

eProcurement System Government of India

Tender Details

Date: 13-Jun-2023 11:47 AM



Basic Details					
Organisation Chain	Indian Institute of Technology Indore Infrastructure Development Office - IITI Infrastructure Development Office- Civil - IITI				
Tender Reference Number	IITI/ IDO/ PR/ Bal. HVAC Tunnel/NIT/2023-24/12				
Tender ID	2023_IITI_757434_1	2023_IITI_757434_1 Withdrawal Allowed Yes			
Tender Type	Open Tender	Form of contract	Works		
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		

<u>Paym</u>	<u>Payment Instruments</u>					
Offline	S.No	Instrument Type				
		R-T-G-S				
	2	NEFT				

Cover Details, No. Of Covers - 2				
Cover No	Cover	Document Type	Description	
1	Fee/PreQual/Technical	.pdf	Waterproofing of balance area of HVAC tunnel at IIT Indore	
2	Finance	.xls	Waterproofing of balance area of HVAC tunnel at IIT Indore	

Tender Fee Details, [Total Fee in ₹ * - 0.00]			
Tender Fee in ₹	0.00		
Fee Payable To	Nil	Fee Payable At	Nil
Tender Fee Exemption Allowed	No		

EMD Fee Details			
EMD Amount in ₹	1,36,000	EMD through BG/ST or EMD Exemption Allowed	No
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	Registrar IIT Indore	EMD Payable At	IIT Indore

Click to view modification history

Work / Item(s)					
Title	Waterproo	Vaterproofing of balance area of HVAC tunnel at IIT Indore			
Work Description	Waterproo	Vaterproofing of balance area of HVAC tunnel at IIT Indore			
Pre Qualification Details	Please refe	Please refer Tender documents.			
Independent External Monitor/Remarks	NA	NA .			
Show Tender Value in Public Domain	Yes	res established			
Tender Value in ₹	67,98,000	Product Category		Sub category	NA

			Civil Works		
Contract Type	Tender	Bid Validity(Days)	180	Period Of Work(Days)	90
Location	IIT Indore	Pincode	453552	Pre Bid Meeting Place	NA
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	IDO office,Ground Floor, IITI
Should Allow NDA Tender	No	Allow Preferential Bidder	No		

<u>Critical Dates</u>				
Publish Date	13-Jun-2023 12:15 PM	Bid Opening Date	20-Jun-2023 03:00 PM	
Document Download / Sale Start Date	13-Jun-2023 12:30 PM	Document Download / Sale End Date	19-Jun-2023 03:00 PM	
Clarification Start Date	NA	Clarification End Date	NA	
Bid Submission Start Date	13-Jun-2023 01:00 PM	Bid Submission End Date	19-Jun-2023 03:00 PM	

NIT Document	S.No	Document Name	ı	Description		Document Size (in KB)
	1	Tendernotice_1.pdf		Waterproofing of IT Indore	of balance area of HVAC tunnel at	1133.54
Moule Thom						1
Work Item Documents	S.No	Document Type	Document	Name	Description	Document Size (in KB)
		i			Waterproofing of balance	

Bid Ope	Bid Openers List					
S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name			
1.	rohit.khatri@iiti.ac.in	Rohit khatri	"ROHIT KHATRI"			
2.	sherinjacob@iiti.ac.in	Sherin Jacob	SHERIN JACOB			
3.	chainika@iiti.ac.in	Chainika Malhotra	CHAINIKA MALHOTRA			
4.	prashant@iiti.ac.in	Prashant Kulkarni	PRASHANT S KULKARNI			

Tender Properties			
Auto Tendering Process allowed	No	Show Technical bid status	Yes
Show Finance bid status	Yes	Show Bids Details	Yes
BoQ Comparative Chart model	Normal	BoQ Compartive chart decimal places	2
BoQ Comparative Chart Rank Type	L	Form Based BoQ	No

Tender Inviting Au	thority
Name	PIC
Address	IDO office,Ground Floor,Abhinandan Bhawan, IIT Indore, Simrol, MP 453554

Tender Creator Details	
Created By	Chainika Malhotra

Designation	Manager
Created Date	13-Jun-2023 11:42 AM



भारतीय प्रौद्योगिकी संस्थान इंदौर Indian Institute of Technology Indore खंडवा रोड, इंदौर- 453552 Khandwa Road, Indore- 453552

E-TENDER- MODE

Water proofing of balance area of HVAC tunnel at IIT Indore

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

INDEX

Name of work: Waterproofing of balance area of HVAC tunnel at IIT Indore

N.I.T. No.: - IITI/ IDO/ PR/ Bal. HVAC Tunnel/NIT/2023-24/12

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FROM	1	TO	59	PAGES.	(EXCLU	IDING	GCC	AND	CORR	ECTION	SLIP	OF
GCC)												

Consultant (CE) IDO, IIT Indore

DEE(C) IDO,IIT Indore

This Item Rate Tender amounting to Rs.67,98,000 /- (Rupees Sixty-Seven lakh Ninety-Eight Thousand only) is here by approved.

