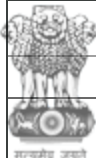


Government eProcurement System		eProcurement System Government of India	
Tender Details			
		Date : 14-Jun-2024 06:12 PM	
Print			
Basic Details			
Organisation Chain	Indian Institute of Technology Indore Infrastructure Development Office - IITI		
Tender Reference Number	IITI/IDO/PR/C/K/NIT-12/24-25/8		
Tender ID	2024_IITI_811998_1	Withdrawal Allowed	Yes
Tender Type	Open Tender	Form of contract	Item Rate
Tender Category	Works	No. of Covers	2
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No
Payment Mode	Offline	Is Multi Currency Allowed For BOQ	No
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No
Payment Instruments		Cover Details, No. Of Covers - 2	
Offline	S.No 1 2	Instrument Type R-T-G-S NEFT	
Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical	.pdf	Technical
2	Finance	.xls	Finance
Tender Fee Details, [Total Fee in ₹ * - 0.00]			
Tender Fee in ₹	0.00	Fee Payable To	Nil
Fee Payable To	Nil	Fee Payable At	Nil
Tender Fee Exemption Allowed	No		
EMD Fee Details			
EMD Amount in ₹	39,100	EMD Exemption Allowed	No
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	Registrar IITI	EMD Payable At	IITI
Click to view modification history			
Work /Item(s)			
Title	Development of 4 Nos. Kitchens for stalls at Central Dining Building		
Work Description	Development of 4 Nos. Kitchens for stalls at Central Dining Building		
Pre Qualification Details	Please refer Tender documents.		
Independent External Monitor/Remarks	NA		
Show Tender Value in Public Domain	Yes		
Tender Value in ₹	19,52,825	Product Category	Construction Works
Contract Type	Tender	Bid Validity(Days)	180
Location	Central Dining Building, IIT Indore	Sub category	NA
Pre Bid Meeting Address	IDO Office, GF, Ab, IIT Indore 453552	Period Of Work (Days)	90
Pre Bid Meeting Date	17-Jun-2024 11:00 AM	Pre Bid Meeting Place	IDO Office, GF, Ab, IIT Indore 453552
Should Allow NDA Tender	No	Bid Opening Place	IDO Office, GF, Ab, IIT Indore 453552
Allow Preferential Bidder	No		

Critical Dates

Publish Date	15-Jun-2024 09:00 AM	Bid Opening Date	24-Jun-2024 12:00 PM
Document Download / Sale Start Date	15-Jun-2024 10:00 AM	Document Download / Sale End Date	21-Jun-2024 05:00 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	15-Jun-2024 10:00 AM	Bid Submission End Date	21-Jun-2024 05:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size (in KB)
	1	Tendernotice_1.pdf	NIT	1075.05

Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (in KB)
	1	BOQ	BOQ_853345.xls	BOQ	319.00

Bid Openers List

S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	chainika@iiti.ac.in	Chainika Malhotra	CHAINIKA MALHOTRA
2.	shailendrajat@iiti.ac.in	shailendra Jat	SHAIENDRA KUMAR JAT
3.	devendra@iiti.ac.in	Devendra Gurjar	DEVENDRA GURJAR
4.	aecivil1@iiti.ac.in	Deepak Chourasia	DEEPAK CHAURASIA

Tender Properties

Auto Tendering Process allowed	No	Show Technical bid status	Yes
Show Finance bid status	Yes	Stage to disclose Bid Details in Public Domain	Technical Bid Opening
BoQ Comparative Chart model	Normal	BoQ Compative chart decimal places	2
BoQ Comparative Chart Rank Type	L	Form Based BoQ	No

TIA Undertaking

S.No	Undertaking to Order	Tender complying with Order	Reason for non compliance of Order
1	PPP-MII Order 2017	Agree	
2	MSEs Order 2012	Agree	

Tender Inviting Authority

Name	SE and Project In Charge
Address	IDO Office, GF, Ab, IIT Indore 453552

Tender Creator Details

Created By	Devendra Gurjar
Designation	Deputy Engineer
Created Date	14-Jun-2024 06:07 PM



भारतीय प्रौद्योगिकी संस्थान इंदौर
Indian Institute of Technology Indore

ई-निविदा-प्रणाली

E-TENDER- MODE

सेंट्रल डाइनिंग बिल्डिंग में स्टॉलों के लिए 4 रसोईघरों का विकास
Development of 4 Nos. Kitchens for stalls at Central Dining Building.

दो बोली आइटम दर निविदा दस्तावेज़ के लिए
दस्तावेज़ ऑनलाइन जमा किया जाना है

Document to be submitted online for
(Two Bid Item Rate Tender document)

(NIT No.: IITI/IDO/PR/C/K/NIT-12/24-25/8 dated 14.06.2024)

(Last date of submission of online Tenders up to 5:00 PM on 21.06.2024)

INDEX

Name of work: Development of 4 Nos. Kitchens for stalls at Central Dining Building

N.I.T. No.: - IITI/IDO/PR/C/K/NIT-12/24-25/8

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This N.I.T. contains 66 (Sixty-Six) pages. Pages marked from 1 to 66 pages. (Excluding GCC and Correction Slip of GCC)

Dy. E. (Civil)
IIT Indore

AEE (E)
IIT Indore

AEE(HVAC)
IIT Indore

DEE (Civil)
IIT Indore

This Item Rate Tender amounting to **Rs.19,52,825** (Rupees Nineteen Lakh Fifty-Two Thousand Eight Hundred and Twenty-Five only) is hereby approved.

Project-In-charge
IDO, IIT Indore

PART-A

**INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR E-TENDERING
FORMING PART OF THE BID DOCUMENT AND TO BE POSTED ON THE
WEBSITE**

The Project In charge, IDO, IIT Indore, on behalf of IIT Indore, invites online item rate bids from approved contractors in CPWD, BSNL, MPPWD, MES, State govt. Bodies & Central PSUs working agency of IITs/ IIMs/ RRCAT etc.

S.No.	NIT No.	Name of work & Location	Estimated cost put to tender	Period of completion	EMD Amount	Pre-bid meeting date and venue	Last date & time of submission of Bid and other documents	Time and date of opening of eligibility Bid/documents
1	2	3	4	6			7	9
1	IIT/IDO/PR/C/K/NIT-12/24-25/8	Development of 4 Nos. Kitchens for stalls at Central Dining Building	<u>Rs.19,52,825</u> (Rupees Nineteen Lakh Fifty-Two Thousand Eight Hundred and Twenty-Five only)	03 Months (90 days)	RS 39,100/- (Rupees Thirty-Nine Thousand One Hundred only) https://forms.edugfix.com/indoreit/add	17.06.2024 At 11:00 AM IDO Office, GF, AB, IIT Indore, Khandwa Road, Simrol, Indore 453552	21.06.2024 at 05:00 PM	24.06.2024 at 12:00 PM

1. 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.
2. Information and Instructions for bidders posted on the website shall form part of the bid document.
3. The bid document consisting of plans, specifications, schedule of quantities of various types of items to be executed, and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from the website http://iiti.ac.in/tender_estate & <https://eprocure.gov.in/eprocure/app> free of cost
4. Those contractors not registered on the website mentioned above are required to get registered beforehand. If needed, they can be imparted training on the online bidding process as per details available on the website.
5. The intending bidder must have a valid class-III digital signature to submit the bid.
6. On the opening date, the contractor can log in and see the bid opening process. After opening the bids, he will receive the competitor's bid sheets.
7. Contractors can upload documents in the form of JPG format and PDF format.
8. If a tenderer does not quote any percentage above/below the total amount of the tender or any section/subhead in the item rate tender, the tender shall be treated as invalid and will not be considered the lowest tender.
9. GST or any other tax payable on construction materials/contract/any activity related to this contract shall be paid by the contractor, and the Government shall not entertain any claim whatsoever in this regard. The contractor shall quote his rates in accordance with the Government of India, Ministry of Finance, Department of Revenue, Central Board of Excise & Customs Notification no.10/2017-Central Tax dated 28 June 2017.

LIST OF DOCUMENTS TO BE UPLOADED WITH TECHNICAL BID

(for technical evaluation)

Sl. No.	List of Documents
1*	Certificate GST No.
2*	EMD Rs. 39,100/-
3*	Registration
4*	Form A: - Financial information
	i) Average Annual turnover of 50% of the estimated cost of Tender in the Last Five Years
5*	Bank Solvency Certificate VALUE SHOULD BE 40% of Estimated Cost
6*	Details of Eligible Work or Similar Work
	Successfully completed similar work within the last Seven years in CPWD, BSNL, MPPWD, MES, State Government bodies, Central PSUs or working agencies of IIT/ IIM/ RRCAT-
	i) one similar work of value 80% of the estimated cost of tender. OR
	ii) Two similar works of value 60% of the estimated cost of tender. OR
	iii) Three similar works of value 40% of the estimated cost of tender
7	Structure and organization of the firm/company
8*	Certificate of EPF and ESIC
9*	Labour Registration/ undertaking on letterhead
10*	Undertaking of compliance with all the statutory laws to be submitted on the letterhead of the organization with seal & signature.
11*	Loss and Profit certificate (certified by CA for the Last Five years)
12*	Self-attested / Notarized on 100 Rs stamp regarding joint venture (in last five years), Joint ventures are not allowed
13*	Self-Attested / Notarized on 100 Rs stamp regarding firm are not blacklisted in last Five years

* MANDATORY

- The Document should be uploaded in the prescribed serial number, and no extra number of documents/ pages will be uploaded.
- Summary Sheet will be attached with the uploaded document

- ❖ **Registration No. Means:** MSME, CPWD, PWD, Society firm and similar related to the construction/ civil work.
- ❖ **Bank Solvency:** Preferably for the Current Financial Year, but not older than one year
- ❖ **Document for Eligibility of Similar Work:** Only the Defined Document (with Seal signed by Client), up to the date of publication of tender, is considered.
Completion Certificate of Work (Sealed and Signed)
- ❖ **Financial Information:**
 1. CA Certified Summary/ Balance sheet year-wise.
 2. Profit/ loss Statement by CA Last 05 Financial Years
 3. ITR returns of the last 05 Assessment Years
- ❖ **Similar Works means:**
Civil works, which includes Electrical work

CPWD-6 FOR e-Tendering

Item rate bids are invited by the Project In-charge, IDO, IIT Indore on behalf of IIT Indore invites online item rate bids from approved registered contractors in CPWD, BSNL, MPPWD, MES, State Govt. Bodies, Central PSUs or working agencies of IIT/IIM/RRCAT, etc., for “**Development of 4 Nos. Kitchens for stalls at Central Dining Building**”.

1. The enlistment of the contractors should be valid on the last date of submission of bids.

In case the last date of submission of bids is extended, the enlistment of contractors should be valid on the original date of submission of bids.

- 1.1 The Item rate work is estimated to cost **Rs.19,52,825/-**. This estimate, however, is given merely as a rough guide.
2. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD 7, which is available as a Govt. of India Publication and also available on the website www.cpwd.gov.in. Bidders 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 **3 Months (90 days)** 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 or made available in parts.
 - (ii) The architectural and structural drawings shall be made available in a phased manner, as per the requirement of the same as per the approved programmer of completion submitted by the contractor after the award of work.
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 except Standard General Conditions of Contract Form can be seen on website http://iiti.ac.in/tender_estate & ido.tender@iiti.ac.in free of cost.
6. After submission of the bid, the contractor can re-submit the revised bid any number of times but before the last time and date of submission of the bid as notified.
7. While submitting the revised bid, the contractor can revise the item rate quoted by him any number of times for any/all sub-heads but before the last time and date of submission of the bid as notified.
8. The receipt shall also be uploaded to the e-tendering website by the intending bidder up to the specified bid submission date and time.
9. A copy of the Enlistment Order and certificate of work experience, and other documents as specified in the bid document shall be scanned and uploaded to the e-Tendering website within the period of bid submission. Further, a certified copy of all the scanned and uploaded documents as specified in the bid document shall have to be submitted by the lowest bidder only within a week physically in the office of the tender opening authority.

