-2): 2012 Led Modules for General Lighting Part 2 Performance Requirements
- 6. IS 15885 (Part-2/Sec13): 2012 Safety of Lamp Control Gear Part 2 Particular Requirements Section 13 DC or AC Supplied Electronic Control gear for Led Modules
- 7. IS 16104: 2012: DC or AC Supplied Electronic Control Gear for LED Modules -Performance Requirements
- 8. IS 16105: 2012: Method of Measurement of Lumen Maintenance of Solid State Light (LED) Sources
- 9. IS 16106: 2012: Method of Electrical and Photometric Measurements of Solid-State Lighting (LED) Products.
- 10. IS 16107 (Part-1):2012 Luminaires Performance Part 1 General Requirements
- 11. IS 16107-1:2012: Luminaires Performance Part 2 Particular Requirements Section 1 LED Luminaire
- 12. IS 16108: 2012: Photo-biological Safety of Lamps and Lamp Systems.

4) Light Fittings-General Requirements:

- a) Fittings shall be designed for continuous trouble free operation under atmospheric conditions without reduction in lamp life or without deterioration of materials and internal wiring
- b) Each fitting shall have a terminal block suitable for loop-out connection by 1100 V PVC insulated copper conductor wires upto 4 sq.mm. the internal wiring should be



completed by the manufacturer by means of standard copper wire and terminated on the terminal block.

- c) All hardwares used in the fitting shall be suitably plated or anodized and passivated.
- d) Each lighting fitting shall be provided with an earthing terminal. All metal or metal enclosed parts of the housing shall be bonded and connected to the earthing terminal so as to ensure satisfactory earthing continuity throughout the fixture.
- e) All surfaces of the fittings shall be thoroughly cleaned and degreased and the fittings shall be free from scale, rust, sharp- edges, and burns.
- f) The housing shall be powder coated/stove-enamelled or anodized as required. The surface shall be scratch resistant and shall show no sign of cracking or flaking when bent through 90 deg. over 12 mm dia mandrel.
- g) Metal used in body of lighting fixtures shall be not less than 22 SWG or heavier if so required to comply with specification of standards. Sheet steel reflectors shall have a thickness of not less than 20 SWG. The metal parts of the fixtures shall be completely free from burns and tool marks. Solder shall not be used as mechanical fastening device on any part of the fixture.

5) LED Light fixtures

LED down Lighter shall be complete with efficient reflector and scientifically designed heat sink for optimum thermal management of LED source ensuring specified life and colour quality. The luminaries shall have IP-20 degree of protection. It shall be suitable for recessed mounting in the false ceiling. The driver shall be provided with the luminaries. LED shall be of high efficiency, long life in warm white or cool day light, as specified in BOQ, with excellent CRI. The estimated life time of LED shall be minimum 50,000 burning hours. THD for any LED light fitting, including driver unit, shall be within 10%.

6) <u>Testing</u>

General

At the completion of the work, the contractor shall carry out the pre- commissioning as well as commissioning checks as given below on the entire installation and records be maintained for reference of any statutory authority, Client or their representatives.

Pre – Commissioning and commissioning Checks

Note – Below mentioned are the list of checks and test to be carried out by contractor. List is only tentative and exhaustive list to be submitted by contractor. Checking and Testing of all items are done by contractor. For verification sampling as mentioned to be adopted for checking in presence of client. Note Sampling of quantity as indicated below are tentative and may vary at the discreet of Engineer-in-charge. Contractor to submit the internal field test report before checking of client.



Component	Points to be checked
Light fittings (Sampling 20%)	 Correct colour coding and correct and proper connection Connections are properly tightened. Not more than two wires are connected on any one side of terminal. Earthing connection is made properly. Lux level measurement (If applicable)

Fire Alarm System

1) Software Modifications

Provide the services of a factory trained and authorized technician to perform all system software modifications, upgrades or changes. Response time of the technician to the site shall not exceed 4 hours. Provide all hardware, software, programming tools and documentation necessary to modify the fire alarm system on site. Modification includes addition and deletion of devices, circuits, zones and changes to system operation and custom label changes for devices or zones. The system structure and software shall place no limit on the type or extent of software modifications on-site.