Project-In-charge

IDO, IIT Indore

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR E-TENDERING FORMING PART OF BID DOCUMENT AND TO BE POSTED ON 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, and MES, State govt. Bodies & Central PSUs working agency of IIT/ IIM/ RRCAT etc.

S. No.	NIT No.	Name of work & Location	Estimated cost put to tender	Period of completion	EMD Amount	Last date & time of submission of Bid, , and other documents as specified in the Press Notice.	Time and date of opening of eligibility Bid / documents
1	2	<u>3</u>	4	6		7	9
1	IITI/ IDO/ PR/ Bal. HVAC Tunnel/NIT/2023-24/12	Waterproofing of balance area of HVAC tunnel at IIT Indore	Estimated Civil cost: Rs.67,98,000 /- (Rupees Sixty-Seven lakh Ninety Eight Thousand only)	03 Months	RS 1,36,000/- Rupees One Lakh Thirty Six Thousand only https://forms.eduqfix.com/indoreiit/add	19.06.2023 03:00 PM	20.06.2023 at 03:00 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.
- Information and Instructions for bidders posted on website shall form part of bid document.

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

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 online bidding process as per details available on the website.
- 5. The intending bidder must have valid class-III digital signature to submit the bid.
- 6. On opening date, the contractor can login and see the bid opening process. After opening of bids, he will receive the competitor bid sheets.
- 7. Contractor can upload documents in the form of JPG format and PDF format.
- 8. If a tenderer does not quote any percentage above / below on the total amount of the tender or any section / sub head in item rate tender, the tender shall be treated as invalid and will not be considered as lowest tender.
- 9. GST or any other tax payable on construction materials/contract/any activity related with this contract shall be paid by the contractor and Government shall not entertain any claim, whatsoever, in this regard. The contractor shall quote his rates in accordance with 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 scanned and uploaded within the period of bid submission:

<u>LIST OF DOCUMENT TO BE UPLOADED WITH TECHNICAL BID (for technical evaluation)</u>

SI. No.	List of Documents
1*	Certificate GST No.
2*	EMD Rs. 1,36,000/-
3*	Registration
	Form A:-Financial information
4*	i) Average Annual turnover 50% of estimated cost of Tender Last Five Year
5*	Bank Solvency Certificate VALUE SHOULD BE 40% of Estimated Cost
6*	Details of Eligible Work or Similar Work
	Successfully completed similar work with in last Seven years
	i) one similar work of value 80% of estimated cost of tender. OR
	ii) Two similar work of value 60% of estimated cost of tender. OR
	iii) Three similar work of value 40% of estimated cost of tender
7	Structure and organization of the firm/company
8*	Certificate of EPF and ESIC
9*	Labour Registration/ undertaking
10*	Undertaking of compliance of all the statutory laws to be submitted on the letter head of the organization with seal & signature.
11*	Loss and Profit certificate (certified by CA for Last Five years)
12*	Notarized /Self Attested on 100 Rs stamp regarding joint venture (in last Five years), Joint venture are not allow
13*	Notarized / Self Attested on 100 Rs stamp regarding firm are not black listed in last Five years
L	

[•] The Document should be uploaded in prescribed serial number and no extra number of document/ pages will be uploaded.

Summary Sheet will be attached with uploaded document

 ^{*} MANDATORY

- * Registration No. Means: MSME, CPWD, PWD, Society firm and similar related to the construction/civil work.
- ❖ Bank Solvency: Current Financial Year
- ❖ Document for Eligibility of Similar Work: Only 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 sheet year wise.
- 2. Profit/loss Statement by CA Last 05 Year(2017-2022).
- 3. ITR returns of last 05 years

❖ Similar Works means:

Civil works which include waterproofing work of underground water retaining structure or water tank etc.

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, and MES & Central PSUs working agency of IIT/IIM/RRCAT etc. for "Waterproofing of balance area of HVAC Tunnel at IIT Indore".

- 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 contractor should be valid on the original date of submission of bids.
- 1.1 The Item rate work is estimated to cost **Rs 67,98,000/-**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 website www.cpwd.gov.in. Bidders shall quote his 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 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.
 - •The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programmer of completion submitted by the contractor after 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 revised bid any number of times but before last time and date of submission of bid as notified.
- 7. While submitting the revised bid, contractor can revise the item rate quoted by him any number of times for any/all sub-heads but before last time and date of submission of bid as notified.

The receipt shall also be uploaded to the e-tendering website by the intending bidder up to the specified bid submission date and time.

Copy of 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, certified copy of all the scanned and uploaded documents as specified in bid document shall have to be submitted by the lowest bidder only within a week physically in the office of tender opening authority.