The bid submitted shall be opened at **12:00 PM on 24.06.2024**

10. The bid submitted shall become invalid if:

The bidder is found ineligible.

- i. The bidder does not upload all the documents (including GST registration certificate and acknowledgement of up-to-date filed return) as stipulated in the bid
- ii. 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 the bid opening authority.
- iii. If a tenderer does not quote any item rate on the total amount of the tender or any section/subhead in the item rate tender, the tender shall be treated as invalid and will not be considered as the lowest tenderer.
- iv. The contractor whose bid is accepted will be required to furnish a performance guarantee of 3% (Three Percent) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any Scheduled Bank of any scheduled bank (in case guarantee amount is less than Rs. 1, 00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period, if any. The contractor whose bid is accepted will also be required to furnish either a copy of applicable licenses/registrations or proof of applying for obtaining a labour license, registration with EPFO, ESIC and BOCW welfare board, including Provident Fund Code No. if applicable, and also ensure the compliance of aforesaid provision by the sub-contractors, if any, engaged by the contractor for the said work and programme chart (Time and progress) within the period specified in Schedule F.

11. Description of the work is as follows: - Development of 4 Nos. Kitchens for stalls at Central Dining Building.

12. 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 bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not, and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by bidders implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools plant, etc., will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

13. The competent authority, on behalf 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 the assignment of any reason. All bids in which any of the prescribed conditions is not fulfilled or any condition, including that of conditional rebate, is put forth by the bidders shall be summarily rejected.

14. Canvassing, whether directly or indirectly, in connection with bidders is strictly prohibited, and the bids submitted by the contractors who resort to canvassing will be liable for rejection.

15. The competent authority on behalf of IIT Indore reserves for himself the right to accept the whole or any part of the bid, and the bidders shall be bound to perform the same at the rate quoted.

16. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the Central Public Works Department or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.

17. 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 prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at 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.

18. The bid for the works shall remain open for acceptance for a period of One Eighty Days (180) days from the date of opening of financial bids. If any bidder withdraws his bid before the said period or issues a 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 the Government shall, without prejudice to any other right or remedy. Further, the bidders shall not be allowed to participate in the rebidding process of the work.

19. This notice inviting Bids shall form a part of the contract document. The successful bidders/contractor, on acceptance of his bid by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of: -

(a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and 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 7 or other Standard C.P.W.D. Form as applicable.

20. For Composite Bids

20.1.1 The Project In charge of the major component will call bids for the composite work. The cost of the bid document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite bid.

20.1.2 The bid document will include the following two components:

Part A: - CPWD-6, CPWD-7 including schedule A to F for the major component of the work, Standard General Conditions of Contract for CPWD 2020 as amended/modified up to receipt of tender

Part B: - General/specific conditions, specifications and schedule of quantities applicable to major components of the work.

Part C: - Schedule A to F for minor components of the work. (PIC of the major component shall also be competent authority under clause 2 and clause 5 as mentioned in schedules A to F for major components), General/specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.

20.1.3 The bidders must associate themselves with agencies of the appropriate class eligible to bid for each of the minor components individually as per NIT Conditions.

20.1.4 The eligible bidders shall quote a percentage rate for all subheads/components of work.

20.1.5 After acceptance of the bid by the competent authority, the Project in charge of a major component of the work shall issue a letter of award on behalf of the IIT Indore. After the work is awarded, the main contractor will have to enter into one agreement with the Project in charge of the major component and also has to sign two or more copies of the agreement depending upon the number of PICs of minor components. One such signed set of agreements shall be handed over to the PIC of minor component(s). PIC of a major component will operate Part A and Part B of the agreement. PIC of minor component(s) shall operate Part C along with Part A of the agreement.

20.1.6 Entire work under the scope of the composite bid, including major and all minor components, shall be executed under one agreement.

20.1.7 Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works.

20.1.8 The main contractor has to associate agency(s) for minor component(s) conforming to eligibility criteria as defined in the bid document and has to submit detail of such agency(s) to Engineer-in-charge of minor component(s) within prescribed time. The name of the agency(s) to be associated shall be approved by the Project In Charge of minor component(s).

20.1.9 In case the main contractor intends to change any of the above agencies/agencies during the operation of the contract, he shall obtain prior approval of PIC of the minor components. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case the engineer-in-charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work, and this shall be binding on the contractor.

20.1.10 The main contractor has to enter into an agreement /MOU with the contractor(s) associated with him for the execution of minor component(s). Copy of such agreement/MOU shall be submitted to the PIC of each minor component as well as to the PIC of the major component. In case of a change of associate contractor, the main contractor has to enter into an agreement/MOU with the new contractor associated with him.

20.1.11 Running payment for the major component shall be made by the PIC of major discipline to the main contractor. Running payment for minor components shall be made by the Engineer-in-charge of the discipline of minor components directly to the main contractor.

20.1.12A. The Item Rate work shall be treated as complete when all the components of the work are complete. The completion certificate of the composite work shall be recorded by the Project-in-charge after the record of the completion certificate of all other components.

20.1.12B. The final bill for the whole work shall be finalized and paid by IIT Indore. The project-in-charge of minor component(s) will prepare and pass the final bill for their component of work and pass on the same to the PIC of the major component for inclusion in the final bill for the composite contract.

INTEGRITY PACT

To,

.....,
.....,
.....

Sub: NIT No. IITI/ IDO/ PR/C/ Dining Modi FF/ 2023-24/ 11 for the work Development of 4 Nos. Kitchens for stalls at the Central Dining Building.

Dear Sir,

It is hereby declared that IIT Indore is committed to follow the principles of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer /bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement, and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of IIT Indore.

Yours faithfully

Project-in-Charge

* To be filled by Project-in- Charge

To,
Project-in-Charge,
.....
.....

Sub: Submission of Tender for the work Development of 4 Nos. Kitchens for stalls at the Central Dining Building.

Dear Sir,

I/We acknowledge that IIT Indore is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by IIT Indore. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement while submitting the tender/bid, IIT Indore shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of IIT Indore.

INTEGRITY AGREEMENT

This Integrity Agreement is made at..... On this..... Day of..... 20.....

BETWEEN

IIT Indore represented through Project-in-Charge...
(Hereafter referred to as the “Principal/Owner”, which expression shall, unless repugnant to the meaning or context hereof, include its Successors and permitted assigns)

AND

..... (Name and Address of the Individual/firm/Company) through..... (Hereinafter referred to as the (Details of

duly authorized signatory) “Bidder/Contractor” and which expression shall, unless repugnant to the meaning or context hereof, include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender ----- (*) ----- (hereinafter referred to as “Tender/Bid”) and intends to award, under laid down organizational procedure, the Development of 4 Nos. Kitchens for stalls at Central Dining Building.

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

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

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

* To be filled by Project –in - charge.

Article 1: Commitment of the Principal/Owner

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

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

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

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

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

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

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles his participation in the Tender process and during the Contract execution:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/ Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/ PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

- d) The Bidder(s)/ Contractor (s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/ Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

- 1) Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights

In case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.

- 2) Forfeiture of Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes

corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

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

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 15 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, IIT Indore.

Article 7- Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.

- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8- LEGAL AND PRIOR RIGHTS

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

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....

(For and on behalf of Principal/Owner)

.....

(For and on behalf of Bidder/Contractor)

WITNESSES:

1.....

(Signature, name and address)

2.....

(Signature, name and address)

Place:

Dated:

INDIAN INSTITUTE OF TECHNOLOGY INDORE

ITEM RATE TENDER & CONTRACT FOR WORKS-

1.	Tender for composite work of:	Development of 4 Nos. Kitchens for stalls at Central Dining Building.
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- (i) To be submitted by 5:00 PM on 21.06.2024 upload at <http://iiti.ac.in/tender IDO> & <https://eprocure.gov.in/eprocure/app>
- (ii) To be opened at 12:00 PM on 24.06.2024 in the ID Office at IIT Indore.

TENDER

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

I/We hereby tender for the execution of the work specified for the 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 respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for 75 (Seventy-Five) days from the due date of its opening and not to make any modification to its terms and conditions.

Further, I/We agree that in case of forfeiture of the 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 executed through another contractor on a back-to-back basis. Further, if such a violation comes to the notice of the 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 the Department before the date of start of work, the Project-in-Charge shall be free to forfeit the entire amount of the Performance Guarantee.

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

Dated

Signature of Contractor

Witness:

Postal Address

Address

Occupation

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the IIT Indore for a sum of `*.....(Rupees.....*.....
.....).

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

(a) *

(b) *

(c) *

For & on behalf of IIT Indore

Signature*.....

Dated: *

Designation*.....

*To be filled in by PIC

PROFORMA OF SCHEDULES

(Separate Performa for Civil, Works in case of Item Rate Tenders)
(Operative Schedules to be supplied separately to each intending tenderer)

SCHEDULE 'A'

Schedule of quantities (Civil + E&M component)

(Civil+ E&M Works: - Part C of this tender document)

SCHEDULE 'D'

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

As attached in the tender form

SCHEDULE 'E'

Reference to General Conditions of contract –

GCC for CPWD 2023 CONSTRUCTION WORKS as amended/modified up to the previous day of submission of tender.

Name of Work: Development of 4 Nos. Kitchens for stalls at Central Dining Building.

Estimated cost for work:	Rs.19,52,825. (Civil + E&M Works)
Earnest money	Rs. 68,150
Performance Bank Guarantee	5% of the tendered value of the work
Security Deposit	2.5% of the tendered value of the work

SCHEDULE 'F' GENERAL RULES & DIRECTIONS

Officer inviting tender	Project-in-charge, IIT Indore
Maximum percentage of quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2.& 12.3	See page 28
Definitions	
2(v)	Engineer-in-Charge Project In charge, IIT Indore
2(vii)	Accepting Authority Director, IIT Indore
2(x)	Percentage on cost of materials and labour to cover all overheads and profits 15% (Fifteen Percent)
2(xi)	Standard Schedule of Rates Delhi Schedule of rate 2023 (Civil) Volume-I & II DSR 2022 (E&M works) with correction slips up to the previous day of submission of bid & Market Rate for non DSR items.
2(xii)	Department Infrastructure Development Office, IIT Indore
	Standard CPWD contract Form GCC 2019, CPWD Form 7/ 8 as modified & corrected up to date General conditions of contract for construction works 2023 & CPWD form-8 as amended up to the previous day of submission of bid.