2) Warranty

All work performed and all material and equipment furnished under this contract shall be free from defects and shall remain so for a period of at least 12 months from the date of issue of completion certificate. The full cost of maintenance, labour and materials required to correct any defect during this one year period shall be included in the submittal bid.

3) Applicable Standards and Specifications

The specifications and standards listed below form a part of this specification. The system shall fully comply with the latest issue of these standards, if applicable.

A. National Fire Protection Association (NFPA) - USA:

NFPA 72 National Fire Alarm Code

B. Underwriters Laboratories Inc. (UL) - USA:

UL 268 Smoke Detectors for Fire Protective Signaling Systems

UL 268 A Smoke Detectors for Duct Applications

4) System Components - Addressable Devices

Addressable Devices – General Addressable devices shall use simple to install and maintain decade, decimal address switches. Devices shall be capable of being set to an address in a range of 001 to 159. However electronic addressing will be accepted only if all the devices can be fully programmed for sensitivity settings, pre alarm level etc from the panel with no extra programming tools and computer shall be used. Detectors shall be intelligent (analog) and addressable and shall connect with two wires to the fire alarm control panel Signaling Line Circuits. Addressable smoke detectors shall provide dual alarm and power/polling LEDs. Both LEDs shall flash green under normal conditions, indicating that the detector is operational and in regular communication with the control



panel, and both LEDs shall be placed into steady red illumination by the control panel, indicating that an alarm condition has been detected. If required, the LED flash shall have the ability to be removed from the system program. An output connection shall also be provided in the base to connect an external remote alarm LED. The fire alarm control panel shall permit detector sensitivity adjustment through field programming of the system. The panel on a time-of-day basis shall automatically adjust sensitivity. Using software in the FACP, detectors shall automatically compensate for dust accumulation and other slow environmental changes that may affect their performance. The detectors shall be listed by UL as meeting the calibrated sensitivity test requirements of NFPA Standard 72, Chapter 7. The detectors shall be ceiling-mount and shall include a separate twist lock base with tamper proof feature. Bases shall include a sounder base with a built-in (local) sounder rated at 85 DBA minimum, a relay base and an isolator base designed for Style 7 applications. The detectors shall provide a test means whereby they will simulate an alarm condition and report that condition to the control panel. Such a test may be initiated at the detector itself (by activating a magnetic switch) or initiated remotely on command from the control panel. Detectors shall also store an internal identifying type code that the control panel shall use to identify the type of device. Detectors will operate in an analog fashion, where the detector simply measures its designed environment variable and transmits an analog value to the FACP based on real-time measured values. The FACP software, not the detector, shall make the alarm/normal decision, thereby allowing the sensitivity of each detector to be set in the FACP program and allowing the system operator to view the current analog value of each detector.

5) Intelligent Multi-Co-Operative Sensing Type Photoelectric Smoke Detector

The detectors shall use the photoelectric (light-scattering) principal to measure smoke density and shall be in position to work in advance multi Co-Operative Sensing, on command from the control panel, send data to the panel representing the analog level of smoke density.

EXECUTION

1) Installation:

Installation shall be in accordance with the NEC, NFPA 72, local and state codes, as shown on the drawings, and as recommended by the major equipment manufacturer.

All conduit, junction boxes, conduit supports and hangers shall be concealed in finished areas and may be exposed in unfinished areas. Smoke detectors shall not be installed prior to the system programming and test period. If construction is ongoing during this period, measures shall be taken to protect smoke detectors from contamination and physical damage. All fire detection and alarm system devices, control panels and remote annunciators shall be flush mounted when located in finished areas and may be surface mounted when located in unfinished areas. Manual fire alarm boxes shall be installed not less than 42 inches (1067 mm), nor more than 48 inches (122 mm) above the finished floor.

2) Test:

The service of a competent, factory-trained engineer or technician authorized by the manufacturer of the fire alarm equipment shall be provided to technically supervise and participate during all of the adjustments and tests for the system. All testing shall be in accordance with NFPA 72, Chapter 7.