The bid submitted shall be opened at 03:00 PM on 20.06.2023

To be filled by PIC

- 8 The bid submitted shall become invalid if:
- (i) The bidder is found ineligible.
- (ii) 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
- (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
- 09 .If a tenderer does not quote any item rate on the total amount of the tender or any section / sub head in item rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- The contractor whose bid is accepted will be required to furnish 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 copy of applicable licenses / registrations or proof of applying for obtaining 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 programe chart (Time and progress) within the period specified in schedule F.

Description of the work is as follows: -

- 11. Waterproofing of balance area of HVAC Tunnel at IIT Indore. 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.
- **12.** A bidders shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a 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 and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 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 condition 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 to himself the right of accepting 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 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 bidders withdraw his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, and 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 Bid 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 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 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 component of the work.
- Part C: Schedule A to F for minor component of the work. (PIC of major component shall also be competent authority under clause 2 and clause 5 as mentioned in schedule 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 himself, with agencies of the appropriate class eligible to bid for each of the minor component individually as per NIT Conditions.
- 20.1.4 The eligible bidders shall quote percentage rate for all subheads/components of work.

- 20.1.5 After acceptance of the bid by competent authority, the Project in charge of major component of the work shall issue 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 Project in charge of major component and has also to sign two or more copies of agreement depending upon number of PIC of minor components. One such signed set of agreement shall be handed over to PIC of minor component(s).PIC of 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 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. Name of the agency(s) to be associated shall be approved by Project In Charge of minor component(s).
- 20.1.9 In case, the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of PIC of minor component. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case, Engineer-incharge 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 agreement /MOU with contractor(s) associated by him for execution of minor component(s). Copy of such agreement/MOU shall be submitted to PIC of each minor component as well as to PIC of major component. In case of change of associate contractor, the main contractor has to enter into agreement/MOU with the new contractor associated by him.
- 20.1.11 Running payment for the major component shall be made by PIC of major discipline to the main contractor. Running payment for minor components shall be made by the Engineer-incharge of the discipline of minor component 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 Project-in-charge of after record of completion certificate of all other components.
- 20.1.12B. Final bill of whole work shall be finalized and paid by the IIT Indore. Project-incharge 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 major component for including in the final bill for composite contract.

INTEGRITY PACT

To,	
	,
	,
	No. IITI/ IDO/ PR/ Bal. HVAC Tunnel/NIT/2023-24/04 for the work Waterproofing of rea of HVAC tunnel at IIT Indore
Dear Sir,	
	t is here by declared that IIT Indore is committed to follow the principle of ency, equity and competitiveness in public procurement.
that the docume	The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition Bidder will sign the integrity Agreement, which is an integral part of tender/bid nts, failing which the tenderer /bidder will stand disqualified from the tendering process bid of the bidder would be summarily rejected.
	This declaration shall form part and parcel of the Integrity Agreement and signing of e shall be deemed as acceptance and signing of the Integrity Agreement on behalf of Indore.
	Yours faithfully
	Project-in-Charge

* To be filled by Project-in- Charge

To,	
	Project-in-Charge,
	,
Sub:	Submission of Tender for the work Waterproofing of balance area of HVAC tunnel at IIT
Indore	

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 the 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 is 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 , (Here is which expression shall unless repugnant to the mean Successors and permitted assigns)			vner",
AND			
of the Individual/firm/Company) throughreferred to as the (Details of			
duly authorized signatory) "Bidder/Contractor" and the meaning or context hereof include its successors			ignant to
Preamble			
WHEREAS the Principal / Owner has floated the Tereferred to as	nder (*) -	(hereinaf	ter
"Tender/Bid") and intends to award, under laid down of standard platform in pantry room with sink and water in			ion
AND WHEREAS the Principal/Owner values full corules, regulations, economic use of resources and of Bidder(s) and Contractor(s).			
AND WHEREAS to meet the purpose aforesaid both Integrity Agreement (hereinafter referred to as "Integrated conditions of which shall also be read as integral part and Contract between the parties.	grity Pact" or "Pac	t"), the terms and	
NOW, THEREFORE, in consideration of mutual conhereby agree as follows and this Pact witnesses as un		in this Pact, the pa	arties
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/subvendors.
- 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 intensions
- 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
Place:
Dated:

INDIAN INSTITUTE OF TECHNOLOGY INDORE ITEM RATE TENDER & CONTRACT FOR WORKS

1. Tender for		for	Waterproofing of balance area of HVAC tunnel at IIT Indore			
	composite work					

- (i) To be uploaded by 1:00 P.M. hours on 13.06.2023 upload at http://iiti.ac.in/tender IDO & https://eprocure.gov.in/eprocure/app
- (ii) To be opened at 03:00 P.M. hours on 20.06.2023 in the office of ID Office 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 respect with the specifications, designs, drawing 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 for 75 (Seventy Five) days from the due date of its opening and not to make any modification in its terms and conditions.