Clause 1(i)	Time allowed for submission of Performance and applicable labour licenses/registration. Registration with EPFO, ESIC & BOCW welfare Board including Provident Fund Code No., if applicable or proof of applying thereof from the date of issue of letter of acceptance	07 Days
Clause 1(ii)	Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period as provided in clause 1 (i) above-5 Days	03 Days
Clause 2	Authority for fixing Compensation under Clause 2	Director, IIT Indore
Clause 2 A	Whether Clause 2A shall be applicable	NA
Clause 5	Number of days from the date of issue of letter of acceptance for reckoning date of start	08 (Eight) Days

Time allowed for the execution of work		03 Months (90 days)
Authority to decide	(i) Extension of time	DOID, IIT Indore
	(ii) Rescheduling of milestone	DOID, IIT Indore or his successor thereof
	(iii) Shifting of date of start in case of delay in handing over of site	Project-in-Charge, IIT Indore or his successor thereof

Table of Milestone(s)

Milestone No.	Description of Milestone	Time allowed from date of start (Days)	Amount to be withheld in case of non-achievement of milestone
1.	Brickwork for partition, conduiting, plaster and paint	20	3%
2.	Fixing of Door frames and door, Kitchen platform and all civil works	40	3%
3.	Fixing of Switch, socket, light, fan, etc.	60	3%
4.	Completion of all E & M work, including Testing and commissioning	90	3%

Note: If the Agency will be failed in achieving the milestone No 1 to 4, then the respective amount of milestone shall be forfeited and not to be payable.

Clause 6	Whether clause 6 shall be applicable	Yes- CMB
Clause 7	Gross work to be done together with net payment / Adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment (CIVIL WORK)	Rs.10.00 lacs
Clause 7A	Whether clause 7A shall be applicable	Yes
Clause 8A	Authority to decide compensation on account if contractor fails to submit completion plans	Director IIT Indore
Clause 10A	List of testing equipment to be provided by the Contractor at site lab.	All necessary equipment for conducting all necessary tests shall be provided at the site as per direction of Project/ Engineer In charge)
Clause 10 B	Whether clause 10-B (i) & (ii) shall be applicable	NA
	Clause 10-B (iii) shall be applicable	NA
Clause 10 C	Component of labour expressed as percentage of value of work	NA
<i>Note: Payment under this clause is admissible when Contractor submits proof of having paid wages due to every worker through bank or ECS or online transfer to His bank account.</i>		
Clause 10 CC	NA	

Clause 11	Specification to be followed for execution of work	
For Civil items of work	For Civil: CPWD specification 2019, Volume-I & II with correction slips up to the previous day of submission of bid, suppliers/manufacturer specification for non-DSR items.	
Clause 12	Type of work	Project and Original work (Civil)
Clause 12.2 & 12.3	Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work	100%
Clause 12.4	Deviation limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earthwork subhead in DSR and related items)	100%
	Deviation limit for items mentioned in the earthwork subhead of DSR and Related Items	100%
Clause 16	Competent Authority for Deciding reduced rates for Civil items of work	DOID, IIT Indore
Clause 18	List of mandatory machinery, tools & Plants to be deployed by the contractor at the site	As per requirement as decided by the project-in-charge.
Clause 19 (C, D, G & K)	Authority to decide the penalty for each default	SE cum Project in Charge, IIT Indore
Clause 25	Designation	
	Conciliator	DOID, IIT Indore
	Arbitrator Appointing Authority	SE cum Project in Charge, IIT Indore or his successor
	Place of Arbitration	

Clause 32		Requirement of Technical Representative(s) and Recovery Rate			
Cost of work (Rupees in crores)	Requirement of Technical Staff		Minimum experience (years)	Designation of Technical Staff	The rate at which recovery shall be made from the contractor in the event of not fulfilling the provision of Clause 32 (figures in words)
	Qualification	Number			
More than 1.5 Crore to 5 Cr.	Graduate Engineer or Diploma in Engineering	1	2 or 5 (respectively)	Project Manager/ Site Engineer	Rs. 15,000 per month (Fifteen thousand rupees only)

**Cost of work in the table above means the agreement amount of the work.

- Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.
- Diploma holders with a minimum of 10 years of 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 the requirements of degree engineers.

Clause 38		
Civil		
(i)	Schedule/statement for determining the theoretical quantity of cement & bitumen on the basis of the Delhi Schedule of Rates 2023 printed by CPWD	D.S.R.2023 for civil works with up-to-date correction slips

(ii)	<u>Variations permissible on theoretical quantities</u>	
	<p>a. Cement for works with estimated cost put to tender not more than 25 lakhs.</p> <p>For works with estimated cost put to Tender is more than 25 lakhs</p>	<p>a. 3% plus/minus</p> <p>2% plus/minus</p>
	b. Bitumen all works	b. 2.5% plus only & nil on minus side.
	c. Steel reinforcement and structural steel Sections for diameter, section and category.	c. 2% plus/minus
	d. All other materials and Electrical Items	d. Nil

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S. No.	Description of Item	Unit	Rates in figures and words at which recovery shall be made from the Contractor	
			Excess beyond permissible variation.	Less use beyond permissible variation
1.	Cement PPC	MT	Nil	Substandard work shall Not be applicable.
2.	Reinforcement Bars TMT-fe 500D (i) Primary Manufacturer	MT	Nil	Substandard work shall Not be applicable.
3.	Structure Steel	MT	Nil	Substandard work shall Not be applicable.

GENERAL REQUIREMENTS FOR THE TENDER

Name of Work: Development of 4 Nos. Kitchens for stalls at Central Dining Building.

- 1 The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with the Project-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.
- 2 A separate schedule of quantity is included in this tender for civil and electrical items of work. If the tenderer wants to offer any unconditional rebates on their rates, the same should also be offered in the respective components of the civil and E&M schedule separately. The contractor shall quote the item rates in figures and words accurately so that there is no discrepancy in rates written in figures and words.
- 3 Time allowed for the execution of work is **03 Months (90 days)**.
- 4 The contractor(s) shall submit a detailed program of execution in accordance with the master programme/ milestone within ten days from the date of issue of the award letter.
- 5 Quality of the project is of utmost importance. This shall be adhered to in accordance with the provisions of CPWD specifications and guidelines given in the relevant Para's.
- 6 The contractor (s) shall make his own arrangements for electricity and water required for the execution of work.
- 7 Cement shall be arranged by the contractor himself.
- 8 Steel Reinforcement shall be arranged by the contractor himself.
- 9 The contractor shall submit the running bills in the shape of the computerized MB in pages of A-4 size as per the standard format of the department and shall act as per modified clause 6 A of CPWD-7
- 10 Contractor has to provide reinforcement cover blocks made of approved proprietary prepacked free-flowing mortars (Concentra as manufactured by M/s Fosroc Chemical India Ltd. or approved equivalent) of high early strength.
- 11 The contractor shall comply with the provisions of the Apprentices Act 1961 and the rules and orders issued there from time to time.
- 12 The contractor shall comply with the provisions of Construction and Demolition Waste Management Rules, 2016, as per the Ministry of Environment and Forest notification dated 29/03/2016 issued in the exercise of powers conferred by Environment (Protection) Act 1986 (Available on web address www.moef.gov.in). The contractor shall also follow all rules and regulations regarding the disposal of C&D waste as per the approval of local bodies.

PART B

MATERIAL AND QUALITY ASSURANCE

1 The contractor shall ensure quality control measures on different aspects of construction, including materials, workmanship, and correct construction methodologies to be adopted. He shall have to submit a quality assurance programme within two weeks of the award of work. The quality assurance programme should include a method statement for various items of work to be executed along with checklists to enforce quality control.

2 The Following Conditions to the specification shall, however, apply: -

3 All stone aggregates shall be of hard stone variety to be obtained from approved quarries conforming to CPWD specification or as approved by the Engineer- in-charge.

Sand to be used for cement concrete work, mortar for masonry and plaster work shall be of standard quality. Sand shall be obtained from the approved quarry.

4 The contractor shall get the source of all other materials not specified elsewhere in the document, approved by the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests, etc., shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.

The contractor shall submit shop drawings of staging and shuttering arrangement, aluminium work, and other works as desired by the Engineer In Charge for his approval before execution. The contractor shall also submit the bar bending schedule for approval of the Engineer –in – charge before execution.

Other Laboratories:

B1 The contractor shall arrange to carry out all tests required under the agreement through the laboratory/government lab/ Institute as approved by the Engineer-in-Charge and shall bear all charges in connection therewith, including charges for testing for all materials.

C) Sampling of Materials:

C1 Sample of building materials fittings and other articles required for execution of work shall be approved by the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing the BIS certification mark shall be used in case the above are not available; the quality of samples brought by the contractor shall be judged by standards laid down in the relevant BIS specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge, which shall be preserved till the completion of the work.

C2 The contractor shall ensure quality construction in a planned and time-bound manner. Any sub-standard material/work beyond the set tolerance limit shall be summarily rejected by the Engineer-in-Charge. The same shall be removed from the site within the time as directed by the Engineer-in-charge at their own cost.

C3 BIS marked materials, except otherwise specified, shall be subjected to quality tests at the discretion of the Engineer-in-Charge. of other materials as per the specifications described for the item/materials. Wherever BIS-marked materials are brought to the site of work, the contractor shall, if required by the Engineer-in-Charge, furnish a manufacturer test certificate to establish

- that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.
- C4 The contractor shall procure all the materials in advance so that there is sufficient time for testing and approval of the materials and clearance of them before use in work.
- C5 All materials brought by the contractor for use in the work shall be checked by the Engineer-in-Charge or his authorized representative of the work on receipt of the same at the site before use.
- C6 The contractor shall be fully responsible for the safe custody of the materials issued to him, even if the materials are in a double lock and key system.
- C7 The Stone aggregate/stone sand shall be brought from any quarries subjected to the said materials to confirm CPWD specifications.
- 5 The day-to-day receipt and issue accounts of different grades/brands of cement shall be maintained separately in the standard proforma by the Assistant Engineer-in-Charge of work, which shall be duly signed by the contractor or his authorized representative.
- 6 The contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. Nothing extra shall be payable to the contractor on this account. However, the cost of photographs, slides, audio/videography, etc. shall be borne by the department.
- 7 The contractor shall be fully responsible for the safe custody of materials brought by him issued to him even though the materials are under a double lock key system.
- 8 Separate cement registers showing the receipt of the OPC and PPC (as required) shall be maintained at the site. The contractor shall construct separate godowns for the storage of OPC & PPC at the site, and nothing extra on this account shall be payable.
- 9 Cement issued shall be for consumption at the site only. No cement for factory-made items and those not manufactured at the site shall be issued.
- 10 In case there is any discrepancy in the frequency of testing as given in the list of mandatory tests and that in the individual sub-head of work as per CPWD specification 2009 Vol. 1 & 2, the higher of the two frequencies of testing shall be adopted.
- 11) Maintenance of Register:
All the register of tests to be carried out at the construction site or in outside laboratories shall be maintained by the contractor, which shall be issued to the contractor by the Engineer-in-Charge in the same manner as being issued to CPWD field staff.
- (i) The registers to be issued to the contractor are:
- a) Materials at site account register.
 - b) Cement register.
 - c) Master test registers.
 - d) Cube test register.
 - e) Paint register.

- f) Any other registers as decided by the Engineer-in-charge relevant to work.
- (ii) All the entries in the register will be made by the designated engineering staff of the contractor and same should be regularly reviewed by JE/AE/EE/PIC.
- (iii) Contractor shall be responsible for safe custody of all the test registers.
- (iv) Submission of copy of all test registers, material at site register along with each alternate running account bill and final bill shall be mandatory. These registers should be duly checked by AE (P) in division office.

