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Name of Work: - Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)

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It is certified that this N.I.T. contains 01 to 122 Pages excluding Cover Page.

NIT No. 28/EE/Indore-I/2026-27 is approved for

Rs. 52,92,748/- (Civil Rs. 38,77,802/- + Electrical Rs. 14,14,946/-)

Assistant Engineer (P)
Indore-1, CPWD, Indore

Executive Engineer
Indore-1, CPWD, Indore

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING FORMING PART OF BID DOCUMENT

The Executive Engineer, Indore-I, CPWD, Indore is formerly known as Executive Engineer, Indore Central Division-I, CPWD, Indore, Old CIA Building, Residency Area, Near GPO, Indore (M.P.) on behalf of the President of India invites online Percentage rate bids from approved and eligible contractors of CPWD as per OM No. DG/Enlist-Rules/2026/Misc./01 dated 31/12/2025 for the following work: -

Sl. No.	NIT No.	Name of Work & Location	Estimated Cost Put to bid	Earnest Money	Stipulated Period of Completion of work (in months)	Last date & Time of online Submission of tender along with scanned copy of documents as per Nit conditions on website	Time & date of opening of bid
1	28/EE/Indore-I/2026-27	Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)	Rs. 52,92,748/- (Civil Rs. 38,77,802/- + Electrical Rs. 14,14,946/-)	Rs. 1,05,855/-	04 (Four) Months	Upto 3:00 PM On 16/09/2026	At 3:30 PM on 16/09/2026

- 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, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website <https://etender.cpwd.gov.in> or www.cpwd.gov.in free of cost
- But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission and uploading the mandatory scanned documents such as Insurance

Surety Bonds, Account Payee Demand draft or Bankers Cheque or Fixed Deposit Receipts or/ and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of Executive Engineer as mentioned in NIT, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/ AE), CPWD and other documents as specified.

5. Those contractors who are not registered or have not updated their profile on the website mentioned above, are required to get registered / update their profile beforehand. The necessary training materials including the videos with step to step process are available on download section of <https://etender.cpwd.gov.in>
6. The intending bidder must have valid **Class-IV** digital signature certificate with encryption key (combo type) to perform any operations / transactions on the e-tendering portal / website and the bidder should download and install the eMsigner on their system as per instructions available on download section of <https://etender.cpwd.gov.in>.
7. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
8. Contractor can upload documents in the form of JPG format and PDF format.
9. Contractor must ensure to quote rate in the prescribed column(s) meant for quoting rate in figures appears in yellow colour and the moment rate is entered, it turns sky blue.

In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).

However, If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

List of Documents to be scanned and uploaded within the period of tender submission:

1. Insurance Surety Bond, Demand Draft/ Account Payee Banker's Cheque / FDR/ Bank Guarantee of any commercial Bank against EMD in favour of **“Executive Engineer, Indore Central Division-I, CPWD, Indore”**.
2. Enlistment Order of the Contractor of CPWD in appropriate Category and valid on the date of opening of tender **as per OM No. DG/Enlist-Rules/2026/Misc./01 dated 31/12/2025.**
3. G.S.T. Registration Certificate of the State, in which the work is to be taken up, if already obtained by the bidder.

If the bidder has not obtained GST registration in the State in which the work is to be taken up or as required by GST authorities, then in such a case the bidder shall scan and upload following undertaking along with other bid documents **"If work is awarded to me, I/We shall obtain GST**

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

4. Copy of receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/AE), CPWD as per **Form-A at page number 20** of the NIT.
5. Uploading of compulsory ERP Training Certificate as per DG OM No. DG/Enlist-2023/10, dated 22/04/2024. According to "The existing enlisted contractor either himself or his authorized representative shall take compulsory ERP (Enterprise Resource Planning) training through any of the CPWD Regional Training Institutes (RTIs) at Delhi, Mumbai, Chennai and Kolkata, National CPWD Academy (NCA) Ghaziabad, Training arranged by Graduates of ERP "Train the Trainers Programme" conducted by NCA, Ghaziabad or through any other special training arranged by ERP unit of CPWD before 30.06.2024. Training will be valid only when participants are registered in LMS (Learning Management System) of ERP and certificate is issued through LMS of ERP".
6. Undertaking for site inspection as per **Form-B at Page No. 21** of the NIT.
- ~~7. Electrical contractor license from competent authority in the name of Contractor or undertaking that "I, hereby confirm that I will either obtain valid electrical contractor license at the time of execution of electrical work or associate CPWD registered contractor having valid electrical contractor license of eligible class."~~

Executive Engineer, Indore-I,
CPWD, Indore

**Government of India CPWD
Notice Inviting Tender for e-Tendering**

1. The Executive Engineer, Indore-I, CPWD, Indore formerly known as Executive Engineer, Indore Central Division-I, CPWD, Indore, Old CIA Building, Residency Area, Near GPO, Indore (M.P.) on behalf of the President of India invites online Percentage rate bids from approved and eligible contractors of CPWD as per OM No. DG/Enlist-Rules/2026/Misc./01 dated 31/12/2025 for the following work: -

NIT No.: – 28/EE/Indore-I/2026-27

Name of work: Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)

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

In case the last date of submission of bid is extended, the enlistment of contractor shall be valid on the original date of submission of bid.

- 1.1 The work is estimated to cost **Rs. 52,92,748/- (Civil Rs. 38,77,802/- + Electrical Rs. 14,14,946/-)**. This estimate, however, is given merely as a rough guide.
- 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids.
For composite bid the bidders, besides indicating the percentage above/below the combined estimated cost put to bid, should also indicate the amount in word for each component separately. The eligibility of bidder will correspond to the combined estimated cost of different components put to bid.
2. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD 7 amended upto correction slip issued up to date of receipt of tender which is available as a Govt. of India publication and also available on website www.cpwd.gov.in. Bidder 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 **04 (Four) 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. (i) The site for the work is available. - Yes

OR

~~The site for the work shall be made available in parts as specified below.~~

*

(ii) ~~The architectural and structural drawing for the work is available. (*)~~

OR

5. The architectural and structural drawings if any, shall be made available in phased manner, as per requirement of the same as per approved program of completion submitted by the contractor after award of work. 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 2023 for Maintenance work and amendment upto last date of submission of bid** can be seen from the web Site <https://etender.cpwd.gov.in> or www.cpwd.gov.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 tender as notified.
7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the components) but before last time and date of submission of tender as notified.
8. Earnest Money in the form of insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks (drawn in favour of **“Executive Engineer, Indore Central Division-I, CPWD, Indore”**) shall be scanned and uploaded to the e-Tendering website within the period of bid submission. The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing EE/AE) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

A part of earnest money is acceptable in the form of bank guarantee also. In such case, minimum 50% of earnest money or Rs. 20 lacs, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any Commercial bank having validity for a period of 90 days for single bid works and 180 days for two bid system or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

The earnest money given by all the tenderers except the lowest tenderer shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. ~~However, in case of two/ three bid system, earnest money~~

~~deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation.~~

Copy of Enlistment Order ~~and certificate of work experience~~ and other documents as specified in the Notice Inviting e-tender shall be scanned and uploaded to the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in e-Tender shall have to be submitted by the lowest bidder only within a week physically in the office of tender opening authority. Online bid documents submitted by intending bidders shall be opened only of those bidders, whose original EMD deposited with any Division Office of CPWD and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at 03:30 PM on 16/09/2026

9. The bid submitted shall become invalid and e-Tender processing fee shall not be refunded if:
 - (i) The bidder is found in-eligible.
 - (ii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
 - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
 - (iv) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

10. The contractor whose bid is accepted will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in schedule E and within the period specified in Schedule F. This guarantee shall be in the form of insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. 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

licenses, registration with EPFO, ESIC and BOCW Welfare Board and Program Chart (Time and Progress) within the period specified in Schedule F.

11. The description of the work is as follows:

Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)

Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that 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.

12. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
13. 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 to rejection.
14. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
15. The contractor (enlisted or non-enlisted in CPWD) shall not be allowed to participate in the tender for work(s) in the CPWD Zone/circle /Division/Sub-Division responsible for award and/or execution of contract(s) in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the Chief Engineer and Junior Engineer (both inclusive). He shall also

intimate the names of persons who are working or are subsequently employed by him and who are near relatives to any Officer working in the CPWD. Any breach of this condition by the contractor would render him liable to be debarred for a period upto two years from tendering in CPWD as decided by the accepting authority mentioned in Schedule F and his decision will be excepted from clause 25.

16. No Engineer of gazette rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
17. The bid for the works shall remain open for acceptance for a period of **thirty (30) days** from the date of opening of bids in case of single bid system.
 - (i) If any tenderer withdraws his tenders or makes any modifications in the terms and condition of the tender which is not acceptable to the department within 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - (ii) If any tenderer withdraws his tender or makes any modification in the terms and conditions of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - (iii) In case of forfeiture of earnest money as prescribed in para (i) and (ii) above, the bidders shall not be allowed to participate in the rebidding process of the same work.
18. This notice inviting bid shall form a part of the contract document. The successful bidder /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 7/8 or other Standard C.P.W.D. Form as applicable.

19. The intending bidders are required to update their profile in CPWD e- tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile / uploading tender can be resolved through the concerned Executive Engineer/ Assistant Engineer or ERP help line no. 18001803286 or e-mail id cpwd.support@techmahindra.com. The e- tendering bidders are also advised not to wait to raise any issues till the last date of submission of bid in their own interest.