Further, I/We agree that in case of forfeiture of Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

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

Signature of Contractor
Postal Address

ACCEPTANCE

The above tender (as modified by you as provide accepted by me for and on behalf of the IIT Indo	•
*(Rupees	*
The letters referred to below shall form part of the	his 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 (as per PWD-3) (Civil Work: - Part C of this tender document)

SCHEDULE 'D'

Extra schedule for specific requirements/document for

As attached in tender form

The work, if any.

SCHEDULE 'E'

Reference to General Conditions of contract –

GCC for CPWD 2020 CONSTRUCTION WORKS as

amended/modified up to receipt of tender

Name of Work: - Waterproofing of balance area of HVAC tunnel at IIT Indore

Estimated cost for	Civil Work	Rs. 67,98,000
work::		

Total

Performance Guarantee	3% of the tendered value of the work
Security Deposit	2.5% of the tendered value of the work

	Table of Mile stone(s)						
Mile stone No.	Description of Mile stone	Time allowed from date of start (Days)	Amount to be withheld in case of non- achievement of milestone				
1.	Cleaning and grouting work	30	4%				
2.	Concrete work Excavation, back filling and painting	40	3%				
3.	Work Complete and handed over.	20	3%				

Note: If the Agency will be failed in achieving the milestone No 1&2, then the respective amount of milestone shall be forfeited and not to be payable.

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS:

Officer	inviting tend	der	Project-in- charge, IIT Indore			
		ge of quantity of items of which rates are to be determined				
		ause 12.2.& 12.3				
Definit	ions:					
2(v)	Engineer-	in-Charge				
			Project –in - Charge , IIT Indore			
2(vii)	Accepting	g Authority	Director, IIT Indore			
2(x)	Percentag	e on cost of materials and				
	cover all	overheads and profits	15% (Fifteen Percent)			
2(xi)	Standard	Schedule of Rates:				
	Civil Item	ns of Work:	D.S.R. 2021 for civil works with Up to date correction slips.			
2(xii)	Departmen	ıt:	Delhi Schedule of Rates-2021 & M.R.			
9(ii)	Standard C	CPWD contract Form:	ID Office, IIT Indore			
			GCC 2020, CPWD form 7 as modified & corrected up to receipt of tender			
Clause	1 i)	Time allowed for sul	bmission of Performance			
		Guarantee program char	rt (Time and Progress)			
		And applicable lab	our licenses/registration,			
		Board including Provide	oplying thereof from the date			
	ii)	0.1% per day of Perfo	extension with late fee @ ormance Guarantee amount ovided in (i) above-5 Days			

IIT Indore

Clause 2 A Whether Clause 2A shall be applicable

Clause 5

No 2nd Day

Number of days from the date of issue of letter of acceptance for reckoning date of start

Mile stone/Bar Chart(s)-

As per construction programmed on

Time allowed for execution of work

03 Month

Authority to decide

DOID, IIT Indore or his successor

(i) Extension of time

Thereof

(ii) Rescheduling of mile stone

(iii) Shifting of date of start in case of delay in handing over of site

Project -in-Charge, IIT or his successor there of

Clause 6, 6A	Clause applicable	Clause 6 A	
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	Civil Rs.25.00 lacs	
	eligible to interim payment		
Clause 7A	Whether clause 7A shall be applicable.	Yes	
Clause 10A	List of testing equipment to be provided by the Contractor at site lab.	Yes	
Clause 10 B	Whether clause 10-B (ii) shall be applicable. Whether	No	
(ii) & 10B iii)	Clause 10-B (iii) shall be applicable.	No	
Clause 10 C	Component of labour expressed as percentage of value of work	25%	

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.

Clause 10CA

S.No.	Material covered under this clause	Base Price of all Materials covered under CE	clause 10 CA* as notified by
1.	Cement:-		
	(ii) Cement (PPC	N.A.	
2	Reinforcement	Bars	
	TMT-Fe 500-D (i)12 mm	Primary N.A.	
	Manufacturer		
3	Structure Steel	N.A.	
	ides cement compor any.	nent used in RMC brought at site from outside approv	ved RMC plants,
Clause	e 10 CC:	NOT APPLICABLE	
Clause	. 11	Charification to be followed for everytion of we	nlr.
	ivil items of work	Specification to be followed for execution of work CPWD Specifications 2019 Vol. 1 and Vol. 2 wit (Hereinafter called CPWD specifications also)	
For Ci	ivil items of work		
For Ci	ivil items of work e 12	CPWD Specifications 2019 Vol. 1 and Vol. 2 wit (Hereinafter called CPWD specifications also)	
For Ci	ivil items of work e 12 of work	CPWD Specifications 2019 Vol. 1 and Vol. 2 wit (Hereinafter called CPWD specifications also)	h up to date correction slips Civil
For Ci	ivil items of work e 12 of work	CPWD Specifications 2019 Vol. 1 and Vol. 2 wit (Hereinafter called CPWD specifications also) Project and Original work	h up to date correction slips
For Ci Clause Type (ivil items of work e 12 of work	CPWD Specifications 2019 Vol. 1 and Vol. 2 wit (Hereinafter called CPWD specifications also) Project and Original work Deviation limit beyond which clause 12.2 &	h up to date correction slips Civil

DOID,IIT Indore

For Civil items of work

Clause 18	List of mandatory machinery, tools &	N.A.
	Plants to be deployed by the contractor at site.	