GENERAL TERMS AND CONDITIONS

- 1 The order of preference in case of any discrepancy under “Conditions of Contract” given in standard CPWD contract form may be read as the following:
 - i) Nomenclature of items as per schedule of quantities.
 - ii) Particular specifications and special conditions, if any.
 - iii) CPWD specifications.
 - iv) Architectural Drawings.
 - v) Indian standard specifications of B.I.S.
 - vi) Sound Engineering Practice.

A reference made to any Indian Standard specification in these documents shall imply the latest version of that standard, including such revisions/amendments as issued by the Bureau of Indian Standard up to the last date of receipt of tenders. The contractor shall keep at his own cost all such publications of relevant Indian standards applicable to the work at the site.

- 2 Except for the items for which particular specifications are given or where it is specifically mentioned otherwise in the description of items in the schedule of quantities, the work shall generally be carried out in accordance with the “CPWD specifications 2019 Vol. 1 and Vol. 2 (with up-to-date correction slips). (Hereinafter to be referred to as CPWD specifications) and instructions of Engineer-in-Charge. Wherever CPWD specifications are silent the latest IS codes/specification shall be followed.
- 3 Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work, and nothing extra shall be payable to him on account of the same. Extra payment for centering/shuttering, if required to be done for heights greater than 3.5 m shall, however, be admissible at the rates arrived at in accordance with clause 12 of the agreement, if not already specified.
- 4 The proposed building is a prestigious project, and the quality of work is of paramount importance. The contractor shall have to engage well-experienced skilled labour and deploy modern T&P and other equipment to execute the work. Many items like stone masonry & stone cladding works, stone flooring and structural glazing, PVDF coating, aluminium composite panels and other specialized flooring work; Woodwork will especially require the engagement of skilled workers with experience, particularly in the execution of such items.
 - a) The contractor (s) shall inspect the site of work before tendering and acquaint himself with the site Conditions, and no claim on this account shall be entertained by the department
 - b) The contractor (s) shall get himself acquainted with the nature and extent of the work and satisfy himself about the availability of materials from kilns or approved quarries for the collection and conveyance of materials required for construction.
6. The contractor (s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy him about the complete characteristics of soil and other parameters of the site. However, no claim on the alleged inadequacy or incorrectness of the soil data shall be entertained.

- 7 The tenderer shall see the approaches to the site. In case any approach from the main road is required by the contractor, the same shall be made good, improved and maintained by the contractor at his own cost. No payment shall be made on this account.
- 8 The contractor (s) shall give to the Municipality, Police and other authorities all necessary notices, etc., that may be required by law and obtain all requisite Licenses for temporary obstructions, enclosures, etc. and pay all fees, taxes and charges which may be leviable on account of these operations in executing the contract. He shall make good any damage to the adjoining property, whether public or private and shall supply and maintain a light and other illumination for caution the public at night.
- 9 The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all dangers and incidents caused to existing / new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work. The contractor shall be responsible for all damages and accidents due to negligence on his part.
- 10 Contractor shall provide permanent benchmarks and other reference points for the proper execution of work, and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations given in the Architectural and plumbing drawings
- 11 The contractor shall make his own arrangement for obtaining electric connection(s) if required and make necessary payments directly to the department concerned.
- 12 Other agencies doing works related to this project may also simultaneously execute their works, and the contractor shall afford the necessary facilities for the same. The contractor shall leave such necessary holes, openings, etc., for laying/burying in the work, pipes, cables, conduits, clamps, boxes and hooks for fan clamps, etc., as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
- 13 Some restrictions may be imposed by the security staff, etc., on the working and for movement of labour, materials, etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
- 14 The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality adhere to their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 15 The building work shall be carried out in a manner complying in all respects with the requirements of the relevant by-laws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.
- 16 The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted by making his own arrangements for water supply, electricity etc. and nothing extra whatsoever shall be payable for the same.
- 17 If as per local Municipal regulations, huts for labour are not to be erected at the site of work; the contractor shall be required to provide such accommodation at a place as is acceptable to the local body and nothing extra shall be paid on this account.

- 18 It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 19 The structural and architectural drawings shall at all times be properly co-related before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer-in-charge.
- 20 The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where, however phased delivery of work is contemplated these provisions shall apply separately to each phase.
- 21 The entire royalty at the prevalent rates shall have to be paid by the contractor on all the boulders, metals, shingles, sand etc. collected by him for execution of the work, directly to the Revenue authority or authorized agents of the State Government concerned or the Central Government, as the case may be.

The same shall be deemed to be included in the rates tendered by the contractor and nothing extra will be paid for the same.

22. PROGRAMME CHART

- i) The contractor shall prepare an integrated programme chart for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfilment of the programme within the stipulated period or earlier as indicated in the milestones under clause 5 of the contract and submit the same for approval to the Engineer-in-Charge within ten days of the award of the contract.
- ii) The programs chart should include the following: -
- a) Descriptive note explaining the sequence of various activities.
 - b) Network (PERT/CPM/BAR CHART)
 - c) Programme for procurement of materials by the contractor
 - d) Programme of procurement of machinery/equipment having adequate capacity commensurate with the quantum of work to be done within the stipulated period by the contractor.
- 23 If it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved programme referred above, the contractor shall produce a revised programme showing the modifications to the approved programme to ensure completion of the work within the stipulated time for completion.
- 24 The submission for approval by the Engineer-in-Charge of such programme or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.
- 25 If the work is carried out in more than one shift or during night no claim on these accounts shall be entertained.
- 26 Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the

contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.

- 27 The contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 28 The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by department.
- 29 Any cement slurry added over base surface for continuation of concreting for better bond is deemed to have been built in the items and nothing extra shall be payable for extra cement considered in consumption on this account.
- 30 The contractor shall take instructions from the Engineer-in-charge for stacking of materials. No excavated earth or building materials etc. shall be stacked/collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.

Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machinery's and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.

- 31 The contractor shall submit for the approval of Engineer-in-Charge names of specialized agencies of repute along with their technical capacity proposed to be engaged by him, who must have executed satisfactorily works of value as specified in mandatory conditions.
 - i) The works shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available thereof is complete and unambiguous. The discrepancy, if any shall be brought to the notice of the Engineer-in-Charge before execution of the work. The contractor alone shall be responsible for any loss or damage executing by the commencement of work on the basis of any erroneous and or incomplete information.
 - ii) Other agencies will also simultaneously execute and install the works of electrification, air conditioning, lifts, fire-fighting etc. for this work and the contractor shall provide necessary facilities for the same. The contractor shall leave such recesses, holes openings etc. as may be required for the electric, air-conditioning and other related works (for which inserts, sleeves, brackets, conduits base pinion, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stone work & brick work, if required and nothing extra shall be payable on this account.
 - iii) The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
 - iv) All Architectural drawings given in the tender other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fixings involved unless and

otherwise specifically mentioned. However, the work shall be executed in accordance with the drawings duly approved by the Engineer-in-Charge.

- 32 Samples of all materials and fittings to be used in the work in respect of brand manufacturer and quality shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work. Articles bearing BIS certifications mark shall only be used unless no manufacturer has got BIS mark for the particular material. Any material/fitting whose sample has not been approved in advance and any other unapproved material brought by the contractor shall be immediately removed as soon as directed. Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping/baling out water, if necessary, for which no extra payment shall be made. Those conditions shall be considered to include water from any source such as inflow of flood, surface and sub-soil water etc. and shall apply to the execution in any season.
- 33 On completion of work, the contractor shall submit at his own cost four prints of “as built” drawings to the Engineer-in-Charge within 30 days of completion of work. These drawings shall have the following information:
- a) Route of all piping and their diameters, including soil waste pipes & vertical stacks.
 - b) Ground and invert levels of all drainage pipes together with locations of all manholes and connections up to outfall.
 - c) Route of all water supply lines with diameters, location of control valves, access panels etc.
- 34 No extra payment will be made for operation/activity mentioned in Serial no.1 to 33 above unless specified otherwise.
- 35 Condition regarding secured advance:-
Secured advance shall be admissible only on those bonafide materials which are likely to be used in the work in a period not exceeding **45 days** from the date of secured advance payment. If the agency fails to use the material (in respect of which secured advance have been paid) in the work in this specified period
- of 45 days, the said component of secured advance shall be recovered from the next running account bill paid to the agency. Secured advance on the same material shall not be paid again.**
- 36 E. In case there is any discrepancy following order of preference will be followed. a. CPWD general specifications for electrical work part – I, Internal 2013, CPWD general specifications for electrical work part – IV, substation CPWD external specifications for electrical 1994. b. National Lighting Code – 2010. c. IS Codes d. National Building Code – 2016 e. Specifications in the NIT f. Any other relevant code g. OEM specifications Note-: All the amendments in the above code till last date of bid submission shall be incorporated.

Salient/ Mandatory Requirement for Tender

The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with the Engineer-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.

1. A separate schedule of quantity is included in this tender for civil and electrical items of work. If the tenderer wants to offer any unconditional rebates on their rates, the same should also be offered in the respective components of the civil and electrical schedule separately. The contractor shall quote the percentage rates in figures and words accurately so that there is no discrepancy in rates written in figures and words.
2. The time allowed for the execution of work is 03 Months.
3. The contractor(s) shall submit a detailed program of execution in accordance with the master programme/ milestone within ten days from the date of issue of the award letter.
4. The contractor has to arrange and install the field laboratory during the currency of work, and nothing extra will be paid on this account.
5. The quality of the project is of utmost importance. This shall be adhered to in accordance with the provisions of CPWD specifications and guidelines given in the relevant paras.
6. The contractor has to deploy the required Plant and machinery on the project. In case the contractor fails to deploy the plant and machinery whenever required and as per the direction of the Engineer-in-charge, he (Engineer-in-charge) shall be at liberty to get the same deployed at the risk and cost of the contractor.
7. The contractor shall comply with the provisions of the Apprentices Act 1961 and the rules and orders issued there from time to time. If he fails to do so, his failure will be a breach of the contract and the Acting Project-In-Charge (Civil)/Executive Engineer may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.
8. Temporary Electric connection shall be issued as per request and charges shall be recovered as per actual consumption of units.
9. Water will be arranged by the contractor at his own sources and not reimbursed by the Institute.
10. EPF and ESI, if applicable, will be reimbursed on an actual basis after due verification.
11. Any item which is not available in the BOQ or deviated beyond schedule F shall be paid as extra items shall be worked out as the actual cost of material and the actual cost of labour plus 15% as overhead and profit. The decision of the Engineer-In-Charge will be conclusive and final binding on the contractor.
12. If BOCW (MP Building & Other Construction Workers Welfare Board), Labour Registration & License, EPF & ESIC Registration are not submitted, and then the 1st RA Bill will not be paid & cleared till the submission of these documents.
13. Certifications like BOCW (MP Building & Other Construction Workers Welfare Board), Labour Registration & License, EPF & ESIC Registration are to be submitted after the issue of the Work Order, then only the site will be handed over to you, and permission to start the work will be given.

A. QUALITY ASSURANCE OF THE WORK

1. The contractor shall ensure quality control measures on different aspects of construction, including materials, workmanship, and correct construction methodologies to be adopted. He shall have to submit a quality assurance programme within two weeks of the award of work. The quality assurance programme should include a method statement for various items of work to be executed along with checklists to enforce quality control.
2. The contractor shall get the source of all other materials not specified elsewhere in the document approved by the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests, etc., shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.