Executive Engineer Indore - I,
CPWD, Indore

NIT FORM CPWD- 7

GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT

STATE: Madhya Pradesh

REGION: Bhopal

BRANCH: B & R

Division: Indore-I

Percentage Rate Tender and Contract for works

Tender for the work of: - **Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)**

- (i) To be uploaded **by 03:00 Hours** on **16/09/2026** to on website: <https://etender.cpwd.gov.in>
- (ii) To be opened in presence of tenderers who may be present at **03:30** hours on **16/09/2026** in the office of The Executive Engineer, Indore - I, CPWD, Indore, Old CIA Building, Residency Area, Near GPO, 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 President of India 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.

I/We agree to keep the tender open for **Thirty (30)** days from the due date of its opening and not to make any modification in its terms and conditions.

I/We have deposited EMD for the prescribed amount in the office of concerned Executive Engineer as per the bid document.

A copy of earnest money deposit receipt of prescribed amount deposited in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by a Commercial Bank, is scanned and uploaded (strike out as the case may be). If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said President of India or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/ We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

Sr. Dman

A.E.(P)

EE

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

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

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

Dated:

Witness:

Address:

Occupation:

Signature of Contractor

Postal Address

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of Rs. (Rupees)

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

(a)

(b)

(c)

For & on behalf of President of India

Signature.....

Dated:

Designation

PROFORMA OF SCHEDULES (FOR CIVIL COMPONENT)

SCHEDULE “A”

Schedule of quantities for Civil Works as per attached pages (as per PWD-3)	:	Enclosed
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SCHEDULE ‘D’

Extra schedule for specific requirement/ document for the work, if any	:	NIL
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SCHEDULE ‘E’

Reference to General Conditions of contract.	:	General Conditions of Contract 2023 for Maintenance work and amended upto correction slips issued upto last date of receipt of tender.
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Name of Work: Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)

Estimated cost of work	:	Rs. 52,92,748/- (Civil Rs. 38,77,802/- + Electrical Rs. 14,14,946/-)
(i) Earnest money	:	Rs. 1,05,855/- (To be returned after receiving Performance Guarantee)
(ii) Performance Guarantee	:	As per OM No. DG/Manual-2024/20 Dated 27/02/2026 (a) PG shall be 5% of the Estimated cost put to tender (ECPT) or contract amount whichever is higher. Performance Guarantee shall remain valid for a minimum period of six months beyond the date of completion of all contractual obligations as per GCC. (b) A bid will be treated as abnormally low if the quoted bid amount is lesser than 80% of the estimated cost put to tender. Additional Performance Guarantee (APG) : In case of abnormally low bids as defined above, the bidder Shall be required to Submit Additional Performance Guarantee (APG) in addition to the Standard Performance Guarantee (PG). The amount of Additional Performance Guarantee (APG) shall be equivalent to the difference between the 80% amount of ECPT and quoted amount. (if ECPT is A and quoted is 0.7A then the amount of APG shall be 0.8A - 0.7A). The Additional Performance Guarantee (APG) shall be in the prescribed format of Performance Guarantee and has to be submitted within the time frame prescribed for submission of Performance Guarantee. The other terms and conditions of release etc. of APG shall be same as that of PG.

(iii) Security Deposit	:	2.5% of tendered amount
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SCHEDULE “F” (GENERAL RULES & DIRECTIONS)

Officer inviting tender	:	Executive Engineer, Indore-I, CPWD, Indore-452001.
Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3	:	See below

Definitions:

	CPWD Directorate	CPWD Directorate includes Director General /Special Director General/ Additional Director General/CPM/CA/Superintending Engineer/ CE-ED/PM/SE/SE-PD/Director (Horticulture)
	Successor	Any authority as notified by the CPWD Directorate before, during and after execution of work/ agreement.
2(vi)	Engineer-in-Charge	Executive Engineer, Indore-I, CPWD, Indore-452001
2(viii)	Accepting Authority	Executive Engineer, Indore-I, CPWD, Indore-452001
2(x)	Percentage rate on cost of materials and labour to cover all overheads and profits.	15%
2(x)(b)	Standard Schedule of Rates	CPWD DSR 2023 with amendments up to last date of submission of bid.
2(xi)	Department	Central Public Works Department (CPWD)
9(ii)	Standard CPWD Contract forms GCC, CPWD Form 7/8 as modified & corrected upto	General Conditions of Contract 2023 for Maintenance work CPWD form 7 modified & corrected upto last date of submission of bid.

Clause 1

(i)	Time allowed for submission of Performance Guarantee, programme chart (Time and progress) and applicable labour	7 (Seven) days
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	licenses, registration with EPFO, ESIC and BOCW welfare board or proof of applying thereof from the date of issue of letter of acceptance	
(ii)	Maximum allowable extension with late fee @0.1% per day of Performance Guarantee amount beyond the period provided in (i) above	3 (Three) days

Clause 2

Authority for fixing compensation under clause 2	:	Superintending Engineer (Indore), CPWD, Indore-452001
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Clause 2A

Applicable Clause 2 / Clause 2A	:	Clause 2
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Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start	:	10 (Ten) days from Letter of award or date of handing over of site whichever is later
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Milestone(s) as per table given below:

S No.	Description of Milestone (Physical)	Time allowed in days (from date of start)	Amount to be with-held in case of non-achievement of milestone
1	1/4th (of the agreement amount)	1/8 of time limit	In the event of not achieving the necessary progress as assessed from the running payment 1.25% of the tender value of work will be withheld for failure of each mile stone.
2	1/2th (of the agreement amount)	3/8 of time limit	
3	3/4th (of the agreement amount)	3/4 of time limit	
4	All works complete.	04 (Four) Months	

Withheld amount shall be released if and when subsequent milestone is achieved within respective time specified. The main contractor will ensure that electrical components of the work are executed in time without giving any chance for slippage of milestone on account of delay in execution of associated electrical works by him. However, in case milestones are not achieved by the contractor for the work, the amount shown against milestone shall be withheld by the Engineer-In-Charge of the respective components.

Note: Intending tenderer may submit phasing of activities / milestones on the basis of their resources and methodology at the time of tendering corresponding to physical milestones / stages indicated in the above table. These shall be formed part of the agreement after approval of the accepting authority.

Time allowed for execution of work	:	04 (Four) Months
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Authority to decide:		
(i)	Authority to decide extension of time	: Executive Engineer, Indore-I, CPWD, Indore-452001
(ii)	Authority to decide rescheduling of milestone	: Superintending Engineer, Indore-I, CPWD, Indore-452001
(iii)	Authority to decide shifting of date of start in case of delay in handing over of site	: Superintending Engineer, Indore-I, CPWD, Indore-452001

PROFORMA OF SCHEDULES Clause 5 schedule of handing over of site.

Part	Portion of site	Description	Time period for handing over reckoned from date of issue of letter of intent.
Part A	Portion without any hindrance	Full site for the work is available	
Part B	Portions with encumbrances		
Part C	Portions dependent on work of other agencies		

Clause 5

Applicable Clause 5/ Clause 5A	:	Clause 5
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Clause 6: Computerised Measure Book (CMB) / Electronic Measurement Book (EMB)

Mode of measurement	:	EMB/CMB
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Clause 7

Gross work to be done together with net Payment/ adjustment of advances for Material collected, if any, since the last such payment for being eligible to Interim payment.	:	Rs. 13.00 Lakhs and part thereof as per direction of Engineer-in-Charge
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Clause 7A

Whether Clause 7A shall be applicable	:	Yes
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Clause 10 A

List of testing equipment to be provided by the contractor at site lab	:	As per Annexure-I attached or as directed by Engineer in Charge
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Clause 10B(ii)

Whether Clause 10 B (ii) shall be applicable	:	No
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Clause 10 C

Component of labour expressed as percent of value of work	:	Not Applicable, 25% (percentage of labour component shall be calculated on 85% of the value of work done during the period under consideration)
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Clause 10CC

Applicable / Not Applicable	:	Not Applicable
Schedule of component of other Materials, Labour etc. for price escalation.		
Component of civil (except materials covered under clause 10CA) /Electrical construction Xm % value of work.		Xm %
Component of Labour--		
expressed as percent of total value of work.		Y %

Clause – 11

Specifications to be followed for execution of work	:	CPWD Specifications 2019 volume- I & II with up to date corrections slips
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Clause 12

12.2	Deviation limit beyond which Clauses 12.2 shall apply for building work	No limit
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Clause 16

Competent Authority for deciding reduced rates.	:	Superintending Engineer (Indore), CPWD, Indore
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Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site	:	As per site requirement and direction of Engineer-in-Charge
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Clause 19 C

Authority to decide penalty for each default	:	Engineer-in-Charge.
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Clause 19 D

Authority to decide penalty for each default	:	Engineer-in-Charge.
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Clause 19 G

Authority to decide penalty for each default	:	Engineer-in-Charge.
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Clause 19 K

Authority to decide penalty for each default	:	Engineer-in-Charge.
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Clause 25

(i) Conciliator	ADG, Region Bhopal, CPWD or his successor or any other Authority as decided by CPWD Directorate.
(ii) Arbitrator appointing authority	Superintending Engineer (Indore), CPWD, Indore or his successor or any other Authority as decided by CPWD Directorate.
(iii) Place of arbitration	Indore.