Clause 25

Constitution of Dispute Redressal Committee (DRC)

For total claims upto Rs. 25.00 lacs

For total claims more than Rs. 25.00 lacs

Chairman	DOID	IIT Indore
Member	i) ADOID	IIT Indore
	ii) Registrar	
	iii) PIC	

Clause 32 Requirement of Technical Representative(s) and Recovery Rate

Cost of work (Rs. in crores)	Ork s. in ores) Qualification Number		Minimum Designation of experience (Years)	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32		
					Figures	Words
			+Minor compo	nent)		
More than 1.5 to 5	Graduate 1 Engineer (Civil-1)f or		2 or 5	Project Manager cum Planning / quality/ Site / billing Engineer	Rs.25,000 per month per person	Rs. Twenty Five Thousand only per month per person
	Diploma Engineer		respectively	1		

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 holder with minimum 10 years relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

Clause 38

(Civil)

 a) Schedule / statement for determining theoretical quantity of cement

	printed by CPWD	
ii)	Variations permissible on theoretical quantities	D.C.D. 2021 for vivil
a)	Cement for works with estimated cost put to tender not more than ` 5 lakhs.	D.S.R.2021 for civil works with up to date correction slips.
	For works with estimated cost put to Tender is more than ` 5 lakhs	
1-)	Diameter all succles	3% plus/minus
b)	Bitumen all works	2% plus/minus
c)	Steel reinforcement and structural steel Sections for diameter, section and category.	•
d)	All other materials and Electrical Items.	2.5% plus only & nil on minus side.
		2% plus/minus.
		Nil

& bitumen on the basis of Delhi Schedule of Rates 2016

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S. No.	Description of Item		Rates in figures and words at which recovery shall be made from the Contractor			
		Unit	Excess Beyond permissible variation	Less Use permissible variation	beyond	
1.	Cement:-					
	(ii) Cement (PPC)	MT		N.A		
2.	Reinforcement Bars					
	TMT-fe 500D (I)Primary Manufacturer	MT		N.A		
3.	Structure Steel	MT		N.A		

GENERAL REQUIRMENTS FOR THE TENDER

Name of Work: Waterproofing of balance area of HVAC tunnel at IIT Indore

- The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with Project -in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.
- 2 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 civil and electrical 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.
- Time allowed for the execution of work is 03 Month.
- 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 award letter.
- 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.
- 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 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 pre packed free flowing mortars (Concentra as manufactured by M/s Fosroc Chemical India Ltd. or approved equivalent) of high early strength.
- The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time.
- The contractor shall comply with the provisions of Construction and Demolition Waste Management Rules, 2016 as per Ministry of Environment and Forest notification dated 29/03/2016 issued in 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 disposal of C&D waste as per approval of local bodies.



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 quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists 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 at 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 approved quarry.
- 4 The contractor shall get the source of all other materials, not specified elsewhere in the document, approved from 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, aluminum work, and other works as desired by Engineer In Charge for his approval before execution. The contractor shall also submit bar bending schedule for approval of Engineer –in – charge before execution.

Other Laboratories:

B1 The contractor shall arrange carrying out all tests required under the agreement through the laboratory/ Govt 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 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.
- C2 The contractor shall ensure quality construction in a planned and time bound manner. Any substandard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge. 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 test at the discretion of the Engineer-in-Charge besides. 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 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 to testing and approving of the materials and clearance of the same before use in work.
- C5 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.
- 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.
- C7 The Stone aggregate/stone, sand shall be brought from any quarries subjected to the said materials confirm CPWD specifications.
- The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the Assistant Engineer-in-Charge of work and which shall be duly signed by the contractor or his authorized representative.
- 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.
- 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 double lock key system.
- 8 Separate cement registers showing the receipt of the OPC and PPC (as required) shall be maintained at site. The contractor shall construct separate godowns for storage of OPC & PPC at site and nothing extra on this account shall be payable.
- 9 Cement issued shall be for consumption at site only. No cement for factory made items and those not manufactured at site shall be issued.
- In case there is any discrepancy in frequency of testing as given in the list of mandatory test 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 construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by 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

- 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 specification and special condition, if any.
 - iii) CPWD specifications.
 - iv) Architectural Drawings.
 - v) Indian standard specifications of B.I.S.
 - vi) Sound Engineering Practice.