B. Other Laboratories:

1. The contractor shall arrange carrying out of all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing. The said cost of tests shall be borne by the contractor/department in the manner indicated below.
2. By the contractor, if the results show that the test does not conform to relevant CPWD Specifications / BIS code or specification mentioned elsewhere in the documents
3. By the department, if the results confirm to relevant CPWD Specifications / BIS code or specification mentioned elsewhere in the documents.
4. If the tests, which were to be conducted in the site laboratory, are conducted in other laboratories for whatever the reasons, the cost of such tests shall be borne by the contractor.

C. Sampling of Materials:

1. Sample of building materials fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing BIS certification mark shall be used in case the above are not available, the quality of samples brought by the contractor shall be judged by standards laid down in the relevant BIS specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work.
2. The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge
3. BIS marked materials except otherwise specified shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/materials. Wherever BIS marked materials are brought to the site of work, the contractor shall if required, by the Engineer-in-Charge furnish manufacturers test certificate or test certificate from approved testing laboratory to
4. establish that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.

5. The contractor shall procure all the materials at least in advance so that there is sufficient time to testing and approving of the materials and clearance of the same before use in work.
6. All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
7. The contractor shall be fully responsible for the safe custody of the materials issued to him even if the materials are in double lock and key system.

D. ADDITIONAL TERMS AND CONDITIONS

1. Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same. Extra payment for centering/shuttering, if required to be done for heights greater than 3.5 m shall however be admissible at the rates arrived at in accordance with clause 12 of the agreement, if not already specified.
2. Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
3. Some restrictions may be imposed by the security staff etc. on the working and for movement of labor, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
4. The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality and abide by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same
5. The building work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.
6. If as per local Municipal regulations, huts for labor are not to be erected at the site of work; the contractor shall be required to provide such accommodation at a place as is acceptable to the local body and nothing extra shall be paid on this account.
7. The structural and architectural drawings shall at all times be properly co-related before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer-in-charge.
8. For the purpose of recording measurements and preparing running account bills, the abbreviated nomenclature indicated in the publications Abbreviated Nomenclature of Items of DSR 2016 shall be accepted. The abbreviated nomenclature shall be taken to cover all the materials and operations as per the complete nomenclature of the relevant items in the agreement and relevant specifications.
9. In case of items for which abbreviated nomenclature is not available in the aforesaid publication and also in case of extra and substituted items for which abbreviated nomenclature are not provided for in the agreement, full nomenclature of item shall be reproduced in the measurement books and bill forms for running account bills.
10. For the final bill, however, full nomenclature of all the items shall be adopted in preparing abstract in the measurement books and in the bill forms.
11. The contractor shall take instructions from the Engineer-in-charge for stacking of materials. No

excavated earth or building materials etc. shall be stacked/ collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.

12. Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machinery's and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.

13. It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.

14. In case the supply of timber/steel frames/shutters for doors, windows etc. is made by some other agency, the contractor shall make necessary arrangements for their safe custody on the direction of the Engineer-in-charge till the same are fixed in position by him & nothing extra shall be paid on this account.

15. The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where however phased delivery of work is contemplated these provisions shall apply separately to each phase.

16. The entire royalty at the prevalent rates shall have to be paid by the contractor on all the boulders, metals, shingle sand etc. collected by him for execution of the work, directly to the Revenue authority or authorized agents of the State Government concerned or the Central Government, as the case may be.

17. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by the departments and shall construct suitable godowns, yards at the site of work for storing all materials as to be safe against damage by sun, rain, dampness, fire, theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose, at his own cost. Materials to be charged directly to work and stipulated for issue free of cost shall also be issued to the contractor as soon as those are received at site or at the stipulated place of issue. The provision of this para shall apply equally and fully to those as well.

18. All materials obtained from the Infrastructure Development Office store or otherwise on receipt shall be checked by the Engineer-in-charge of the work or his representations before use.

19. Registers for the materials to be issued by the department shall be maintained as required by the Engineer-in-charge and these shall be signed by the contractor or his authorized agent and representative of Engineer-in-charge on each day of transactions.

SPECIAL CONDITIONS

1. The contractor shall not store/dump construction material or debris on the metalled road.
2. The contractor shall get prior approval from the Engineer-in-Charge for the area where the construction material or debris can be stored beyond the metalled road. This area shall not cause any obstruction to the free flow of traffic/inconvenience to pedestrians. It should be ensured by the contractor that no accidents occur on account of such permissible storage.
3. The contractor shall take appropriate protection measures like raising windbreakers of appropriate height on all sides of the plot/area using CGI sheets or plastic and/or other similar material to ensure that no construction material dust flies outside the plot area.
4. The contractor shall ensure that all the trucks or vehicles of any kind which are used for construction purposes/or are carrying construction materials like cement, sand and other allied materials are fully covered. The contractor shall take every necessary precaution that the vehicle is properly cleaned and dust-free to ensure that on route to their destination, the dust, sand or any other particles are not released in the air/contaminated air.
5. The contractor shall provide a mask to every worker working on the construction site and involved in loading, unloading and carriage of construction material and construction debris to prevent inhalation of dust particles.
6. The contractor shall provide all medical help, investigation and treatment to the workers involved in the construction of building and carriage of construction material and debris relating to dust emission.
7. The contractor shall ensure that C&D waste is transported to the C&D waste site only and due record shall be maintained by the contractor.
8. The contractor shall ensure the compulsory use of a jet in grinding and stone cutting.
9. The contractor shall carry out on-road inspection for black smoke generating machinery. The contractor shall use cleaner fuel.
10. The contractor shall ensure that the DG sets comply with emission norms notified by MoEF.
11. The contractor shall use vehicles having pollution under control certificate. The emissions can be reduced to a large extent by reducing the speed of a vehicle to 20 mph. Speed bumps shall be used to ensure speed reduction. In cases where speed reduction cannot effectively reduce fugitive dust, the contractor shall divert traffic to nearby paved areas.
12. The contractor shall ensure that the construction material is covered by tarpaulin. The contractor shall take all other precautions to ensure that no dust particles are permitted to pollute air quality as a result of such storage.
13. The work may involve working in odd hours. No extra payment shall be made on account of the same.
14. No extra payment will be made for the operation/activity mentioned above.
15. MTC of all the material shall be submitted by the Agency.
16. The contractor shall make his own arrangements for electricity. IIT Indore, at its own discretion, may, however, consider providing the electric connection in special circumstances on a payment basis. In that case, the contractor has to make his own arrangement for laying the cables and

another distribution system from the tap-off point. On completion of the project, no dues certificate shall be obtained by the contractor. No extra payment will be made for the operation/activity mentioned. The electricity bill amount informed by IIT authorities shall be paid within 15 days after receiving the bill; otherwise, the same amount will be withheld from the running or final bill till the payment is done by the agency.

17. GUARANTEE FOR WATER PROOFING TREATMENT:

16.1 The contractor shall be fully responsible for and shall guarantee proper performance of the entire waterproofing system for a period of 10(Ten) years from the final completion of works. In addition, specific 10 years written guarantee (to be furnished in a non-judicial stamp paper of value not less than Rs. 100/-) in the prescribed proforma shall be submitted for the performance of the system before final payment shall not in any way limit any other rights the Employer may have under the contract. All water-proofing work shall be carried out through specialized agency as per method of working approved by the Engineer-in-Charge. However, the contractors shall be solely responsible for waterproofing treatment until the expiry of the above guarantee period.

16.2 Ten years guarantee in prescribed proforma shall be given by the contractor for the water proofing treatment. In addition, 10% (ten percent) of the cost of these items of water proofing under this sub head shall be retained as guarantee to watch the performance of the work executed. However, half of this amount(withheld) would be released after five years from the date of completion of the work, if the performance of the waterproofing works is satisfactory. The remaining withheld amount shall be released after completion of ten years from the date of completion of work, if the performance of the waterproofing work is satisfactory. If any defect is noticed during the guarantee period, it should be rectified by the contractor within seven days of issuing of notice by the Engineer-in-Charge and, if not attended to, the same shall be got done through other agency at the risk and cost of the contractor and recovery shall be effected from the amount retained towards guarantee. In any case, the contractor and the specialized agency, during the guarantee period, shall inspect and examine the treatment once in every year and make good any defect observed and confirm the same in writing. The security deposit can be released in full, if bank guarantee of equivalent amount, valid for the duration of guarantee period is produced and deposited with the Department.

SPECIAL CONDITION FOR MATERIAL

1. The contractor shall, at his own expense, procure and provide all materials required for the work.
2. The contractor shall procure all the materials in advance so that there is sufficient time for testing and approval of the materials and clearance of them before use in work.
3. All materials brought by the contractor for use in the work shall be checked by the Engineer-in-Charge or his authorized representative of the work on receipt of the same at the site before use.
4. The contractor shall also employ necessary watch and ward establishment for the safe custody of materials at his own cost.

ADDITIONAL CONDITIONS FOR CIVIL WORKS

1. a) The contractor (s) shall inspect the site of work before tendering and acquaint himself with the site's conditions, and no claim on this account shall be entertained by the department.
b) The contractor (s) shall get him acquainted with the nature and extent of the work and satisfy him about the availability of materials from kilns or approved quarries for the collection and conveyance of materials required for construction.
2. The contractor (s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy him with the complete characteristics of soil and other parameters of the site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.
3. The tenderer shall see the approaches to the site. In case any approach from the main road is required by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost. No payment shall be made on this account.
4. The contractor (s) shall give to the Municipality, Police and other authorities all necessary notices, etc., that may be required by law and obtain all requisite Licenses for temporary obstructions, enclosures, etc. and pay all fees, taxes and charges which may be leviable on account of these operations in executing the contract. He shall make good any
Damage to the adjoining property, whether public or private shall supply and maintain a light and other illumination to caution the public at night.
5. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night speed limit board red flags, red lights and providing barriers. He shall be responsible for all dangers and incidents caused to existing / new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work.
6. The contractor shall provide at his own cost suitable weighing, surveying, leveling, and measuring arrangements as may be necessary at the site for checking. All such equipment shall be calibrated in advance from the laboratory and approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
7. The contractor shall provide permanent benchmarks and other reference points for the proper execution of work, and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations given in the Architectural and plumbing drawings
8. On completion of work, the contractor shall submit at his own cost four prints of "as built" drawings to the Engineer-in-Charge within 30 days of completion of work. These drawings shall have the following

information:

a) Run all piping and their diameters, including soil waste pipes & vertical stacks.

b) Ground and invert levels of all drainage pipes together with locations of all manholes and connections up to outfall.

c) Run of all water supply lines with diameters, location of control valves, access panels etc.

If the above-mentioned drawings are not submitted by the contractor within the above-specified time, then the final bill will not be paid, and the Security Deposit shall not be released.

9. Any cement slurry added over the base surface for the continuation of concreting for the better bond is deemed to have been built in the items, and nothing extra shall be payable for extra cement considered in consumption on this account.

10. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by the department.

11. The works shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time by the Engineer-in-Charge. Before the commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available thereof is complete and unambiguous. The discrepancy, if any, shall be brought to the notice of the Engineer-in-Charge before the execution of the work. The contractor alone shall be responsible for any loss or damage executed by the commencement of work on the basis of any erroneous and or incomplete information.

12. The contractor shall take all precautions to avoid accidents by exhibiting caution boards day and night, speed limit boards, red flags, and red lights and providing necessary barriers and other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.

13. Other agencies will also simultaneously execute and install the works of electrification, air conditioning, lifts, firefighting, etc., for this work, and the contractor shall provide the necessary facilities for the same. The contractor shall leave such recesses, holes, openings etc., as may be required for the electric, air-conditioning and other related works (for which inserts, sleeves, brackets, conduits base pinion, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at the time of casting of concrete, stone work & brick work if required and nothing extra shall be payable on this account.