Note: (1) The above constitution Committee is subjected to change, for which necessary notification shall be issued by the competent authority of the department, if required.

Clause 32

The Requirement of Technical

Representative(s) and Recovery Rates:

Applicable as below: -

Sr. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical / Technical Representative)	Minimum Experience in years	Number	Rate of which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32	
						Figures	Words
1	Graduate Engineer Or Diploma Engineer	Civil	Project manager cum planning/ Quality/Site / billing Engineer	2 years or 5 years respectively	1	Rs. 15,000/-Per month per person	Rupees Fifteen Thousand per month per person

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers

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

Clause 38

(i)	(a)	Schedule /statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates	DSR 2023 with amendments up to last date of submission of bid.
(ii)	(ii)	Variations permissible on theoretical quantities:	
	(a)	Cement	
	i	For works with estimated cost put to tender not more than Rs. 25 lakh	3% (Three percent) plus / minus
	ii	For works with estimated cost put to tender more than Rs. 25 lakh	2% (Two percent) plus / minus
	(b)	Bitumen for all works	2.5% (Two point five percent) plus & only and nil on minus side
	(c)	Steel Reinforcement and structural steel sections for each diameter, section and category	2% (Two percent) plus/minus
	(d)	All other materials	Nil

Form – A

Receipt of Deposition of original EMD
(Receipt No..... /Date.....)

1. Name of work: - **Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)**
2. NIT No.: - **28/EE/Indore-I/2026-27**
3. Estimated Cost: - **Rs. 52,92,748/- (Civil Rs. 38,77,802/- + Electrical Rs. 14,14,946/-)**
4. Amount of Earnest Money Deposit: - **Rs. 1,05,855/-**
5. Last date of submission of bid: - **16/09/2026** on or before 3:00 p.m.
6. **EMD should be in favour of “Executive Engineer, Indore Central Division-I, CPWD, Indore”.**

(To be filled by EMD receiving EE/DDH)

1. Name of Contractor: -
2. Form of EMD: -.....
3. Amount of Earnest Money: -.....
4. Date of Submission of EMD: -.....

Signature, Name and Designation of EMD
Receiving officer (EE/DDH)
Along with office stamp

1. The Executive Engineer receiving EMD in original form examines the EMD deposited by the bidder and shall issues a receipt of deposition of earnest money to the agency in a given format uploaded by tender inviting EE. The receipt can also be issued by any subordinate Gazetted authority as authorized by the Engineer-in-Charge/DDH.
2. The Executive Engineer receiving original EMD shall also intimates tender inviting Executive Engineer about deposition of EMD by the agency by email/fax/telephonically.
3. The original EMD receiving Executive Engineer shall releases the EMD after verification from the e-tendering website that the particular contractor is not L-1 bidder and work is awarded.
4. The tender inviting Executive Engineer will call for original EMD of the L-1 tenderer from EMD receiving Executive Engineer immediately.

Sr. Dman

A.E.(P)

EE

Form-B

FORMAT FOR UNDERTAKING FOR SITE INSPECTION

To,
The Executive Engineer, Indore-I,
C.P.W.D., Indore.

I/we hereby give an undertaking for the given work as follows:

NIT No.: 28/EE/Indore-I/2026-27

Name of work: Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)

I/we have inspected and examined the site and its surroundings is / are satisfied before submitting our bid 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 I/we may require and in general shall myself / ourselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect our bid. I/we shall be deemed to have full knowledge of the site whether I/we inspect it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. I/we shall be responsible for arranging and maintaining at our 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.

I understand that no space in **CBN, Neemuch** will be provided for staying labour at site. Also, I agree to arrange water& electricity the same will not be provided by department/ client department.

Submission of a bid by a I/we implice(s) that I/we have read this notice and all other contract documents and has made myself / our-self 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 us by the Government and local conditions and other factors having a bearing on the execution of the work.

Place :

Date :

Yours faithfully

(Signatures of Bidder(s))

Sr. Dman

A.E.(P)

EE

ANNEXURE –I**Equipment's for Testing of Materials & Concrete at Site Laboratory**

Equipment's for conducting necessary tests shall be provided and installed at site in the well-furnished site laboratory by the agency at his own cost. The following list is only indicative and not exhaustive. The Bidder may be required to deploy more T & P as per requirement of work. Nothing extra shall be payable.

Sl. No	Equipment	Numbers (Minimum)
1	Balances – i) 7 kg to 10 kg capacity semi-self indicating type – accuracy 10 gram. ii) 500 Gram capacity semi-self indicating type – accuracy 1 gram iii) Pan balance -5 kg capacity – accuracy 10 grams	1
2	Ovens- electrically operated Thermostatically controlled upto 110 degree C – Sensitivity 1 degree	1
3	Sieves as per IS 460-1962 i) I.S. sieves 450mm internal dia of sizes [100mm, 80mm, 63mm, 50mm, 40mm, 25mm, 20mm, 12.5mm, 10mm, 6.3mm, 4.75mm complete with lid and pan] ii) I.S. Sieves - 200mm internal dia (brass frame) consisting of 10mm, 4.75mm, 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, & 150 micron, 90 microns, 75 microns, with lid and pan]	1 1
4	Sieve shaker capable of 200mm and 300mm dia sieves, manually operated with timing switch assembly	1
5	Equipment for slump test-Slump cone, steel plate, tamping rod, steel scale, scoop.	2
6	Dial gauges 25mm travel- 0.01 mm/division least count–2 nos.	1
7	100 tonnes compression testing machine, electrical-cum-manually operated	1
8	Graduated measuring cylinders 200 ML capacity	3
9	Enamel trays (for efflorescence test for bricks) i) 300 mm x 250mm x 40mm ii) Circular plate of 250mm dia	2 4
10	Slump cone, steel plate, tamping rod, steel scale, scoop	1 (each)
11	Pumps and pressure gauges for hydraulic testing of pipes	1
12	Cube moulds size 70mmx70mmx70mm	6
13	Cube moulds size 150mmx150mmx150mm	20
14	Dial gauge, 25 mm dial-0.01mm/ division least count	2
15	Spatula 100mm & 200mm with long blade wooden handle	1 each

16	Vernier calipers 12” & 6” sizes	1 each
17	Digital Micrometer least count 0.01mm	1
18	Digital paint thickness meter for steel 500 micron range	-
19	GI tray 600x450x50mm, 450x300x40mm, 300x250x40mm	2 each
20	Electric Motor mixer 0.25 cum capacity	-
21	Screw gauge 0.1mm-10mm, least count 0.05	1
22	Pruning Rods 2 Kg weight length 40 cm and ramming face 25 mm ²	2
23	Extra Bottom plates for 15 cm cube mould	10
24	Iron Weight of 5 kg, 2 kg, 1 kg, 500 gm, 200 gm, 100 gm	1 each
25	Brass Weight of 50 gm, 20 gm, 10 gm, 5 gm, 2 gm, 1 gm	1 each
26	Measuring cylinder TPX or Poly propylene capacity 100 ml, 500ml, 250 ml	1 each
27	Wash Bottles capacity 500 ml	3
28	Hammer 1lb & 2lb	2 each
29	Hacksaw with 6 blades	-
30	Plastic or G.I. Buckets 15 ltr, 10 ltr, 5 ltr	1 each
31	Wheel Barrow	-
32	Any other equipment for site tests as outlined in BIS codes and as directed by the Engineer-in-charge.	1
33	Steel tape a) 30 Mtrs b) 3 Mtrs	1 2
34	Wire gauge (circular type) disc	1
35	Foot Rule	1
36	Long Nylon Thread	1
37	Rebound hammer for testing concrete	+
38	Dynamic penetrometer	+
39	Magnifying glass	+
40	Screw driver 30 cms long	+
41	Ball pin Hammer 100 gms	+
42	Plastic bags for taking samples	1 Packet
43	Moister meter for timber	+
44	A good quality plumb bob	+
45	Spirit level, minimum 30 cms long with 3 bubbles for horizontal/ vertical	+
46	Hydrometer	+

Additional Conditions

1.0 Acquaintance with site and Architectural drawings.

- 1.1 The intending tenderers are requested to go through architectural drawings. These drawing are available in the **o/o Executive Engineer, Indore-I, CPWD, Indore**. The architectural drawings show the type of building to be constructed, number of storeys and other architectural features. No claim whatsoever shall be entertained for the same and also for lack of information on this account, which the tenderer is expected to have.
- 1.2 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, suitable location for construction of godown, store, camp, transport facilities the extent of leads and lifts.
- 1.3 The work shall be carried out in accordance with the architectural drawings, Electrical & Mechanical drawings and structural drawings etc. All the drawings, shall have to be properly correlated before executing the work. In case of any difference noticed between drawings, final decision, in writing of the Engineer-in-Charge shall be obtained by the contractor. Samples shall be prepared before starting particular items of work for prior approval of the Engineer-in-Charge and nothing extra will be payable on this account.

2.0 Specifications: -

- 2.1 Unless otherwise specified, CPWD Specifications as mentioned in clause 11 under schedule “F” with upto date correction slips till the date of receipt of tender shall be followed in general. Any additional item of work if taken up subsequently shall also conform to the relevant CPWD specifications mentioned above.
- 2.2 Wherever any reference to any Bureau of Indian Standard Specifications occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued there to or revisions thereof, if any, up to the date of receipt of tenders.
- 2.3 Work shall be carried out in professional manner with finished product serving the intended purpose with specified strength, durability and aesthetics.
- 2.4 The contractor shall prepare all the needed shop drawings well in advance and get them approved before placing the order and execution of the item.