5

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

- 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.
- 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.
- The proposed building is a prestigious project and quality of work is paramount importance. Contractor shall have to engage well experienced skilled labour and deploy modern T&P and other equipment's to execute the work. Many items like stone masonry & stone cladding works, stone flooring, and structural glazing, PVDF coating aluminum composite panel and other specialized flooring work, Wood work will specially require engagement of skilled workers having experience particularly in 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 nature and extent of the work and satisfy himself about the availability of materials from kiln or approved quarries for collection and conveyance of materials required for construction.

- 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 complete characteristics of soil and other parameters of site. However, no claim on the alleged inadequacy or incorrectness of the soil data shall be entertained.
- The tenderer shall see the approaches to the site. In case any approach from 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.
- 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 fee, 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 light and other illumination on for cautioning the public at night.
- 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 bench marks 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
- The contractor shall make his own arrangement for obtaining electric connection(s) if required and make necessary payments directly to the department concerned.
- 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.
- 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.
- The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality and 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.
- The building work shall be carried out in the 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.
- 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.
- 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.

- It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 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.
- 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.
- 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 fulfillment of the programme within the stipulated period or earlier as indicated in the mile stones 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 programmes chart should include the following:
 - a) Descriptive note explaining 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's having adequate capacity commensurate with the quantum of work to be done within the stipulated period by the contractor.
- 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.
- 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.
- If the work is carried out in more than one shift or during night no claim on these accounts shall be entertained.

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

- 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 upto outfall.
- c) Route of all water supply lines with diameters, location of control valves, access panels etc.
- No extra payment will be made for operation/activity mentioned at Serial no.1 to 33 above, unless specified otherwise.
- 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 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 next running account bill paid to the agency. Secured advance on the same material shall not be paid again.

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 Engineer-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.

- I 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 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 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 award letter.
- 4 Contractor has to arrange and install field laboratory during the currency of work and nothing extra will be paid on this account.
- 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 paras.
- 6 Contractor has to deploy 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 a 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 under 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 arrange by contractor at his own sources and not reimbursed by the Institute.

10 EPF and ESI, if applicable, will be reimbursed on actual basis after due verification.

Il 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 actual cost of material and actual cost of labour plus 15% as overhead and profit. The decision of Engineer-In-Charge will be conclusive and final binding on the contractor.

12If BOCW (MP Building & Other Construction Workers Welfare Board), Labour Registration & License, EPF & ESIC Registration not submitted, and then 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 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

l4The 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 quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.

15The contractor shall get the source of all other materials, not specified elsewhere in the document, approved from 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:

léThe 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.

17By 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

18By the department, if the results confirm to relevant CPWD Specifications / BIS code or specification mentioned elsewhere in the documents.

19 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:

21 The contractor shall ensure quality construction in a planned and time bound manner. Any substandard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge.

22BIS 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 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.

23 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.

24 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.

25 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

26 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.

Nother 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.

28 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.

29 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.

30 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.

31 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.

32The 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.

33 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.

34In 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.

35 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.

%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.

37 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.

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

39 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.

#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.

41 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.

42The 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.

43 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.

4Registers 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 metalled road.
- 2. The contractor shall get prior approval from 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 the 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 wind breakers 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 fly 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 material like cement, sand and other allied material are fully covered. The contractor shall take every necessary precautions that the vehicle are properly cleaned and dust free to ensure that enroute their destination, the dust, sand or any other particles are not released in air/contaminate air.
- 5. The contractor shall provide 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 relatable 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 compulsory use of 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 emission norms notified by MoEF.
- 11. The contractor shall use vehicles having pollution under control certificate. The emissions can be reduced by a large extent by reducing the speed of a vehicle to 20 kmph. 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 precaution 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 operation/activity mentioned at above.
 - 15. MTC of all the material shall be submitted by Agency.

16. 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 excluding cement required for the work.
- 2. The contractor shall procure all the materials in advance so that there is sufficient time to testing and approving of the materials and clearance of the same before use in work.
- 3. 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.
- 4. The contractor shall also employ necessary watch and ward establishment for the safe custody of materials at his own cost.

ADDITIONAL CONDITIOON FOR CIVIL WORKS

- 1. 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 him acquainted with nature and extent of the work and satisfy him about the availability of materials from kiln or approved quarries for 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 about complete characteristics of soil and other parameters of 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 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 fee, 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 light and other illumination on for cautioning 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 and leveling and measuring arrangements as may be necessary at site for checking. All such equipment shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
- 7. Contractor shall provide permanent bench marks 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 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) Run of all water supply lines with diameters, location of control valves, access panels etc.

If above said drawings are not submitted by the contractor with in the above specified time then final bill will not be paid and Security Deposit shall not be released.

9. 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.