Before energizing the cables and wires, check for correct connections and test for short circuits, ground faults, continuity, and insulation. Verify proper supervisory alarm at the FACP.

Check installation, supervision, and operation of all intelligent smoke detectors, response indicators using the walk test.

3) Final Inspection:

At the final inspection, a factory-trained representative of the manufacturer of the major equipment shall demonstrate that the system functions properly in every respect.

4) Instruction:

Instruction shall be provided as required for operating the system. Handsom demonstrations of the operation of all system components and the entire system including program changes and functions shall be provided. The contractor and/or the systems manufacturer's representatives shall provide a typewritten "Sequence of Operation." The entire Fire alarm System components shall be of same make and Listed. The data sheets of each equipment shall be submitted along with offer.

			cifical & Fire al	ann system	
S. No.	Material / Item	Brand & Manufacturer / Supplier – 1	Brand &Manufacture r/ Supplier - 2	Brand & Manufacturer / Supplier - 3	Brand &Manufacturer/ Supplier - 4
1	Termination (Lugs)	COMMET	DOWELL	JAINSON	
2	MS Black Enameled/ Galvanized ERW Conduits	AKG	BEC	STEELKRAFT	
3	PVC Conduit (FRLS) & Accessories (ISI Approved)	AKG	BEC	PRECISION	
4	Copper Conductor PVC Insulated Wires/ Stranded Flexible Wires (FRLS)	FINOLEX	HAVELLS	RR KABLE	RAJNIGANDHA
5	Light Fixtures	WIPRO	PHILIPS	HAVELLS	KLITE
6	Fire Alarm and Public Address System	HONEYWELL (NOTIFIER)	Make of	Material already i IONEYWELL (NC	nstalled at site –
7	Response Indicator	AGNI DEVICES	APOLLO	SYSTEM SENSOR	ELECTROQUIP

Makes of Material for Electrical & Fire alarm system



Makes of Material for Civil Item

S. No.	Material / Item	Brand & Manufacturer / Supplier – 1	Brand & Manufacturer/ Supplier - 2	Brand & Manufacturer / Supplier - 3	Brand & Manufacturer/ Supplier - 4
		ARMSTRONG	HUNTER DOUGLAS	USG BORAL	SAINT GOBAIN
1	False Ceiling System	Brand & Manufacturer/ Supplier - 5		Brand & Manufacturer/ Supplier - 7	
		AEROLITE	DURLUM	INTERARCH	



PART-II TECHNICAL BID DOCUMENTS



A. List of Documents to be submitted within the period of bid submission:

- 1. Certificate of Registration for GST.
- 2. Online receipt of deposited EMD.
- 3. Certificate of Registration for EPF.
- 4. Certificate of Registration for ESIC.
- 5. Certificate of Registration for PAN Card.
- 6. Certificate of Registration for company/firm.
- 7. Certificate of Financial Turnover from Chartered Accountant as per Form-A.
- 8. Copy of receipt for payment of EMD through online mode.
- 9. Should have satisfactorily completed similar works- copies of relevant documents
- 10. Latest Bank Solvency Certificate as per tender condition.
- 11. All documents mentioned in technical bid (P-44 to P-58)
- 12. Should submit seal and signed copy of complete tender documents along with corrigendum/addendum (If any)
- 13. Should have valid Building & other construction works (BOCW) registration certificate or undertaking that they will submit it if the work is awarded.
- 14. Should have valid labor license registration certificate or undertaking that they will submit it if the work is awarded.
- 15. Should submit declaration on letter head as per clause 1.3 of CPWD-6 (Page-8).
- 16. Should submit the self declaration certificate on their letter head that for any work in last five years performance bank guarantee has never been forfeited / encashed by the client.
- 17. Work Order copy fulfilling similar work condition shall be provided with Schedule of Rates and Scope of Works including Satisfactory Completion certificate by client (Seal and signed by Executive Engineer or equivalent) with executed value, date of completion of the job and reference work order number. In case executed value is not mentioned in the completion certificate issued by the client, work order value with amendments, if any, shall be considered for the purpose of evaluation.