3.0 The contractor shall submit monthly progress report of the work in a computerized form. The Work Program and progress report shall contain and as per the following, apart from whatever else may be required as specified at no extra cost:

- (i) Project information, giving the broad features of the work under the contract, and the broad structural as well as architectural and other details.
- (ii) Introduction, giving a brief scope of the work under the contract, and the broad structural or other details.
- (iii) Construction schedule of the various components of the work through a bar chart for the next three quarters (or as may be specified), showing the milestones, targeted tasks and upto date progress.

- (iv) Progress chart of the various components of the work that are planned and achieved, for the month as well as cumulative upto the month, with reasons for deviations, if any, in a tabular format.
- (v) Plant and machinery statement, indicating those deployed in the work, and their working status.
- (vi) Man-power statement, indicating individually the names of all the staff deployed in the work, along with their designations.
- (vii) Financial statement, indicating the broad details of all the running account payments received upto date, such as gross value of work done, advances taken, recoveries effected, amounts withheld, net payments, details of cheque payments received, etc.
- (viii) A statement showing the extra and substituted items submitted by the contractor, and the payments received against them, items pending for sanction/decision by the Department, broad details of the Bank Guarantees, indicating clearly their validity periods, broad details of the insurance policies taken by the contractor, if any, the advances received and adjusted.
- (ix) Progress photographs, in colour, of the various items/components of the work done upto date, to indicate visually the actual progress of the work. Quality assurance and quality control tests conducted during the month, with the results thereof.
- (x) Video graphy at various stages of construction right from the day of start of work to date of completion/occupation, covering all major events, inspections, visits by dignitaries etc.

4.0. INTERPRETING SPECIFICATIONS In interpreting the specifications, the following order of decreasing importance shall be followed in case of contradictions:

- a. Nomenclature of items given in the schedule of quantities in the tender.
- b. Particular Specifications
- c. Additional Conditions
- d. Special conditions
- e. Contract & Clauses as per Standard CPWD **General Conditions of Contract 2023 for Maintenance work and & corrected upto last date of submission of bid.**
- f. CPWD Specifications as mentioned in clause 11 under schedule-F and MORTH Specifications with upto-date correction slips.
- g. Relevant I.S. Codes or specification.
- h. Directions of Engineer-in-charge shall be applicable where none of the above is to be applied.

5.0 Rates

- 5.1 Tendered rates shall be inclusive of all taxes and levies payable under the respective statutes. (Except EPF & ESI payable to labour)
- 5.2 The rates for all items of work, shall unless clearly specified otherwise, include cost of all labour, materials and other inputs involved in the execution of the item.
- 5.3 Unless otherwise provided in the Schedule of quantities the rate tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths to the building and nothings extra shall be payable to him on this account.
- 5.4 Unless otherwise specified in the schedule of quantities, the rates for all items of work shall be considered as inclusive of pumping out or bailing out of water, if required for which no extra

payment will be made. This will include water encountered from any source such as rains, floods, sub soil water table being high and /or due to any other cause whatsoever.

- 5.5. The tenderer shall abide by the rules and regulations of respective GST Act. Necessary deductions on account of taxes shall be made on the gross value of the work done from the bills of the contractor as per the provisions of above stated Acts. Necessary certificates, if required, for tax deduction at source shall be issued to the contractor by the Engineer in Charge. However acceptability of the certificate by the concerned authority shall not be responsibility of Engineer-in-charge. The decision of the Engineer in Charge regarding quantum of tax to be deducted at source shall be final and binding on the contractor.
- 5.6 The contractor shall comply with proper and legal orders and directions of the local or public authority of municipality and abide by the rules and regulations and pay all fees and charges which he may be liable. Quoted rates shall be considered inclusive of all such fees and charges.

6.0 Material :

- 6.1 All the materials to be used on works shall bear BIS certification mark unless otherwise the make is specified in the item or special conditions appended with this tender document. In case BIS mark materials or the materials mentioned in the tender documents are not available, as per opinion of Engineer-in-Charge, which shall be final, the material to be used shall conform to CPWD specifications applicable in the tender or BIS Code. In such case Engineer-in-Charge shall satisfy himself about the quality of such material and give his approval in writing. Only articles classified as first quality by the manufacturers shall be used unless otherwise specified. All material not having ISI mark shall be tested as per relevant BIS specification. The Engineer-in-Charge may relax the condition regarding testing of the quantity of the materials required for the work if small. In all cases of use of ISI marked materials proper proof of procurement of materials from authentic manufacturers shall be provided by the contractor to the entire satisfaction of Engineer-in-Charge.
- 6.2 For any material brought prematurely at site without approval of Engineer-In-Charge, no advance payment shall be made for such material and Department shall not be responsible for its damage / deterioration. The makes of material have been indicated in the list of approved makes. The Engineer-in-charge shall reserve the right to instruct the contractor to remove the material which, in his opinion, is not as per specifications.
- 6.3 The contractor shall procure all the materials in advance so that there is sufficient time for testing and approving of the material and clearance of the same before use in work. The testing of the materials shall be performed at any laboratory approved by the Engineer-in-Charge.
- 6.4 The contractor shall bring sample of materials for approval of the Engineer-in-charge. Sample of approved materials must be kept at site for inspection/comparison with materials to be used in work. All materials shall be delivered with manufactures test certificates and technical catalogues, instructions manuals, wiring diagram etc. as required.
- 6.5 Samples of various materials required for testing shall be provided free of charge by the contractor. All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor.

- 6.6 The quantities of various material/items may vary from the quantities given in schedule of work. The agency shall bring the various items & materials as per actual requirement at site at the time of execution of work. Excess quantities shall not be accepted & paid by the department.
- 6.7 The agency has to make his own arrangement for storage and custody of materials. No separate storage accommodation shall be provided by the department. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor.
- 6.8 The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications.

7.0 Inspection at Manufacturer's site:

- 7.1 For items/equipment requiring initial inspection at manufacturer's site, the contractor will intimate the date of testing of equipment's/material at the manufacturer's works before dispatch. The department also reserves the right to inspect the fabrication job at factory and the successful tenderer has to make the arrangement for the same. The successful tenderer shall give sufficient advance notice regarding the dates proposed for such tests/inspection to the department's representative(s) to facilitate his presence during testing/fabrication. The Engineer-in-charge at his discretion may waive off such testing/fabrication. The cost of the Engineer's first visit to the factory will be borne by the Department. If subsequent visits are required on account of failure on the part of Contractor, the same shall be charged to him.

8.0 Electric Connection & Supply

- 8.1 The contractor shall make his own arrangements for obtaining electric connections, if required and make necessary payments directly to the department concerned.
- 9.0 The contractor shall leave such necessary holes, opening etc. for laying/burrying in the work, pipes, cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for electric, sanitary, air conditioning, fire fitting, P.A. system, telephone system, C.C.T.V., system etc. and nothing shall be paid for the same. The contractor shall leave such recesses, holes, openings, etc., as may be required for the electric and other related works. (For this purpose any required inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be arranged by the contractor and fix the same at the time of casting of concrete, stone work & brick work, if required, and nothing extra shall be payable on this account). Any Damage done to the building during the execution shall be made good immediately at his own cost to the entire satisfaction of the Engineer-in-Charge.
- 10.0 The chasing, cutting and making holes in the masonry and / or cement concrete and / or RCC works shall be done carefully without causing any damage to the structure. As far as possible, mechanical cutters & core cutting machines shall be used in a workman like manner, for concealing the pipelines and fittings. The chases / holes, so made, shall be made good with the cement mortar of mix 1: 3 (1 cement: 3 fine sand) after testing of the pipe lines for leakage. The cost of cutting cores in RCC, cutting holes in masonry & making good the same shall be inclusive in the respective item of drainage/water supply lines.

11.0 Co-operation & Co-ordination with other agencies:

- 11.1 The contractor for this work shall plan his work in such a manner so that the work (S) of other contractor (S) is /are not affected in any way. The work should be planned in a systematic manner so as to ensure proper co-ordination of various disciplines viz. sanitary & water supply, drainage, rain water harvesting, electrical, firefighting, information technology, communication & electronics and any other services.
- 11.2 Conduits for electrical wiring/cables will be laid in such a way that they leave enough space for Concreting and do not adversely affect the structural members. Nothing extra over the agreement rate shall be paid for the same.
- 11.3 The successful tenderer shall co-ordinate with other contractors and agencies engaged in the construction of building, if any, and exchange freely all technical information so as to make the execution of this works contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want of cooperation and coordination by the successful tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the successful tenderer himself.
- 11.4 Other agencies will also be executing simultaneously the works like other buildings, electrical cable laying, street lighting and horticulture works etc. for the same project along with this particular work. The contractor shall extend necessary facilities for the same and cooperate with such contractors. No claim in the matter shall be entertained.
- 11.5 The Contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupants of the adjacent properties and to the public in general. The Contractor shall take all care, as not to damage any other adjacent property or other services running adjacent to the plot. If any damage is done, the same shall be made good by the Contractor at his own cost and to the entire satisfaction of the Engineer-in-Charge. The Contractor shall use such methodology and equipment's for execution of the work, so as to cause minimum environmental pollution of any kind during construction. Further, the Contractor shall take all precautions to abide by the environmental related restrictions imposed by Madhya Pradesh Pollution Control Board, Govt. of Madhya Pradesh.
- 11.6 Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants / users of adjoining buildings. No claim what so ever on account of site constraints mentioned above or any other site constraints, inadequate availability of skilled, semi-skilled or unskilled workers in the near vicinity, non-availability of construction machinery spare parts and any other constraints not specifically stated here, shall be entertained from the Contractor.
- 11.7 The contractor shall conduct his 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 contractors or he shall arrange his work with that of the others in an acceptable and in a proper coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.