- 10. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by 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 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.
- 12. The contractor shall take all precautions to avoid accidents by, exhibiting caution boards day and night, speed limit boards, red flags, red light 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, 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.
- 14. All materials obtained from Govt. stores or otherwise shall be get checked by the Engineer-in-Charge or his any authorized supervisor staff on receipt of the same at 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 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, 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.
- 19. 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.
- 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 at bathrooms, kitchen etc. and nothing extra on this accounts 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 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 with 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, the 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

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

S.	Material	List of Preferred Makes
No.		
1	(i) Ordinary Portland Cement /	ACC, Ultratech, Ambuja Cement,
	Portland Pozzolona Cement /	J.K.Cement, Century Cement, Shree
	Sulphate Resisting Portland cement	Cement, Jaypee Cement, Vikram Cement.
	(ii) White Cement	Birla White, J.K.White
2	Reinforcement Steel	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd
	TMT bars Fe-500D	(RINL), JSW Steel Ltd., Jindal Steel &

		Power Ltd.		
3	Water Proofing Compounds,	Fosroc, ROFF/Dr.Fixit (Pidilite Industries),		
	Admixtures, Plasticizer, Super	CICO, Sika, BASF, Ardex Endura (Bal		
	Plasticizer, Curing Compounds.	Endura)		
4	Integral Water Proofing compound	Fosroc :Conplast 421		
	with cement (For Plaster & Mortar)	Dr.Fixit: L.W+		
		Sika :Sikacin		
		Asian Paints : Smart Case Vitalia&		
		equivalent product of BASF, CICO, Ardex		
		Endura		
5	Water Proofing for bathroom / toilet /	Fosroc : Brush Bond		
	balcony & other wet areas	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	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) AnodisedAluminium	Kilong, Alualpha, Classic, Ebco
	Hardware (Heavy Duty)	
20	Clear/Float/Frosted/Refractive/Coated	Saint Gobain, AIS, Modiguard, Asahi

	Glass/Toughned	
21	Stainless Steel Railing, Accessories	JINDAL, Dorma, Kich, GEZE, Godrej,
	etc.	Hardwyn
22	S.S.Door& Window & fittings	Jindal, Dorma, Kich, Doorset, Godrej,
		Ozone
23	Silicon based water repellent /	G.E. Plastics, Dow Corning, (Wacker),
	Weather sealant	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	Somany, Kajaria, RAK, NITCO
	(Antiskid/Matt/Glazed)	
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	Asian Paints (Professional Acrylic
	Distemper	Distemper), Nerolac : Beauty Acrylic
		Distemper, Berger: Bison Acrylic
		Distemper, DuluxICI:Maxilite
32	Ist Quality Acrylic Distemper	Asian Paints (Tractor Aqua Lock Paint)
	(washable / Ready Mix / Low VOC)	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	Asian Paints (Royale Luxury Emulsion)
	(Interior)	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	Asian Paints : (Apex Ultima)
	Paint with silicon additive	Nerolac : XL Total
		Berger: Weather Coat all guard
		ICI-Dulux : Weather Shield max
39	Synthetic Enamel Paint	Asian (Apcolite 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	Asian Paints, Nerolac, Berger, ICI
	Chromate Primer)	
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	NECO, Kapilansh, Electrosteel, SKF.
	& Fittings	
52	C.I. Manhole covers, frames & GI	NECO, RAJ Iron Foundary Agra, BIC,
	Gratings	SKF, Kapilansh
53	SFRC Manhole covers & gratings	KK, JAIN, PARGATI
54	CP Brass Fittings	Jaquar, Grohe, Roca, PRIMA
	(Superior Range)	
55	CP Brass Fittings	Hindware, Jaguar, ESSCO, Parryware,
	(Normal Range)	PRIMA
56	Sanitary ware, Fittings & accessories	Kohler, Roca, Hindware, Parryware
	(Superior Range)	
	Sanitary ware, Fittings & accessories	Hindware, CERA, Parryware, Jaguar
	(Normal Range)	
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	Fenesta, VEKA, KOMERLING, RHEAU,
<u> </u>	51 10 Doors & Hilliams (I ROTILL	

	makers & their authorized Fabricators	Aluplast, Wintech, Duroplast.	
	only.)		
62	Extruded Polystrene 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	Finolax, Supreme, Plasto.	
	As per IS :13592		
73	PVC Shutter	Rajshri, Sintex, M/s Jain Wood Industries	

CONTRACT FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS

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

The Agreement m	iade	tnisaa	y or		
Two thousan	d and	ber	tween		
		Son	of		
	(hereinafter	:			
Called the Guarantor of the one Government of the other part).	_	ESIDENT OF INDIA (h	ereinafter o	called	the
WHEREAS THIS (hereinafter	agreement called	is supplementary the contract) dated	to	a	contract
	_ and made betw	een the GUARANTOR (OF THE O	NE pa	rt 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