(B) Data Sheets to be filled up by the Tenderers/ Bidders

SI. no.	Information	Format of submission	Compliance
1	Obligation / Compliance To Be Insured By Contractor	Annexure- "A"	Yes/No
2	Тах	Annexure- "B"	Yes/No
3	Indemnity by contractor	Annexure- "C"	Yes/No
4	Certificate in prescribed format	Annexure- "E"	Yes/No
5	Letter of Transmittal	Annexure- "F"	Yes/No

Note:

- 1 If necessary, additional sheets may be added to the forms.
- 2. Some of the forms will require attachments. Such attachments should be clearly marked as follows: Attachment I to Form # Attachment 2 to Form #. etc.



Annexure- "A"

Obligation/Compliance to be insured by Contractor

Sr.	Items	Compliance of Con	tractor to be filled by
No.		Contractor	
		YES	NO
1	Registration		
2	Compliance of provisions of Child Labor Act, and Workmen compensation Act		
3	To ensure treatment in case of accident / injuries suffered in Performance of work including wages and compensation under WC Act.		
4	Send accident report to Regional Labor Commissioner (RLC)		

Annexure – "B" TAX

Attach copy of current last three years' income tax returns details (i.e. F.Y 20-21, 21-22,22-23)



Annexure- "C" INDEMNITY

(To be filled by Contractor)

I on behalf of M/s hereby agree and
undertake that I have understood all the safety rules and procedures and all staff
working on behalf of M/s will
follow all safety rules and procedures. I declare that I M/s
will be responsible for any safety violations/
accident etc. IIT Indore will not be responsible in case of any accident / incident
and will not compensate financially or otherwise.
I have by dealars that I am acle responsible on habalf of

I hereby declare that I am sole responsible on behalf of M/s.....

..... for giving such declaration.

Name of Indemnifier

Signature of Indemnifier

Stamp/Seal of the Indemnifier /Contractor



Annexure- "E"

<u>CERTIFICATE</u>

(to be provided on letter head of the firm)

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

I also certify that the above information is true and correct. In every respect and in any case at a later date, if it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date: Place:

Signature of Contractor



Annexure-"F"

LETTER OF TRANSMITTAL

From:

То

The Project in Charge, IIT Indore (MP).

Name of work: - "Providing and Fixing of false ceiling and associated electrical & fire alarm work in the corridor of POD 1A & 1D."

Sir,

Having examined the details given in Press Notice and bid documents for the above work, I/ we hereby submit the relevant information.

- 1. I / we hereby certify that all the statements made and information supplied in the enclosed forms A to E 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 submit the requisite certified solvency certificate and authorize PIC, IIT Indore to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I / we also authorize PIC, IIT Indore to approach individuals, employers, firms and corporation to verify our competence and general reputation.
- 4. I / we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works:

Nam	ne of work	Certificate from
1.		
2.		
3.		

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 found to be incorrect.

Enclosures:-

Seal of bidder

Date of submission

SIGNATURE(S) OF BIDDER(S)



(S) IData Sheets to be filled up by the Tenderers/ Bidders

SI. No.	Information	Format of submission	Compliance
1	Financial Information	Form – "A"	Yes/No
2	Solvency Certificate	Form – "B"	Yes/No
3	Experience of Similar Nature of Works	Form – "C"	Yes/No
4	Performance Reports of above referred works in Form 'C'	Form – "D"	Yes/No
5	Structure & Organization details	Form – "E"	Yes/No
6	List of the projects under execution or awarded	Form – "F"	Yes/No
7	Compliance Sheet	Form – "G"	Yes/No



FORM 'A'

FINANCIAL INFORMATION

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

Financial Year	18-19	19-20	20-21	21-22	22-23
Gross Annual turnover on construction works					
Profit/Loss					

II. Financial arrangements for carrying out the proposed work.

Signature of Chartered Accountant with Seal. BIDDER(S)

SIGNATURE OF



Solvency Certificate from Bankers of bidders in the prescribed Form "B".