12.0 Safety Measures: -

- 12.1 The contractor shall also provide necessary barricade, informatory boards, lights and flagmen at either end of the execution area and at such intermediate points as required & as directed by the Engineer-in-charge at no extra cost.
- 12.2 The contractor shall maintain in good condition all work executed till the completion of the entire work entrusted to the contractor under this contract & nothing extra shall be paid on this account.
- 12.3 For form work use of solid timber and products involving solid timber shall not be permitted. 2
- 12.4 Any damage to work resulting from rains or from any other cause until the work is taken over by Department after completion of work shall be made good by the contractor at his own cost.
- 12.5 Any damage made by men, machinery, vehicles (LMVs or HMTVs), or any way to the public/private property such as services of electricity, water, telephone, LAN, road and path during execution of the work shall be repaired/redone by the Agency/Contractor. If contractor fails to repair/redone damage, the work shall be done on his risk as per the direction of the Engineer in charge. No any cost claim shall be entertained on this account.
- 12.6 All safety equipment such as Safety Helmets, Safety shoes, gloves, safety belt etc. shall be made available to site Engineers, Supervisors, labourers, masons fitters etc.

13.0 Handling of Material/Waste:-

- 13.1 Unserviceable materials shall have to be removed and disposed off to places as decided by the Engineer-in-charge. Scarified rubbish of brick aggregates of WBM etc. shall be spread on the shoulders / on the slope of embankments and suitably compacted for which nothing extra shall be paid.
- 13.2 The contractor shall take instructions from the Engineer-in-charge for stacking of materials in any place. Double handling of materials or excavated earth if required at any stage, shall have to be done by the contractor at his own cost. No excavated earth or building material shall be stacked on areas where other buildings, roads services of compound walls are to be constructed.
- 14.0 The contractor & his work people shall observe all relevant rules regarding security promulgated in which work is to be carried out by the controlling authority of the area.
- 15.0 For water supply, in case the contractor is required to make his own arrangement then including boring of tube well, if necessary, and nothing extra shall be paid by the Department for arrangement of water or on its treatment as per requirements laid down in IS: 456 / 2000 Para 5.4 or CPWD Specification 2019 Volume-I to II with upto date correction slips.
- 16.0 In case of any calamity or injury to any labour/ workmen etc. or loss / wastage of materials due to nature or insurgency, contractor shall have to bear the cost of compensation and no claim to this effect shall be entertained by the department.
- 17.0 The contractor shall keep himself ready for execution of any item / items of work / part of the item of work on emergent notice given by the Engineer-in-charge on day to day basis during rainy season at no extra cost.

- 18.0** The contractor shall provide at his own cost suitable weighing and measuring equipment's /instruments as may be necessary at site for checking purposes. All such equipment's instruments shall be got tested for calibration in advance from laboratory approved by the Engineer-in- Charge.
- 19.0** The work on item of internal finishing must be started as soon as the structure is completed.
- 20.0** The fittings used for items of water supply & sanitary works shall be of same make for all items from amongst the makes mentioned in the items.
- 21.0** The contractor shall be responsible for the protection of sanitary and water supply fittings and fixtures against pilferage and breakage during the period of installation and thereafter until the building is handed over.
- 22.0** The contractor shall give a performance test of the entire installation (S) as per standing specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
- 23.0** 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 restriction / instructions including issue of identity cards to all persons authorized by him to do work / visit the work site and nothing shall be payable on this account.
- 24.0** No claim for idle establishment & labour, machinery & equipment's, tools & plants and the like, for any reason whatsoever, shall be admissible during the execution of work as well as after its completion.
- 25.0 CLEANLINESS OF SITE**
- 25.1** The Contractor shall not stack building material /malba /muck/ rubbish on the land or road of the local development authority or on the land owned by the others, as the case may be. So the muck, rubbish etc. shall be removed periodically as directed by the Engineer-in-Charge, from the site of work to the approved dumping grounds as per the local byelaws and regulations of the concerned authorities and all necessary permissions in this regard from the local bodies shall be obtained by the Contractor.
- 25.2** Nothing extra shall be payable on this account except for material obtained from dismantling, which shall be paid in relevant agreement item. In case, the Contractor is found stacking the building material / malba as stated above, the Contractor shall be liable to pay the stacking charges / penalty as may be levied by the local body or any other authority and also to face penal action as per the rules, regulations and bye-laws of such body or authority. The Engineer –in-Charge shall be at liberty to recover, such sums due but not paid to the concerned authorities on the above counts, from any sums due to the Contractor including amount of the Security Deposit and performance guarantee in respect of this contract agreement.
- 26.** If the complaints not attended by agency after one week of their registration in complaint register, recovery @ Rs. 100/- per day on day to day basis will be made in subsequent Running bills till the complaint attended by the agency.

PARTICULAR SPECIFICATIONS

1.0 General

- 1.1 Wherever any reference to any Indian Standard Specification occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued thereto or revisions thereof, if any, upto the date of receipt of tenders.
- 1.2 Unless otherwise specified in the schedule of quantities, the rates for all items of work shall be considered as inclusive of pumping out or bailing out water, if required for which no extra payment will be made. This will include water encountered from any source such as rains, floods, sub soil water table being high and/or due to any other cause whatsoever.
- 1.3 The work shall be executed and measured as per metric dimensions given in the Schedule of quantities, drawings etc. (FPS units wherever indicated are for guidance only).

2.0 The following modifications to the above specifications and some additional specifications shall however apply.

- 2.1 All stone aggregate and stone ballast shall be of hard stone variety to be obtained from approved quarries or to be got approved by the Engineer-in-charge.
- 2.2 Coarse sand should be obtained from approved sources or any other source to be got approved by the Engineer-in-charge and screened as required. The same shall be clean and sharp angular grit type. If the sand brought to site is dirty it must be washed in clean water.
- 2.3 Cast iron pipes and fittings without ear shall be used. However, pipes and fittings with ears may be accepted without any extra payment. In such cases, clamps are not required for fixing and no extra payment will be made for fixing the pipes.
- 2.4 The rates for all items of work, shall unless clearly specified otherwise, include cost of all labour, materials, scaffolding and other inputs involved in the execution of the item at all floors and heights.
- 2.5 To avoid displacement of bars in any direction and to ensure proper cover, only factory made round type cover blocks as approved by Engineer-in- Charge should be used for R.C.C. Work. Nothing extra shall be paid for this.

3.0 Embedding of pipes, conduits etc.

- 3.1 The brick work for the portions of the external wall of W.C. through which pipes are taken, will be done after the pipes are fixed as for a practicable.
- 3.2 All crossings, embedment etc. in walls and floors for water supply, drainage and sanitary pipes, fittings etc. shall be provided as per previously prepared detailed drawings for individual walls and floors so as to avoid cuttings of brick work and floors. All such areas shall be made good during finishing and nothing extra shall be paid for this.

4.0 STEEL WORK

- 4.1 The rate of T/angle iron frame shall include the following.
- a) M.S. tie of 16mm dia bar should be welded to M.S. frames at the bottom to keep the frames vertical in correct position. The tie shall be embedded in floor concrete. No tie is necessary for window frames.
 - b) M.S. frame for doors shall have 4 nos. M.S. lugs 15 x 3mm, 10cm long welded to each vertical member of the frame.
 - c) M.S. flat 25 x 8mm, 100mm long having machine threaded holes (No. of flats shall correspond to the No. of butt hinges to be fixed to door/window shutter) shall be welded at appropriate places at the back of the M.S. frames for fixing the required butt hinges to the frame with machine screws, M.S. flats 26 x 8mm 50mm long with machine threaded holes shall be welded to the back of the frame to receive the butt hinges for the cleats.
- 4.2 The M.S. plate 15 x 6mm thick for holding arrangements are to be provided and welded as per site conditions. The rate is inclusive of the cost of such clamps.
- 4.3 All welded steel work shall be tested for quality of weld as laid down in IS 822-1970 before actual erection.

5.0 WATER SUPPLY, DRAINAGE AND SANITARY INSTALLATIONS

- 5.1 The work shall in general be executed in accordance with CPWD Specifications 2019 Vol-I & II and as per approved drawings for services.
- 5.2 Before taking up the work, the contractor shall prepare integrated plan, drawings for various civil and electrical services under the scope of his contract showing details of fixing various pipe lines running horizontally and vertically and obtain approval of Engineer-in-Charge. Integrated services drawings shall conform to local Byelaws. The work shall be carried out as per approved integrated shop drawings for plumbing, sanitary, rain water pipe and drainage work.
- 5.3 The SCI/CI pipes and G.I. pipes, wherever necessary, shall be fixed to RCC columns, beams etc. with rawl plugs, or appropriate fasteners as approved by Engineer-in-Charge, and nothing extra shall be payable on this account. GI pipes shall be, wherever made to pass through wall / concrete, then it shall be done using protective sleeves around the pipes to protect it from damage, nothing extra shall be payable on this account.
- 5.4 Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should confirm to bye-laws and specifications of the Municipal Body / Corporation where CPWD Specifications are not available. The work of water supply, internal sanitary installation and drainage etc. shall be carried out as per local Municipal Corporation or such local body bye-laws. The contractor shall get the materials (fixtures/fittings) tested by the Municipal body/Corporation authorities wherever required at his own cost and after completion of work shall produce necessary completion certificates from such authorities.