14. All materials obtained from Govt. stores or otherwise shall be checked by the Engineer-in-Charge or any authorized supervisor staff on receipt of the same at the site before use.

15. The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall, as far as possible, arrange his work and shall place and dispose of the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.

16. All Architectural drawings given in the tender other than those indicated in the nomenclature of items are only indicative of the nature of the work and materials/fixings involved unless and otherwise specifically mentioned. However, the work shall be executed in accordance with the drawings duly approved by the Engineer-in-Charge.

17. If the work is carried out in more than one shift or during night, no claim on these accounts shall be entertained.

18. Existing drains, pipes, cables, overhead wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.

19. The contractor shall be responsible for the watch and ward/guard of the buildings and the safety of all fittings and fixtures, including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is

physically handed over to the department. No extra payment shall be made on this account.

20. The day-to-day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the Jr. Engineer-in-Charge of work and which shall be duly signed by the contractor or his authorized representative.

21. The contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. Nothing extra shall be payable to the contractor on this account. However, cost of photographs, slides, audio/videography etc. shall be borne by the department.

22. The contractor shall be fully responsible for the safe custody of materials brought by him issued to him even though the materials are under double lock key system.

23. The rate of items of flooring is inclusive of providing sunken flooring in bathrooms, kitchen, etc. and nothing extra on this account is admissible.

24. No payment shall be made to the contractor for any damage caused by rain, snowfall, floods, earthquake or any other natural causes whatsoever during the execution of work. The damages of the work will be made good by the contractor at his own cost and no claim on this account shall be entertained.

25. For construction works which are likely to generate malba/rubbish to the tune of more than a tempo/truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at their own cost to the notified/specified dumping ground and under no circumstances these shall be stacked/dumped, even temporarily outside the construction premises.

26. The Plinth Level of Building is to be kept as per Architectural drawings. All the items of works such as PCC, RCC, Brickwork and shuttering etc. in foundation upto this plinth level will be measured and paid as the work done upto plinth level. Nothing extra due to higher plinth will be paid and contractor's rates quoted for all these items shall, therefore, be deemed to cater for extra height of plinth.

27. The contractor has to follow all safety norms as laid down in National Building Code of India. All the workers shall be equipped with the required safety gadgets while working at site such as ISI marked helmets, Shoes and safety belts, gumboots, gloves etc.

28. Contractor must clean the site and handover in complete respect to IITI after the completion of work.

PREFERRED MAKES OF MATERIALS FOR CIVIL WORKS

The preferred makes of materials to be used in the work are as follows. In case of non-availability of these makes, the Engineer-in-Charge may allow the use of alternative BIS makes of Materials in the work.

S. No.	Material	List of Preferred Makes
1	(i) Ordinary Portland Cement / Portland Pozzolona Cement / Sulphate Resisting Portland cement	ACC, Ultratech, Ambuja Cement, J.K.Cement, Century Cement, Shree Cement, Jaypee Cement, Vikram Cement.
	(ii) White Cement	Birla White, J.K.White
2	Reinforcement Steel TMT bars Fe-500D	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd (RINL), JSW Steel Ltd., Jindal Steel & Power Ltd.
3	Water Proofing Compounds, Admixtures, Plasticizer, Super Plasticizer, Curing Compounds.	Fosroc, ROFF/Dr.Fixit (Pidilite Industries), CICO, Sika, BASF, Ardex Endura (Bal Endura)
4	Integral Water Proofing compound with cement (For Plaster & Mortar)	Fosroc :Conplast 421 Dr.Fixit : L.W+ Sika :Sikacin Asian Paints : Smart Case Vitalia& equivalent product of BASF, CICO, Ardex Endura
5	Water Proofing for bathroom / toilet / balcony & other wet areas	Fosroc : Brush Bond Dr.Fixit : Pidifine 2K Sika :Nito Bond Asian Paints : Damp Block 2 K & equivalent product of BASF, CICO, Ardex Endura
6	Crystalline water proofing compound	Fosroc :Fosroc Crystalline Dr.Fixit : Dr.Fixit Crystalline Sika : Sika Crystalline Asian Paints : Crystalline Quarty& equivalent product of BASF, CICO, Ardex Endura, Pentron
7	Grouts, Tile Adhesive	Latecrete, Kerokoal, BASF, Ardex Endura, Ferrous Crete.
8	Structural Steel	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd (RINL), and JSW Steel Ltd., Jindal Steel & Power Ltd.
9	Polycarbonate Sheet	GE Plastic, LEXAN
10	Profile steel sheet (Precoated)	Ezydeck of TATA, Lloyd Superdeck, JSW / Jindal
11	Particle Board	Kitply, Action TESA, Greenlam, Merino.
12	Laminated Particle Board / Laminates	Kitply, Action TESA, Greenlam, Century Ply, Merino, Sunmica.

13	Flush Door shutters	Duro, Kitply Industries (Swastik), Century, Durian, Green Ply, Jayna
14	Fire Rated Doors	Signum Fire Protection, Shakti Metdoor, NAVAIR, Adhunik Technology, Sukri, Promat International.

15	False Ceiling System	Armstrong, Hunter Douglas, USG Boral, Saint Gobain, Aerolite, Durlum, Interarch.
16	Plywood / Veneer steel	Green ply, Century Merino, Kitply, Duro Durian.
17	Melamine Polish	Asian Paints Melamine Gold, Wudfine of Pidilite, Timbertone of ICI Dulux.
18	Floor Spring & Door Closure	Godrej, Dorma, Dorset, Kich
19	(a) Aluminium Section	Hindalco, Jindal, Indian Aluminium Co.
	(b) Anodised Aluminium	Kilong, Alualpha, Classic, Ebco
	Hardware (Heavy Duty)	
20	Clear/Float/Frosted/Refractive/Coated Glass/Toughned	Saint Gobain, AIS, Modiguard, Asahi
21	Stainless Steel Railing, Accessories etc.	JINDAL, Dorma, Kich, GEZE, Godrej, Hardwyn
22	S.S.Door& Window & fittings	Jindal, Dorma, Kich, Doorset, Godrej, Ozone
23	Silicon based water repellent / Weather sealant	G.E. Plastics, Dow Corning, (Wacker), BASF, Pidilite (Dr.Fixit/Roff)
24	Poly-Sulphide Sealant	Fosroc, Pidilite (Dr.Fixit/Roff), Sika, BASF
25	Mosaic Tiles / Chequerred Tiles	Ultra Tiles, NITCO, Hyper(Mayur), Pavcon
26	Ceramic Tiles	Somany, Kajaria, RAK, NITCO
27	Vitrified Tiles (Antiskid/Matt/Glazed)	Somany, Kajaria, RAK, NITCO
28	Paver Block &Kerb Stone	Pavcon, Hyper Tiles / Dynamic Industries/Mayur, KK, Power, Sharda, Navya
29	Dash / Anchoring Fasteners	HILTI, Fischer, Bosch, Wurth.
30	Cement Based Wall putty	Birla wall care, JK White, Berger, Asian Paints.
31	Oil Bound Washable Distemper / Dry Distemper	Asian Paints (Professional Acrylic Distemper), Nerolac : Beauty Acrylic Distemper, Berger: Bison Acrylic Distemper, DuluxICI:Maxilite
32	Ist Quality Acrylic Distemper (washable / Ready Mix / Low VOC)	Asian Paints (Tractor Aqua Lock Paint) Berger : Commando Or equivalent paints of Nerolac or ICI Dulax.
33	Acrylic Emulsion Paints	Asian Paints : (Professional Premium Interior Emulsion Paint) Nerolac : Beauty Gold Berger : Rangoli total care ICI-Dulux : Super Cover
34	Plastic Emulsion Paint	Asian Paints : (Apcolite Heavy Duty Premium Emulsion Paint)

		Nerolac : Impression
		Berger : Easy Clean
		ICI-Dulux : 3 in 1
35	Premium Acrylic Emulsion Paints (Interior)	Asian Paints (Royale Luxury Emulsion)
		Nerolac : Impression
		Berger : Silk

		ICI Dulux : Velvet Touch
36	Textured Exterior Paint	Asian paints, Nerolac, Berger Paints, Ultratech Paints Luxture.
37	Acrylic Smooth Exterior Paint	Asian Paints : (Apex / Professional Premium Exterior Emulsion)
		Nerolac : XL
		Berger : Weather Coat
		ICI-Dulux : Weather Shield
38	Premium Acrylic Smooth Exterior Paint with silicon additive	Asian Paints : (Apex Ultima)
		Nerolac : XL Total
		Berger : Weather Coat all guard
		ICI-Dulux : Weather Shield max
39	Synthetic Enamel Paint	Asian (Apolite Premium gloss enamel), Nerolac : Synthetic Hi gloss
		Berger :Luxol Hi gloss
		ICI-Dulux : Gloss Synthetic enamel
40	Cement Primer	Nerolac, Berger, BP White (Berger), Decoprime WT(Asian), White Primer(ICI)
41	Steel Primer (Red Oxide Zinc Chromate Primer)	Asian Paints, Nerolac, Berger, ICI
42	Wood Primer	Asian Paints (Wood Primer – White / Pink), Berger, ICI, Nerolac.
43	Epoxy Paint	Asian, Nerolac, Berger, ICI, Kansai Akzo Nobel.
44	Fire Paint	Asian Paints, Akzo Nobel Coatings India Ltd., PROMAT, Jotun.
45	G.I. / M.S. Pipe	Tata, Jindal (Hisar)
46	G.I. Fittings	Unik, AVR, Zoloto
47	HDPE Pipes	Reliance, Jain Pipes, ORIPLAST, Supreme
48	DI Pipes	Electrosteel, Jindal, TATA DUCTURA, Kapilangle, Kesoram.
49	DI Fittings	Electrosteel, Jindal, TATA DUCTURA, Kapilangle, Kesoram.
50	UPVC pipe and Fittings	Astral, Supreme, Ashirwad
51	Centrifugally Cast (Spun) Iron Pipes & Fittings	NECO, Kapilansh, Electrosteel, SKF.
52	C.I. Manhole covers, frames & GI Gratings	NECO, RAJ Iron Foundary Agra, BIC, SKF, Kapilansh

53	SFRC Manhole covers & gratings	KK, JAIN, PARGATI
54	CP Brass Fittings (Superior Range)	Jaquar, Grohe, Roca, PRIMA
55	CP Brass Fittings (Normal Range)	Hindware, Jaguar, ESSCO, Parryware, PRIMA
56	Sanitary ware, Fittings & accessories (Superior Range)	Kohler, Roca, Hindware, Parryware
	Sanitary ware, Fittings & accessories (Normal Range)	Hindware, CERA, Parryware, Jaguar
57	Mirror Glass	Atul, Modi Guard, Golden Fish
58	CPVC Pipe & fitting	Astral, Supreme, Ashirwad
59	Stainless Steel Sink	Neelkanth, Nirali, Jyna

60	RCC Pipes(NP-2)	Lakshmi, Sood&Sood, Jain Pipe Co. (Newai), Mahaveer Enterprises (Newai), work well spun pipes (pali)
61	UPVC Doors & Windows (PROFILE makers & their authorized Fabricators only.)	Fenesta, VEKA, KOMERLING, RHEAU, Aluplast, Wintech, Duroplast.
62	Extruded Polystyrene Insulation Board	Dowcorning, Supreme, Texas, Analco
63	Heat Resistant Tiles	Swastik, Thermatek
64	Gypsum Plaster	Ferrous Crete, Gyproc Saint Gobain, Ultratech
65	Floor hardener	Ironite, Ferrok, Hardonate
66	Modular Expansion Joint	Herculus, Sanfield India Ltd. Vexcolt
67	Glass Wool	Dow Corning, U.P. Twiga, Isover
68	UPVC doors and window hardware's	Rotto, Dorset, Kinlong
69	AAC Block Adhesive	Ultratech, Ardex Endura, Ferrous Crete.
70	Ready Mix Concrete	Ultratech Concrete, ACC Ready mix, Lafarge RMC India or as approved by Engineer – in- Charge.
71	Tile Fixer/Adhesive	As approved by Engineer – in- Charge.
72	PVC Rain water pipe & fittings As per IS :13592	Finolax, Supreme, Plasto.
73	PVC Shutter	Rajshri, Sintex, M/s Jain Wood Industries

LIST OF PREFERRED MAKES OF ELECTRICAL & MECHANICAL MATERIALS

The makes of all the materials to be used in the work have been specified. However, if any material is to be used in the work and the make is not specified the decision of the Engineer-in-charge in writing shall be final.