FORM 'B'

FORM OF BANKERS' CERTIFICATE FROM A NATIONALIZED BANK

This certificate is issued without any guarantee or responsibility on the bank or any of the officer.

(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.



FORM 'C'

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

1	S. No.
2	Name of work/project and location
3	Owner or sponsoring organization
4	Cost of work in crores of rupees
5	Date of commencement as per contract
6	Stipulated date of completion
7	Actual date of completion
8	Litigation/ arbitration cases pending/inprogresswithdetails*
9	Name and address / telephone Number of officer to whomreferencemaybemade
10	Whether the work was done onbacktobackbasis—Yes/No

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

Signature of bidder(s)



	FORM	'D)'
	PERFORMANCE REPORT OF WORKS F	RE	FERRED TO IN FORMS
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		:
7	(ii) Actual date of completion(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	Performance Report		
(Quality of work	:	Outstanding/Very Good/Good/Poor
F	- inancial soundness	:	Outstanding/Very Good/Good/Poor
7	Fechnical Proficiency	:	Outstanding/Very Good/Good/Poor
F	Resourcefulness	:	Outstanding/Very Good/Good/Poor
	General Behavior	:	Outstanding/Very good/Good/Poor

Dated:

(Seal and Signed by) Executive Engineer or Equivalent

"C"



FORM 'E' STRUCTURE & ORGANISATION

- 1 Name & address of the bidder
- 2 Mobile no./Email ID:
- 3 Legal status of the bidder (attach copies of original document defining the legal status) :
 - i. An Individual
 - ii. A proprietary firm
 - iii. A firm in partnership
 - iv. A limited company or Corporation
- 4 Particulars of registration with various Government Bodies (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.
- 6 Designation of individuals authorized to act for the organization
- 7 Has the bidder or any constituent partner in case of partnership firm, Limited Company /Joint Venture ever were convicted by the court of law? If so, give details.
- 8 In which field of E&M Engineering construction the tenderer has specialization and interest.
- 9 Any other information considered necessary but not included above.

Signature of bidder(s)



FORM 'F'

1	S. No.
2	Name of work/project and location
3	Owner or sponsoring organization
4	Cost of work in crores of rupees
5	Date of commencement as percontract
6	Stipulated date of completion
7	Upto date percentage progressofwork
8	Slow progress if any andreasonsthereof.
9	rvarme arru auguess / telephone Number of officer to whomreferencemaybemade
10	Remarks

List of the projects under execution or awarded

Certified that the above list of works is complete and no work has been left out and that the information given is correct to my knowledge and belief.

Signature of bidder(s)



PART-III FINANCIAL BID



PRICE BID

PRICE BID - Schedule of price bid in the form of BOQ format:

- 1. The below mentioned Financial Proposal/Commercial bid format is provided as BoQ along with this tender document at https://eprocure.gov.in/eprocure/app
- 2. Bidders are advised to download this BoQ.xls as it is and quote their offer/rates in the permitted column and upload the same in the commercial bid.
- 3. Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be completely rejected.
- 4. The rate to be quoted in the price bid should be inclusive of all taxes, duties, levies etc. and no separate payment will be made on account of any type of taxes or duties.
- 5. The tender shall remain valid for acceptance for 180 days, from the date of tender opening.

OTHER CONDITIONS FOR PRICE BIDS

- 1. No unilateral revision in price will be admissible.
- 2. Rates should be quoted in the accounting units (A/U) mentioned in this tender. Rates must be quoted clearly on free delivery basis at IIT Indore and total value is also indicated in words.
- **3.** In case spares/accessories are applicable, their list and price should be clearly indicated separately.