6.0 FLOORING, SKIRTING, DADO, TILE WORK, TREADS & RISERS OF STEPS, JAMBS, SILLS & SOFFITS

- 6.1 Nothing extra shall be payable for using combination of marble, granite, tiles and kota in the required pattern at various locations to make line and level unless otherwise specified.
- 6.2 Flooring in toilets, verandah, kitchen, courtyard and at other places if required shall be laid to the required slope/gradient as per the directions of the Engineer-in-Charge and nothing extra shall be paid on account of the same.
- 6.3 The pattern, spacing and locations of joints shall be as per drawings and direction of the Engineer-in-Charge and nothing extra shall be paid on account of the same.

SPECIAL CONDITIONS

- 1.0** The contractor will have to work according to the programme of work, decided by the Engineer-in-charge for which purpose the contractor should submit a tentative program of the work within one month from the date of start of the work. The contractor shall also construct a sample unit, complete in all respects within time specified by the Engineer-in-charge and this sample unit shall be got approved from the Engineer-in-charge before mass construction is taken up. No extra claim whatsoever beyond the payment due at agreement rates will be entertained from the Contractor on this account.
- 2.0** The contractor shall take instructions from the Engineer in charge for stacking of materials in any place. No excavated earth or building material shall be stacked on or near as where other buildings, roads, services or compound walls are to be constructed.
- 3.0** The work shall be carried out in accordance with the Architectural drawings and structural drawings. The structural and architectural drawings shall have to be properly correlated before executing the work. In case of any difference noticed between architectural and structural drawings, final decision, in writing, of the Engineer-in-charge shall be obtained by the contractor. In case of any discrepancy in the item given in the schedule of quantities appended with the tender and architectural drawings related to the relevant items, the former shall prevail unless and otherwise given in writing by the Engineer in charge. Samples shall be prepared before starting particular items of work for prior approval of the Engineer in charge and nothing extra shall be payable on this account.
- 4.0** All the material to be used on works shall bear ISI certification mark unless otherwise the make is specified in the item or special conditions appended with this tender document. In case ISI mark materials or the materials mentioned in the tender documents are not available, as per opinion of Engineer-in-charge, which shall be final and binding, the material to be used shall conform to CPWD specifications applicable in this tender or IS Code. In such cases Engineer-in-charge shall satisfy himself about the quality of such materials and give his approval in writing. Only articles classified as first quality by the manufacturers shall be used unless otherwise specified. All material not having ISI mark shall be tested as per relevant ISI specification. The Engineer in charge may relax the condition regarding testing if the quantity of the materials required for the work is small. In all cases of use of ISI marked materials proper proof of procurement of materials from authentic manufacturers shall be provided by the contractor to the entire satisfaction of Engineer in charge.
- 5.0** All materials equivalent to the one specified should be got approved by the Engineer- in- Charge before using the said materials in the work.
- 6.0** The contractor shall be responsible for the protection of sanitary and water supply fittings and fixtures against pilferage and breakage during that period of installation and thereafter until the building is handed over.
- 7.0** Any damage to work resulting from rains or from any other cause until the work is taken over by the Department after completion of work shall be made good by the contractor, at his own cost.

- 8.0** The contractor shall comply with the provision of any Government acts which relate to the work and to the regulations and laws of any local authorities. The contractor shall give all notices required by the said acts, laws etc. and pay all fees payable to such authorities and allow for those contingencies, cost of restorations etc. and all other fees payable to the local authorities.
- 9.0** Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to bye-laws and specifications of the municipal body/corporation where CPWD specifications are not applicable. The work of water supply, internal sanitary installations, drainage etc. shall be carried out as per local Municipal Corporation or such local body bye-laws. The contractor shall get the materials (fixtures/fittings) tested by the Municipal body/Corporation authorities wherever required at his own cost and after completion of work shall produce necessary completion certificates from such authorities.
- 10.0** The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by the rules and regulations and pay all fees and charges which he may be liable.
- 11.0** The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.

12.0 BRIEF WORDING OF ITEMS:

- 12.1** For the purpose of recording measurements and preparing running account bills, the underlined portions of the nomenclature of items included in the Schedule of Quantities shall be adopted as the abbreviated nomenclature of the particular item. The abbreviated nomenclature shall be taken to cover all the materials and operations as per the complete nomenclature of the relevant item in the agreement and relevant specifications. In the case of items for which abbreviated nomenclature is not indicated in the Schedule of Quantities, the full nomenclature shall be reproduced while recording measurements and preparing the bills. Also following abbreviations may be adopted.

- A) P/L for: Providing and Laying
- B) P/F for: Providing and Fixing.
- C) C.C. for: Cement Concrete.
- D) C.M. for: Cement Mortar.

- 12.2** In case of extra/substituted items of work for which brief wording is not provided in the agreement, the full nomenclature of the item shall be reproduced in the measurement books and bill forms of running bills.
- 12.3** The full nomenclature of the items shall be adopted in preparing abstract of final bill in the measurement books and also in the forms for final bills.

13.0. CONDITIONS FOR CEMENT: -

- 13.1 The contractor shall procure Ordinary Portland Cement (OPC) [conforming to IS: 8112] /Portland Pozzolana Cement (PPC) [conforming to IS: 1489 (Part-I)], as required in the work, from reputed manufacturers of grey cement as mentioned in List of Approved Make or from any other reputed cement Manufacturer. Superintending Engineer / CPM / ADG / SDG may change the brand of cement depending upon availability in local market but confirming to grade mentioned in NIT and only with the ISI mark, if warranted. The name of the manufacturers should be finalized after taking into consideration the availability and cost factor.
- 13.2 Supply of cement shall be taken in 50 Kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.
- 13.3 Use of PPC (Portland Pozzolana Cement) shall be used in RCC structures in accordance with the circular issued by the Directorate General of Works vide No. CDO/SE(RR)/Fly Ash (Main)/102 dt. 09.04.2009. The use of PPC shall be regulated as per the conditions stipulated in the circular dt. 09.04.2009.
- 13.4 The mechanical properties such as modulus of elasticity, tensile strength, creep and shrinkage of flyash mixed concrete or concrete using flyash blended cements (PPCs) are not likely to be significantly different and their values are to be taken same as those used for concrete made with OPC.
- 13.5 To control higher rate of carbonation in early ages of concrete both in flyash admixed as well as PPC based concrete, water/binder ratio shall be kept as low as possible, which shall be closely monitored during concrete manufacture.
- 13.6 If necessitated due to low water/binder ratio, required workability shall be achieved by use of chloride free chemical admixtures conforming to IS:9103. The compatibility of chemical admixtures and super plasticizers with each set OPC, fly ash and /or PPC received from different sources shall be ensured by trials.
- 13.7 In environment subjected to aggressive chloride or sulphate attack in particular, use of flyash admixed or PPC based concrete is recommended. In case, where structural concrete is exposed to excessive magnesium Sulphate, flyash substitution/content shall be limited to 18% by weight. Special type of cement with low C3A content may also be alternatively used. Durability criteria like minimum binder content and maximum water/binder ratio also need to be given due consideration in such environment.
- 13.8 Wet curing period shall be enhanced to a minimum of 10 days or its equivalent. In hot & arid regions, the minimum curing period shall be 14 days or its equivalent.
- 13.9 Subject to General Guidelines detailed out as above, PPC manufactured conforming to IS: 1489 (Part-I) shall be treated at par with OPC for manufacture of Design Mix Concrete for structural use in RCC.

- 13.10 Till the time, BIS makes it mandatory to print the %age of flyash on each bag of cement, the certificate from the PPC manufacturer indicating the same shall be insisted upon before allowing use of such cements in works.
- 13.11 While using PPC for structural concrete work, no further admixing of flyash shall be permitted.
- 13.12 The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-in-charge. The cement godown of the capacity to store a minimum of 2000 bags of cement or as decided by the NIT approving authority, in case less than 100MT cement is required for the work, shall be constructed by the contractor at the site of work for which no extra payment shall be made. For small maintenance works, NIT approving authority shall decide the requirement of the storage / godown.
- 13.13 The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-charge at any time.
- 13.14 The cement shall be got tested by Engineer-in-charge and shall be used on work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laboratories. All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor.
- 13.15 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditions therein. In case Cement consumption is less than theoretical consumption including permissible variation, work is to be rejected & in case of excess consumption, no adjustment need to be made.
- 13.16 Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-charge.
- 13.17 Damaged cement shall be removed from site immediately by the contractor on receipt of notice in writing from the Engineer-in-charge. If he does not do so within three days of receipt of such notice, the Engineer-in-charge shall get it removed at the cost of the contractor.
- 13.18 Cement should be kept in godowns under double locks and keys and its consumption account invariably maintained, whether the cement is supplied departmentally or arranged by the contractor. A register should be maintained at the site of each work costing above Rs. 20,000.00. This register should contain the columns as shown in Appendix-30. (CPWD Works Manual 2019, SOP No. 3/14).