S. NO	ITEM DESCRIPTION	MANUFACTURER
1	STEEL CONDUIT AND ACCESSORIES (ISI MARKED)	BEC/ AKG/ RM CON / Steel Kraft
2	PVC INSULATED FRLS COPPER CONDUCTOR CABLES 1.1 KV GRADE (ISI MARKED)	FINOLEX / HAVELLS / RR KABLE / L&T / POLYCAB
3	MODULAR PLATE TYPE SWITCH / SOCKET GI BOXES / FAN REGULATOR / TELEPHONE SOCKET	SCHNEIDER (Clipsal) / LEGRAND (Myrius) / MK (BLENZ)/Wipro (Convex)
4	MCB / MCB DB'S / RCBO / MCCB / MCCB DB	LEGRAND / SCHNEIDER / ABB / L&T/ SIEMENS/ HAVELLS
5	LED TUBE / BULKHEAD LIGHT FITTINGS	PHILIPS / LIGHTING TECHNOLOGIES / TRILUX / BAJAJ/WIPRO/HAVELLS
6	WALL BRACKET FITTINGS	PHILIPS / LIGHTING TECHNOLOGIES / TRILUX / WIPRO / JAQUAR / KESELEC/BAJAJ
7	CEILING FAN (BLDC- 5 STAR RATED ISI MARKED)	GORILLA / CROMPTON GREAVES / USHA/HAVELLS
8	EXHAUST FANS/ FRESH AIR FAN	KHAITAN / CROMPTON / USHA / ALMONARD /HAVELLS
11	1.1 KV XLPE CABLE (ISI MARKED) (Power and Control)	FINOLEX / GLOSTER / HAVELLS / RR KABEL / CCI / POLYCAB
12	OCTOGONAL STREET LIGHT POLE/Brackets	BAJAJ / VALMOUNT/ TRANSRAIL/RR Spat (Consoul)
13	DIGITAL INDICATING/ MEASURING INSTRUMENTS / MULTIFUNCTION METERS	L&T (QUASER) / SCHNEIDER (CONZERV) / AE / RISHAB
14	SELECTOR SWITCH	L&T/ KAYCEE/ SIEMENS/ AE
15	INDICATION LAMP & PUSH BUTTON	BCH/ L&T/SIEMENS/ SCHNEIDER
16	DIGITAL ENERGY METER	L & T / CONZERV/ SECURE
18	CABLE GLAND/ LUGS/ THIMBLES	COMMET/ DOWELLS/ RAYCHEM
19	G I PIPE / MS PIPE	TATA / JINDAL HISSAR / SAIL / (ISI MARKED)
20	IDMT/NUMERICAL RELAYS FOR OVER CURRENT/ EARTH FAULT	L & T/SIEMENS/ SCHNEIDER / ABB / GE
21	POWER / CONTROL CONTACTORS	GE/ L & T / SIEMENS / SCHNEIDER / ABB
22	BATTERIES	EXIDE / AMRON / AMAR RAJA
	LT PANEL	OEM approved manufacturers of

23		Siemens/Schneider Electric/L&T/ABB/Legrand
26	ELECTRICAL SWITCHGEAR & STARTERS, RELAYS	SIEMENS / L & T / ABB / SCHNEIDER
28	CTs FOR PANELS	AUTOMATIC ELECTRIC / L & T / INTRANS / INSTRANS
29	CONTACTORS	SIEMENS / L&T / SCHNEIDER / ABB
35	LED - STREET LIGHT / POST TOP LANTERN / GATE LIGHT / BOLLARD	PHILIPS / WIPRO / KESELAC / LIGHTING TECHNOLOGY /HAVELLS/BAJAJ
36	Cat 6/6A UTP Cable	Belden/Comscope/Tyco/Legrand/Panduit/Molex
37	G.I. Sheets	SAIL/ TATA/ JINDAL
38	GSS Factory Fabricated Ducts/ Duct Flanges	ROLASTAR /ZECO/DUCTOFAB/ECODUCT
39	Spiral Round/ Oval ducts	SPIRO/7 STAR/ DUSTECH
40	Duct Support	KANWAL/ HILTI
41	Grills/ Diffusers/ Fire Dampers/ Louvers/ Volume Control Dampers/ Back Draft Dampers	AIR MASTER /TITUS/PRECISE
42	Closed Cell Nitrile rubber insulation	ARMACELL / K- FLEX / VIDOFLEX / A- FLEX
43	Centrifugal Fans for ventilation	KRUGER/NICOTRA/LAXMI/VACUNAIR/ GREEN HECK
	All other items not covered	As approved by the Engineer-in-charge.

ADDITIONAL TERMS AND CONDITIONS for Electrical & Mechanical Works

Any damage done to the man, machine and building during the execution of work shall be the responsibility of the contractor, and the same will have to be made good promptly by the contractor at his own cost to the entire satisfaction of the Engineer-in-Charge.

The electrical work shall be executed in a closely coordinated manner with the client's department.

Conduit layout drawing shall be approved by the Engineer -in-charge before laying of conduit.

Watch and ward: -

Watch & ward for the installations and materials, including materials supplied by the department, shall be the responsibility of the contractor till the installations / leftover materials are finally taken over by the department. Nothing shall be payable on this account separately as this is deemed to be included within the scope of work.

Completeness of tender: -

Statutory deduction of "Contract Tax" at source shall be made while releasing payment through running / final bills. A certificate specifying the rate and amount of deduction shall, however, be issued.

No. form 'D', form 31/32 (Road Permit) shall be issued by the department.

Conformity to specifications: -

The work shall be carried out strictly in accordance with C.P.W.D. specifications for electric works 2013 (Internal) and 1994 (External) as amended up to date and also in accordance with the Indian Electricity Rules 1956 and Indian Electricity Act. 1910 as amended up to date and as per the instructions of the Engineer-in-Charge.

FRLS PVC insulated copper wire used shall be ISI marked and wire of the size 4.00 Sq. mm and above shall be of stranded conductors, and all standard wires are required to be crimped for connections/terminations.

All accessories like switches, sockets, C/rozes, and holders shall be ISI-marked.

Crimping-type ferrules/thimbles shall be provided for wire termination in switches, sockets, MCB, etc., as requested.

Contractor shall have to prove bonafides of the make of materials by producing necessary documentary evidence. Firms are advised accordingly to obtain prior approval from the Engineer-in-charge for the proposed make of materials before bringing materials to the site of work.

Phenolic laminated sheet be of only ISI Marked. Covers for adopter box and function box shall also be of white phenolic laminated sheet.

Earthing connections: -

All fans & fittings are to be properly earthed for which no extra will be paid.

Proper sleeving is to be provided to bare earth conductor in the switch boxes and also to bare conductors used for inter switch looping inside the switch boxes for which no extra will be paid.

Termination of wiring inside DB's & main boards should be by crimped connections.

Clamp type termination of earth strip (wherever provided) to pipe electrode will be made.

SISW FANS FOR EXHAUST

I) Centrifugal fans shall be of single-width, single-inlet construction, with bearing on one side, complete with access door, squirrel-cage induction motor, V-belt drive, belt guard etc. The complete fan unit should be Acid proof treatment to make it suitable for laboratory exhaust.

II) Housing shall be of heavy gauge sheet steel in welded construction. It shall be rigidly reinforced and supported by structural angles. Split casing shall be provided on larger sizes of fans. However, neoprene/

asbestos packing shall be provided throughout split joints to make it airtight. 1.2 mm galvanized wire mesh inlet guard of 5cms sleeves shall be provided on both inlets. Housing shall be provided with access doors with quick locking tension handles and neoprene gasket. Rotation arrow shall be clearly marked on the housing.

III) Fan wheel shall be backward curved non-overloading type unless otherwise specified. Fan wheel and housing shall be statically and dynamically balanced. Fan outlet velocity shall not exceed 610 meters per minute.

IV) Shaft shall be constructed of steel, turned, ground and polished.

V) Bearings shall be of the sleeve/ball bearing type mounted directly on the fan housing. The bearing shall be self-aligned, oil grease packed, pillow block type.

VI) Drive to fan shall be provided from 3 phase electric motor through belt with adjustable motor sheave and belt guard. Belt shall be of the oil resistant type. The number of belts shall be not less than two.

VII) The fan motor shall be totally enclosed as a fan cooled squirrel cage induction motor with IP- 54 protection & selected for quiet running. The motor shall be suitable for operation on $415 \pm 10\%V$, 3 phase, 50 Hz, A.C. supply. The motor shall conform to IS: 325. "Three phase induction motors" having class F insulation. The Fan motor shall be energy efficient with efficiency level of IE-3 or EFF1 whichever is more efficient, and it shall be ECBC compliant.

VIII) Motor starter shall be in accordance with Electrical specifications.

DUCTING

1. RECTANGULAR DUCTS

i) All ducts shall be fabricated either from Galvanized Sheet Steel (GSS) conforming to IS: 277 or aluminum sheets conforming to IS: 737. The steel sheets shall be hot dip galvanized with coating of minimum 120 grams per square meter (GSM) of Zinc.

ii) The thickness of sheets for fabrication of rectangular ductwork shall be as under. The thickness required corresponding to the longest side of the rectangular section shall be applicable for all the four sides of the ductwork.

Longest side (mm)	Minimum sheet thickness	
	For GSS	For Aluminum
750 mm and below	0.63	0.80
751 mm to 1500 mm	0.80	1.00
1501 mm to 2250 mm	1.00	1.50
2251 mm & above	1.25	1.80

i) All sheet metal connections, partitions and plenums required for flow of air through the filters, fans etc. shall be at least 1.25 mm thick galvanized steel sheets, in case of G.I. sheet ducting or 1.8 mm thick aluminum sheet, in case of aluminum sheet ducting and shall be stiffened with 25mm x25 mm x 3 mm angle iron braces.

ii) Circular ducts, where provided shall be of thickness as specified in IS: 655 as amended upto date.

iii) Aluminium ducting shall normally be used for clean room applications, hospitals works and wherever high cleanliness standards are functional requirements.