Signature of the Tenderer Name of the Firm: Contact No.: Email: Seal:



Schedule of Quantity

S.No	Item Description	Unit	Qty
1	Civil Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595mm of approved texture, design and patterns as per CPWD Specification 2019, to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mmthick (galvanized @ 120 grams per sqm including both sides)comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 1200 mm and secondary intermediate cross-T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 12x50 mm long dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 76x25x25x1.6 mm fixed with grid and Z cleat of size 25x37x25x1.6mm thick with precut hole on both 25mm flange to pierce into 12x50mm or even bigger size dash fastener if require, fixed with Glavanised iron perimeter wall angle or size 24x24x0.40mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450mm center to center and 40 mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in Charge. With 15 mm thick Tegular edged light weight calcium silicate false ceiling tiles.	Sqm	2803
2	Electrical		
3	Supply, Installation, Testing and Commissioning of Recessed mounted LED fixture complete with driver (constant current and constant voltage) include testing & commissioning of existing loop/circuit wire already laid for light fixture at site, supply of erection support, PVC conduit and wire till mounting level of light fixture, terminal connector complete in every way as required. (Wipro Cat no. CRDL 11R017HP57 or equivalent (Refer Makes of Material list in technical specification). Note: Requirement of scaffolding or any other support structure that is required for installation ,testing and commissioning of light fixture or its respective wiring shall be under scope of contractor.	Nos	475
4	Supply, Installation, Testing and Commissioning of Surface mounted LED fixture complete with driver (constant current and constant voltage) include testing & commissioning of existing loop/circuit wire already laid for light fixture at site,	Nos	48



	· · · ·		
	supply of erection support, PVC conduit and wire till mounting level of light fixture, terminal connector complete in every way as required. (Wipro Cat no. CRDL 11S017HP57 or equivalent (Refer Makes of Material list in technical specification). Note: Requirement of scaffolding or any other support structure that is required for installation ,testing and commissioning of light fixture or its respective wiring shall be under scope of contractor.		
5	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.		
5.01	3 X 2.5 Sq.mm	Mtr	300
6	Wiring for light point with 2X1.5+1X1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed PVC FRLS conduit. Wire to laid from existing light point to other light point as per approved drawing. Item include supply of wire.(Refer Makes of Material list in technical specification).		
6.01	Loop point (Excluding supply & installation of conduit).	Nos	60
7	Supplying and fixing of following sizes of medium class PVC conduit along with all accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
7.01	25mm	Mtr	200
8	Fire Alarm System & Public Address System		
8.01	Supply, Installation, Testing and commissioning of fire alarm panel loop card in existing fire alarm panel installed at site complete in all respect. Make: (Notifier) Honeywell, Model: LEM 320 or equivalent and compatible. This Item also includes any type of integration, software programming or software upgradation required in existing fire alarm and public address system of honeywell so as to make system complete and functional in all respect.	Nos	1
8.02	Supply, Installation, Testing and commissioning of fire alarm panel loop card complete in all respect. Make: (Notifier) Honeywell, Model: LCM 320 or equivalent and compatible. This Item also includes any type of integration, software programming or software upgradation required in existing fire alarm and public address system of honeywell so as to make system complete and functional in all respect.	Nos	1



8.03	Supply, Installation, testing & commissioning of Multi Cooperative Sensing Analog addressable Photoelectric smoke detector with its mounting base, Address Switch to programme the detectors from 01-159, complete as required. Make: (Notifier) Honeywell, Model-FSP/951 or equivalent and compatible. This Item also includes any type of integration, software programming or software upgradation required in existing fire alarm and public address system of honeywell so as to make system complete and functional in all respect.	Nos	84
8.04	Supply, Installation, testing & commissioning of response indicator with its mounting base on surface/recess MS box having two LED, Metallic cover complete with all connections as required. (Refer Makes of Material list in technical specification).This Item also includes any type of integration, software programming or software upgradation required in existing fire alarm and public address system of honeywell so as to make system complete and functional in all respect.	Nos	84
9	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.		
9.01	2 X 1.5 Sq.mm	Mtr	700
10	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.		
10.01	25 mm	Mtr	250
11	Supplying and fixing of following sizes of flexible GI conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
11.01	25 mm	Mtr	500
12	Disconnection and shifting of box type ceiling speakers to false ceiling. Item includes cutting of false ceiling, extension of wiring till the installation of speakers, testing of speakers after shifting.	Nos	24