The pages of the register should be machine numbered and each page initialed by the EE. The cement godown and the register are required to be checked by the AE/EE in-charge of the work as per following schedule.

At least weekly or fortnightly, respectively in case of works at the Headquarters of AE/EE.

Whenever they visit the site of work in case of works located outside the Sub-Divisional / Divisional Head Quarters.

14.0 CONDITIONS FOR REINFORCEMENT STEEL:

- 14.1 The modified guidelines for procurement of steel are given below:
- 14.1.1 For reinforced cement concrete or pre-stressed concrete works, the reinforcement bars shall consist of the following grades conforming to IS 1786 : 2008 (Indian Standard specification for high strength deformed steel bars and wires for concrete reinforcement): Fe 500D, Fe500S and Fe 550D.
- 14.1.2 The contractor shall obtain manufacturer's certificate stating the process of manufacture, chemical composition and test sheet giving result of each mechanical test applicable to the material purchased and submit it to be Engineer-in-Charge. Each test certificate shall indicate the number of the cast to which it applies, corresponding to the number or identification mark to be found on the material.
- 14.1.3 The Engineer-in-Charge shall get each consignment tested for both chemical composition and physical properties (including bend and re-bend test) as specified in IS: 1786 from NABL accredited laboratory or any Government laboratory.
- 14.2(a) Reinforcement bar is one of the most important building materials. Its quality directly affects the life span, resistance to earthquake and durability of the structure. In order to ensure consistent quality of rebars, the contractor shall procure IS marked TMT bars of various grades from the steel manufactures such as SAIL (CRS TMT Bars), RINL (HSCRM Rebars with corrosion resistant elements), Tata (Tata Tiscon CRS), JSW (Neosteel CRS), JSPL (Jindal CRS TMT Steel). **Only Corrosion Resistant Steel (CRS) rebars shall be used** as per (DG Circular No. CSQ/SE(TAS)/EE(TAD)/Steel/2021/50-H, dated 17/02/2021 & CSQ/SE(TAS)/Steel/ 2022/257-H, dated 23/06/2022).
- (b) **In case, corrosion resistant TMT Bar as per (DG Circular No. CSQ/SE(TAS)/EE(TAD)/Steel/2021/50-H, dated 17/02/2021 & CSQ/SE(TAS)/Steel/2022/257-H, dated 23/06/2022) is not available in the market normal TMT Bar of same grade shall be allow only after due application by the contractor stating difficulty and not readily availability of the CRS reinforcement steel that too with prior approval of competent authority of the department only then in such situation, cost reduction at rate of Rs. 3.00 per kg of steel reinforcement shall be made.**
- 14.3 Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time of written orders from the Engineer-in-Charge to do so.
- 14.4 The steel reinforcement bars shall be brought at site in bulk supply of 10 tonnes or more, or as decided by the Engineer-in- charge.
- 14.5 The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

- 14.6 For checking nominal mass, tensile strength, bend test, re-bend test etc. specimen of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

Size of bar	For consignment below 100 tonnes	For consignment above 100 tonnes
Under 10 mm dia bars	One sample for each 25 tonnes or part thereof	One sample for each 40 tonnes or part thereof
10 mm to 16mm dia bars	One sample for each 35 tonnes or part thereof	One sample for each 45 tonnes or part thereof
Over 16mm dia bars	One sample for each 45 tonnes or part thereof	One sample for each 50 tonnes or part thereof

- 14.7 The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. Testing charges payment will be regulated as per para 17.0 (page no. 47) of NIT & as per Clause-10A of GCC.
- 14.8 The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.
- 14.9 Steel brought to site and remaining unused shall not be removed from site without the written permission of Engineer-in-Charge.
- Reinforcement including authorized spacer bars and laps shall be measured in length for different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
 - The standard sectional weights referred to shall be as in Table 5.4 in para 5.3.4 in CPWD specifications 2019 Vol. I will be considered for conversion of length of various sizes of TMT bars in to standard weight.
 - Record of actual sectional weights shall also be kept dia. wise and lot wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer in Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight.
 - If the derived weight as in sub-para (iii) above is less than the standard weight as in sub-para (ii) above, then the Derived Actual Weight shall be taken for payment.
 - If the derived actual weight is found more than the standard weight, than standard weight as worked out in sub para (ii) above shall be taken for payment. Nothing shall be paid extra for the difference in Derived/ Actual Weight and standard weight.
- 14.10 Every care should be taken to avoid mixing different types of grades of bars in the same structural members as main reinforcement to satisfy relevant clause of IS: 456. In case of buildings, wherever the situation necessitates, the change over shall be permitted only from any one level onwards. In case of foundations, all foundation elements (footings and grade beams) shall have the same kind of steel. In the case of columns, all structural elements up to the level of change, where the change-over is taking place should have the same kind of steel as those in columns.

- 14.11 The reinforcing steel brought to site of work shall be stored on brick / timber platform of 30/40-cm height, nothing extra shall be paid on this account.

14.0(A) Special Condition for Structural Steel (Tee, Angle, Channel, Structural Tubes and plates & R.S. Joist)

- 14.1(A) The contractor shall procure Structural steel (Tee, Angle, Channel, Structural Tubes and plates & R.S. joist) from primary producers (SAIL, Tata Steel Ltd, RINL, Jindal Steel & Power Ltd. and JSW steel Ltd.).
- 14.2(A) Samples shall be taken and got tested by the Engineer-in-charge confirming to relevant BIS code. In case the test results indicate that the structural steel arranged by the contractor does not conform to the specification, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week's time or written orders from the Engineer-in-charge to do so.
- 14.3(A) The structural steel shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account.
- 14.4(A) The contractor shall supply free of charge the structural steel sample required for testing including its transportation to testing laboratories. Testing charges payment will be regulated as per para 17.0 (page no. 47) of NIT & as per Clause-10A of GCC.
- 14.5(A) The steel brought to site and the steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.
- 14.6(A) In case contractor is permitted to use structural steel other than above mentioned make as in 13.0(A) then:
- (1) Base Price of Structural Steel as stipulated under Schedule 'F' shall be reduced by Rs. 3500/-MT ~~However, for operation of provision of clause 10CC in such case the indices for structural steel will be considered same as indicated in Indices issued by DG. CPWD for primary producer.~~
 - (2) The quoted rate of relevant item of tender of structural steel work shall be reduced by Rs. 4.00 per Kg.
- 14.7(A) If the actual weight of structural steel to be used in the work differs from standard weight, the following procedure shall be followed for arriving at the quantity for payment.
- (a) If the actual weight is more than standard weight only standard weight shall be considered for payment.
 - (b) If the actual weight is less than standard weight but within the permissible vitiation, only actual weight shall be considered for payment.

15.0 REINFORCED CEMENT CONCRETE WORK

15.1 DESIGN MIX CONCRETE

- 15.1.1 The RCC work shall be done with Design Mix Concrete unless otherwise specified. In the nomenclature of items wherever letter M has been indicated, the same shall imply for the Design Mix Concrete. For the nominal mix in RCC, CPWD Specifications shall be followed. The Design Mix Concrete will be designed based on the principles given in IS: 456-2000. The contractor shall design mixes for each grade of concrete indicating that the concrete ingredients and proportions will result in concrete mix meeting requirements specified. In case of use of admixture and or white cement, the mix shall be designed with these ingredients as well.

- 15.1.2 The concrete mix design will be carried out by the contractor at laboratories / Test houses as enumerated at para 17.0 (page no. 47) of NIT & as per Clause-10A of GCC. Ready mix concrete shall conform to accepted design mix.
- 15.1.3 In the event of all the above laboratories being unable to carry out the requisite design / testing the contractor shall have to get the same done from any other laboratory with prior approval of the Engineer-in-Charge.
- 15.1.4 The contractor shall submit the mix design report from any of above approved laboratories for approval of Engineer-in-Charge **within time given by Engineer-in-Charge** from the date of issue of letter of acceptance of the tender.
- 15.1.5 In case of white Portland cement and the likely use of admixtures where CC/RCC is done with concrete pumps in concrete with ordinary Portland/white Portland cement, the contractor shall design and test the concrete mix by using trial mixes with white cement and /or admixtures also, for which nothing extra shall be payable.
- 15.1.6 Each time when there is change of source or characteristic properties of the ingredients used in the concrete mix during the work, a revised mix design shall be done and approval obtained from the approved Laboratory or as per the direction of the Engineer-in-Charge. Preferably only single source of cement shall be kept for the work. In case contractor decides to use more than one source of approved cement brand then for each brand separate design mix shall be done and got approved by Engineer-in-charge.
- 15.1.7 The Mix shall be designed to produce the grade of concrete having required workability and characteristic strength not less than as specified.
- 15.1.8 The mix design for a specified grade of concrete shall be done for a target mean compressive strength $T_{ck} = F_{ck} + 1.65 S$

Where,

F_{ck} = Characteristic compressive strength at 28 days.

S= Standard deviation

The standard deviation for each grade of concrete shall be calculated separately.