FLAT OVAL SPIRAL DUCTS

i) All Flat Oval/ Round Spiral Duct and Fittings shall be manufactured from 120 gsm galvanized steel of lock forming quality.

ii) All Flat Oval/ Round Spiral Ducts should have in Continuous external reinforcement with 4-ply Spiral lock seam at regular intervals of 125 mm of maximum length of 3 m each. The fabrication of flat Oval spiral ducts & duct fittings should be as per SMACNA High pressure duct standards, 1985.

iii) All Flat Oval/ Round Spiral Ducts and Duct fittings shall be joined with slip joint connects of 50mm insertion length and fastened with rivets.

DOCUMENTATION & MEASUREMENT OF DUCTING

All ducts fabricated and installed should be accompanied and supported by following documentation:

- 1) For each drawing, all supply of ductwork must be accompanied by computer generated detailed bill of materials indicating all relevant duct sizes, dimensions and quantities. In addition, summary sheets are also to be provided showing duct area by gauge and duct size range as applicable.
- 2) Measurement sheet covering each fabricated duct showing dimensions and external surface area along with summary of external surface area of duct gauge-wise
- 3) All duct pieces to have a part number, which should correspond to the serial number, assigned to it in the measurement sheet. The above system will ensure speedy and proper site measurement, verification and approvals.

TESTING

After duct installation, total duct work (Air-conditioning and Mechanical Ventilation Ducts) should be tested for leakage. The procedure for leak testing should be followed as per SMACNA – “HVAC Air Duct Leakage Test Manual” (First Edition – 1985)

CONSTRUCTION

DUCTS

- i) Ducts shall be fabricated at site or factory fabricated and shall be generally as per IS: 655 "Specifications for metal air ducts", unless otherwise deviated in these General Specifications.
- ii) The interior surfaces of the ducting shall be smooth.
- iii) All the ducts upto 600mm longest side shall be cross broken between flanges by a single continuous breaking. Ducts of size 600mm and above shall be cross broken by single continuous breaking between flanges and bracings. Alternatively, beading at 300mm centers for ducts upto 600mm longest side, and 100mm centers for ducts above 600mm size shall be provided for stiffening.
- iv) As far as possible, long radius elbows and gradual changes in shape shall be used to maintain uniform velocity accompanied by decreased turbulence, lower resistance and minimum noise. The ratio of the size of the duct to the radius of the elbow shall be normally not less than 1:1.5.
- v) Flanged joints shall be used at intervals not exceeding 2500mm. Flanges shall be welded at corners first and then riveted to the duct.
- vi) Stiffening angles shall be fixed to the sides of the ducts by riveting at 1.2.5 meters from joints for ducts of size 600mm to 1500mm, and 0.6mm from joints for ducts of size larger than 1500mm. Bracings for ducts larger than 1500mm can alternatively be by/diagonal angles.
- vii) Plenums for filters shall be complete with suitable access door of size 450mm x450mm.

CONTRACT FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATERPROOFING WORKS

(BASEMENT/LOWER GROUND FLOOR/UNDERGROUND TANK/ROOF)

The Agreement made this _____ day of _____ Two thousand _____ and between _____ Son of _____ (hereinafter

Called the Guarantor of the one part) and the PRESIDENT OF INDIA (hereinafter called the Government of the other part).

WHEREAS THIS agreement is supplementary to a contract
(hereinafter called the contract) dated

_____ and made between the GUARANTOR OF THE ONE part and the Government of the other

Part, whereby the contractor, inter alia, undertook to render the buildings and structures in the contract recited completely water and leak-proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for 10 (Ten) years from the date after the maintenance period prescribed in the contract.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be ten years to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the Guarantor will not be responsible for the leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose:

- (a) Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof.
- (b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts.
- (c) The decision of the Engineer-in-charge with regard to cause of leakage/seepage shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building water proof to the satisfaction of the Engineer-in-charge at his cost and shall commence the work for the rectification within seven days from the date of issue of the notice from the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be done by the department by some other agency contractor at the GUARANTOR's risk and cost. The decision of the Engineer-in-charge as to the cost payable by the Guarantor shall be final and binding.

That if guarantor fails to make good all defects or commits breach thereunder then the Guarantor will indemnify the principal and his successors against all loss, damage, cost expense otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and/or cost incurred by the Government the decision of the Engineer-in-Charge will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been
executed by the Obligor _____ and by

_____ and for and on behalf of the PRESIDENT OF INDIA on the day, month and year
first above written

SIGNED, SEALED AND delivered by OBLIGOR in the presence of :

1.
2.

SIGNED FOR AND ON BEHALF OF THE PRESIDENT OF
INDIA BY _____ in the presence of:

1.
2.

Form of Performance Security (Guarantee)

Bank Guarantee Bond

In consideration of the President of India (hereinafter called "The Government") having offered to accept the terms and conditions of the proposed agreement between.....and

(Hereinafter called "the said Contractor(s)") for the work..... (hereinafter

Called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees

..... only) as a security/guarantee from the contractor(s) for compliance of his obligations in

accordance with the terms and conditions in the said agreement.

We... (Hereinafter referred to as "the Bank") hereby undertake to pay to the Government an amount not exceeding Rs. (Rupees..... Only) on demand by the Government.

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

We, the said bank further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.

We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in- Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

We, (indicate the name of the Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be

relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.

This guarantee shall be valid up tounless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.

..... (Rupees) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated theday offor.....(indicate the name of the Bank)

PART C

Name of Work: Development of 4 Nos. Kitchens for stalls at Central Dining Building.

Priced schedule of items (BOQ)

Civil Works					
S. no.	Particulars	Quantity	Unit	Rate	Amount
1	Reinforced cement concrete work in beams, suspended floors, roofs having slopes up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	0.598	Cum		
2	Centering and shuttering including strutting, propping etc. and removal of form for Lintels, beams, plinth beams, girders, bressumers and cantilevers	5.2	Sqm		
3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-mechanically treated bars of grade Fe-500D or more	80	Kg		
4	Brick work with non modular fly ash bricks conforming to IS:12894, class designation 10 average compressive strength in super structure above plinth level up to floor V level in : Cement mortar 1:4 (1 cement : 4 coarse sand)	20.42	Cum		
5	Half brick masonry with non modular fly ash bricks of class designation 10, conforming to IS :12894, in super structure above plinth and upto floor V level. Cement mortar 1 : 4 (1 cement : 4 coarse sand)	9.6	Sqm		
6	12 mm cement plaster of mix in fine sand : 1:4 (1 cement: 4 fine sand)	160.8	Sqm		
7	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour. Two coats	160.8	Sqm		
8	Providing and fixing min. 20 mm thick (average) Kota stone pre-moulded and pre-polished, machine cut for kitchen platforms required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement: 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch-ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish, etc., complete at all levels.	9.0	Sqm		

9	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately). Second class teak wood	0.16	Cum		
10	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	12.0	Sqm		
11	Providing and fixing chromium plated brass handles with necessary screws etc. complete: 125 mm	8.0	each		
12	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete : 300x16 mm	8.0	each		
13	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
13.1	15 mm nominal dia Pipes	22.0	Meter		
13.2	25 mm nominal dia Pipes	16.0	Meter		
14	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 25 mm nominal bore	2.0	each		
15	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15 mm nominal bore	8.0	each		
16	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 100x100 mm size P type With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3.0	each		
17	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	3.0	Cum		
18	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	12.0	Sqm		
19	Providing and fixing including all the fittings, HDPE Pipe for drainage of PE-100 grade, min. working pressure 8				

	kgf/sqcm of following diameter and thickness				
19.1	4 inch (110 mm) min. thickness 6.5 mm	12.0	Meter		
19.2	6 inch (160mm) min. thickness 9.5 mm	28.0	Meter		
Electrical works					
20	Supplying & Fixing 20A,240 Volt, SPN Industrial Type Socket Outlet With 2 Pole & Earth, Metal Enclosed Plug Top Along with 20A "C" Curve, SP MCB in Sheet Enclosure, on Surface or in Recess With Chained Metal Cover For Socket outlet & Complete Woth Connections, Testing & Commissiong Etc. as Required	16	Each		
21	Supplying & Fixing Following type Piano Type Switch / Socket on The Existing Switch Box / Cover Including Connections Etc. As Required				
21.1	5/6 amps switch	8	Each		
21.2	15/16 A Switch	20	Each		
21.3	6 Pin 15/16 A Socket Outlet	20	Each		
22	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class steel conduit, with piano type switch, Phenolic laminated sheet plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	Group C	12	Point		
23	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note: Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	8 way (4 + 24), Double door	2	Each		
24	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
24.1	Single pole	40	Each		
24.2	Triple pole	2	Each		
25	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	63 Amp	2	Each		
26	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.				
	100 A.30KA.FPMCCB	2	Each		

27	Supplying and Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size in the existing masonry open duct as required.				
27.1	3 ½ C X 35 sq mm Aluminium Armoured	220	Meter		
27.2	3 C X 6 sq mm Aluminium Armoured	160	Meter		
28	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanization thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	100 mm width X 50 mm depth X 1.6 mm thickness	150	Meter		
29	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
	3½ X 35 sq. mm (32mm)	6	Each		
30	Supplying & Fixing of Following Size of Steel Conduit along with Accessories in Surface/Recess Including Painting In Case Of Surface, Conduit or Cutting The Wall & Making Good The Same in case of Recessed Conduit as Required				
30.1	32 MM	150	Meter		
30.2	50 MM	100	Meter		
31	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required.				
31.1	6 Module (200mmX75mm)	12	Each		
31.2	8 Module (125mmX125mm)	4	Each		
32	Wiring for circuit / submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed steel conduit as required				
32.1	2 X 4 Sqmm + 1 X 4 Sqmm earth wire	480	Meter		
32.2	2 X 6 Sqmm + 1 X 6 Sqmm earth wire	100	Meter		
33	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CM/M/W) minimum 6.00, Air delivery minimum 210 Cum/Min , 350 RPM (tolerance as per IS : 374-2019), THD less than 10%, electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required.	4	Each		
34	Supply, installation, Testing & Commissioning of 36W recessed mounted LED fixture 600mm x 600mm (2x2) recessed mounted LED fixture with CRCA powder coated housing high efficiency PMMA diffuser complete	4	Each		

	with electronic driver, P.F>0.9, THD<10%, rated life of L-70 @ 40,000 having minimum lumens output of 3600 lumens & efficacy better than 100 lumens/watt with CRI > 80 including making suitable arrangement as per recommendation of manufacturer for fixing on surface & connection with 3 x 1.5 sq.mm pvc insulated Flame Retardent- LSZH copper conductor cable etc, as required.				
35	Supply, Installation, Testing & Commissioning of 18/20 W LED Tube Light fixture.	8	Each		
HVAC Works					
36	SITC of centrifugal backward curved fan cap. 3000 cfm x 50 mm WC with cg 3 hp 1440 rpm, FM-IE2 motor complete	Nos	2		
37	Supply, installation, balancing and commissioning of factory fabricated GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications of following sheet thickness complete as required.				
37.1	Thickness 0.63 mm sheet	Sqm	30		
37.2	Thickness 0.80 mm sheet	Sqm	100		
38	Supply, Installation of MS Stand for Exhaust fan	Nos	2		
39	Supply and installation of electrical starter panel for 3000 cfm exhaust fan	Nos	2		
40	Supply, installation, testing and commissioning of GI volume control duct damper complete with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc, as per specifications.	sqm	2		
41	Supply of SS Hood- 20 Guage Grease/oil removal arrangement Tray. (Size - 4*3*1.5ft, with all necessary arrangement)	Nos	8		