	* *	• 0		oss and/or damage and/or co final and binding on the partie	
IN	WITNESS executed by	WHEREOF the Obligor	these presents	have been and by	
first above		nd on behalf of	the PRESIDENT OF	INDIA on the day, month an	d year
SIGNED,	SEALED AND deli	vered by OBLI	GOR in the presence	of:	
1. 2.					
	GNED FOR A	AND O	N BEHALF	OF THE PRESIDENT in the presence of:	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
(Hereinafter called "the said Contractor(s)") for the work
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. (RupeesOnly) on demand by the Government.
We,
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,
We,

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

Name of Work: Water proofing of balance area of HVAC tunnel at IIT Indore

Priced schedule of items (BOQ)

<u>Sno</u>	Item Description	<u>Unit</u>	Quantity	Rate	<u>Amount</u>
1	Earth work in excavation by mechanical means (Hydraulic Excavator)/ manual means in foundation trenches or drains (exceeding 1.5 m in width or 10 sqm well as 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto1.5m including getting out the excavated soil and disposal of surplus excavated soil as directed within a lead as per in charge. All kind of soil	Cum	936		
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up. to 50 m and lift up to 1.5 m.	Cum	702		
3	Brick work with common burnt clay F.P.S. (non-modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	11.52		
4	Applying one coat of water thinable cement primer of approved brand and manufacture on wall surface: water thinable cement primer inside of tunnel.	Sqm	4320		
5	Providing and laying in position specified grade of reinforced cement concrete, including water proofing compound of approved make @200 ml per bag of cement excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level: 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size de rived from natural sources)	Cum	24		

			1	
6	Providing and laying integral cement-based	Sqm	396	
	treatment for water proofing on the vertical	-		
	surface by fixing specified stone slab 22 mm to			
	25 mm thick with cement slurry mixed with			
	water proofing compound conforming to			
	IS:2645 in recommended proportions with a			
	·			
	gap of 20 mm (minimum) between stone slabs			
	and the receiving surfaces and filling the gaps			
	with neat cement slurry mixed with			
	waterproofing compound and finishing the			
	exterior of stone slab with cement mortar 1:3			
	(1 cement: 3 coarse sand) 20 mm thick with			
	neat cement punning mixed with water			
	proofing compound in recommended			
	proportion complete at all levels and as			
	directed by Engineer-in-charge:			
	22.2.1 Using rough Kota stone			
7	Clearing of site by removal of debris, from the	Sqm	1190	
	HVAC tunnel complete. including disposal of	2 4		
	unserviceable material at an unobjectionable			
	place, stacking of serviceable material as per			
	instruction tasking all necessary precautions for			
	safety of existing structures, service lines etc.			
	_			
	all necessary tools tackles and safety barricades			
	shall be arranged by the contractor			
8	Preparation of existing surfaces like chipping of	Sqm	300	
	unsound weak / loose concrete/cover of			
	reinforcement and removal of debris to a			
	designated location (up to full height) block to			
	support the structure provisionally during			
	repair work and maintaining them in position			
	till required, complete all specified and			
	directed by the Engineer-in-charge.			
			4500	
9	Injection Grouting: Providing & applying	No	4500	
	injection sockets up to 40%-50% (of the			
	concrete thickness) deep inside at an			
	inclination (< 60 degree). Now inject it with the			
	, , , ,			
	IE 6692 (a non-ionic emulsion having			
	alkoxysilanes which induce the hydrophobicity			
	and significantly decrease the water ingress of			
	cementitious materials) Dilution of the 6692 is			
	•			
	to accord the required pH and all other			
	parameters as per the expert formulator / site			
	in charge . Make sure the consumption 2 lt per			
	socket. It can be achieved with static head			
	tactics and pressure pump (4-8 kg pressure).			
	tactics and pressure pump (4-0 kg pressure).			

	Subsequently leave for 48 hours. Create the cementitious grout slurry modified with non-shrink expansive grout admixture, IE 6692, Corrosion inhibitor all with water. The dilution ratio must as per the site and hole need. The grouting slurry must be lean to stiff in each hole. Stiff slurry to be admixed with Tam seal SBR to keep log record for all sockets and finally cutting of nipples and patch it up. Ultra rapid setting mortar to plug active water to be used			
10	Supply & Apply Crystalline coating MS5012 coats @ 2 KG/ Sqm. Each coat must be in perpendicular direction to previous one at an interval of 10 hours .thoroughly saturate the surface with water before and after of each coat Including plaster is to be done on surface and to be admixed & modified per bag of cement @ Rectron 3S @ 90 gms, SBR @ 1 Kg & IE6692 @ 0.5Lt. etc. complete in all respect as per direction of Engineer-In-Charge	Sqm	3582	
11	SFMC: Providing and laying super fluid micro concrete with PPF (RECRON 3S): for concrete repairs MES 466 etc. complete in all respect as per direction of Engineer-In-Charge Total Amount	Cum	3	
	Total Amount			