The degree of quality control for this work is “Good” for which the standard deviation (s) obtained for different grades of concrete shall be as follows:-

Grade of Concrete	For “Good” quality of control
M 20	4.0
M 25	4.0
M 30	5.0
M 35	5.0

- 15.1.9 Out of the six specimen of each set, three shall be tested at seven days and remaining three at 28 days. The preliminary tests at seven days are intended only to indicate the strength likely to be attained at 28 days. All cost of mix designing and Testing charges payment will be regulated as per para 17.0 (page no. 47) of NIT & as per Clause-10A of GCC.
- 15.1.10 The samples of cement, aggregate (fine & coarse) to be sent to the laboratories shall be sealed in the presence of the Engineer- in -Charge and shall have his signature and cost of packaging, sealing, transportation, loading, unloading, Testing charges payment will be regulated as per para 17.0 (page no. 47) of NIT & as per Clause-10A of GCC.
- 15.1.11 Notwithstanding the approval granted by Engineer-in-Charge in aforesaid manner, the contractor shall be fully responsible for quality of concrete including input control, transportation and placement etc.
- 15.1.12 The Engineer-in-Charge reserves the right to exercise control over the ingredients, water and admixtures, purchased, stored and to be used in the concrete including conducting of tests for checking quality of materials fit or unfit for use in production of mix.
- 15.1.13 The Contractor shall submit the test data of the material used for concrete mix- design in the laboratories, so the material being used at site can be compared with those data / size etc.
- 15.1.14 In case of change of parameters of ingredients (fine aggregate, cement, coarse aggregate) fresh concrete mix-design to be done as mentioned in paras 14.1.1, 14.1.2 & 14.1.6 to 14.1.10 above and got approved from the Engineer-in-Charge before execution.
- 15.1.15 The contractor shall make arrangement to install a mini laboratory at site for accelerated testing of design mix concrete as per IS : 9013. The department reserves right to take samples of design mix concrete from the mass production of the concrete for testing and compare with the laboratory's results.
- 15.1.16 Nothing shall be paid extra for installation and cost of batching plant and other arrangement for making necessary test of design mix concrete.
- 15.1.17 The item of design mix cement concrete shall be inclusive of all the ingredients including admixtures if required, labour, machinery T & P etc. (except shuttering which will be measured & paid for separately) required for a design mix concrete of required strength and workability. **The rate quoted by the agency shall be net & nothing extra shall be payable on account of change in quantities of concrete ingredients like aggregates and admixtures as per the approved mix design.**

- 15.1.18 Concrete shall be handled from the place of mixing to the place of final deposit / placement by methods, which prevent segregation, or loss of any ingredients and contamination.
- 15.1.19 Where concrete is conveyed by chutes, the chute shall be made of metal or fitted with metal lining. The approval of the Engineer-in-charge shall be obtained for the use of chutes in excess of 3 metres length and in such cases the concrete shall be remixed if so required by the Engineer-in-Charge or closed bottom buckets shall be used. If concrete is placed by pumping, the conduit shall be primed properly. Once pumping is started, it shall not be interrupted as far as possible. Concrete shall not be dropped into place from a height more than 1.5m.
- 15.1.20 Concreting of any portion of the work shall be done in presence of the representative of the Engineer-in-Charge and shall be done only after approval of the Engineer-in-Charge.
- 15.1.21 Concreting shall be carried out continuously between constructions joints shown on the drawings or as agreed by the Engineer-in-Charge. The contractor shall closely follow the sequence of concreting where it is specified in the drawings. If concreting is interrupted before reaching the predetermined joint an approved construction joint shall be provided. Construction joints shall be minimized as far as possible. These shall be set at right angles to the general direction of the member. The surface film of the first placed concrete should preferably be removed while the concrete is still green to expose the aggregate and leave a sound irregular surface. However care shall be taken not to disturb the concrete already laid.
- 15.1.22 **Admixtures:** Wherever required, admixtures of approved quality only shall be mixed with concrete as specified. The admixtures shall conform to IS: 9103. The chloride content in the admixture shall satisfy the requirements of BS: 5075. The total amount of chlorides in the admixture mixed concrete shall also satisfy the requirements of IS 456-2000.
- 15.1.23 **Use of ready mixed concrete (RMC) may also be permitted, with prior approval of Engineer-in-Charge, without any extra payment.** Separate account of design mix concrete and RMC shall however be kept. The ready mixed concrete shall conform to the requirement of durability, workability and strength as laid down for design mix concrete.
- 16.0 Conditions for Ready-mix concrete:-**
- (a) The contractor can use concrete from RMC plants also with prior approval of the Engineer-in-charge, instead of preparing the same in central batching plant at site within agreement item of Batch Mix Plant without any extra cost, looking to expedite

the progress and need of work. However for procuring RMC from approved plant the contractor shall follow the following conditions. Nothing extra shall be payable to the contractor for procuring RMC from the external plant.

- (b) For procurement of ready mix concrete from approved RMC plants, the contractor shall, within a 07 days of award of the work, submit list of at least three RMC plant companies of repute along with details of transit mixer and pumps etc. to be deployed indicating name of owner / company, its location capacity, technical establishment, past experience and text of MOU proposed to be entered between purchaser (the contractor) and supplier (RMC Plant). The Engineer – in – Charge shall give approval in writing (subject to draw of MOU). The contractor shall draw the MOU with approved RMC plant owner / company and submit to Engineer-in- Charge within a week of such approval. The contractor will not be allowed to purchase ready mixed – concrete without completion of above stated formalities for use in this project. Notwithstanding the approval granted by Engineer-in-charge in aforesaid manner, the contractor shall be fully responsible for quality of concrete including input control, transportation and placement etc.
- (c) The Engineer-in-charge will reserve right to inspect at any such stage and reject the concrete if he is not satisfied about quality of product. The contractor should therefore draw MOU / agreement with RMC owner / company very carefully, keeping all terms and conditions / specifications forming a part of this tender document. Including the following controls.
 - i. The Engineer-in-charge reserves the right to exercise control over the ingredients, water and admixtures purchased, stored and to be used in the concrete including conducting of tests for checking quality of Materials, recordings of test results and declaring the Materials fit or unfit for use in production of mix.
 - ii. Calibration checks of the RMC.
 - iii. Weight and quantity check on the ingredients, water and admixtures added for batch mixing.
 - iv. Time of mixing of concrete.
 - v. Testing of fresh concrete, recordings of results and declaring the mix fit or unfit for use. This will include continuous control on the workability during production and taking corrective action.
 - vi. For exercising such control, the Engineer-in-charge (if required) shall periodically depute his authorized representative at the RMC plant. It shall be responsibility of the contractor to ensure that all-necessary requirement manpower & facilities are made available to Engineer-in-charge and / or his authorized representative at RMC plant.
- (d) **The Agency shall setup the minimum 1 fully semi-automatic batching and mixing plant having capacity not less than 4 cum/hour / Flori at the site as per site condition. The photographs for the same are attached for reference.**



- (e) All required relevant records of RMC shall be made available to the Engineer-in-charge or his authorized representative. Engineer-in-charge shall, as required specify guidelines & additional procedures for quality control & other parameters in respect of materials and production & transportation of concrete mix, which shall be binding on the contractor & the RMC plant.
- (f) 43 grade OPC/ PPC as per schedule of the contract (conforming to relevant IS Codes) of brand / make / source as approved by Engineer-in-charge shall only be used for production of concrete.
- (g) The RMC produced concrete be accepted by Engineer-in-Charge at site after receipt of the same after fulfilling all the requirements of mix mentioned in the tender documents.
- (h) The item of design mix cement concrete shall be inclusive of all the ingredients including admixtures if required, labour, machinery, T&P etc. required for a design mix concrete of required strength and workability. The rate quoted by the agency shall be net & nothing extra shall be payable on account of change in quantities of concrete ingredients like cement and aggregates and admixtures etc. as per the approved mix design.
- (i) Ready mix concrete shall be arranged in quality as required at site of work by transportation in a transit mixer. [The general conditions of transit mixer and other requirement shall conform to IS:5892.] Ready mix concrete shall be supplied as per the pre-agreed schedule approved by Engineer-in-charge.
- (j) All other operations in concreting work like Mixing, Slump, transportation, laying / placing of concrete, compaction, curing etc. not mentioned in this particular specification for Design Mix Concrete shall be as per IS : 456-2000 or amended thereafter.
- (k) For design mix concrete of RCC other than those specified above, the contractor shall use the Design mix concrete produced by a central batching and mixing plant at his own cost. The contractor, if he so desires, can arrange the design mix concrete also from Ready mix concrete producer after obtaining written approval of the Engineer-in-charge. Nothing extra whatsoever shall be payable on this account.
- (l) Ready mix concrete shall be arranged in quantity as required at site of work. The ready mix concrete shall be supplied as per the pre-agreed schedule approved by Engineer-in-charge. Nothing extra shall be payable on this account.
- (m) The item of design mix cement concrete (produced at site as well as arranged from RMC producer) shall be inclusive of all the ingredients including admixtures if required, labour, machinery, transportation etc. (except reinforcement and shuttering

which will be measured & paid as per provision of contract) required for a design mix concrete of required strength and workability. The rate quoted by the agency shall be net & nothing extra shall be payable on account of changes in quantities of concrete ingredients like cement and aggregates and admixtures etc. as per approved mix design except for quantity of extra cement payable as per schedule of quantity. Other operations in concreting work like Mixing, Slump, transportation, laying / placing of concrete, compaction, curing etc. not mentioned in this particular specification for Design Mix of Concrete shall be as per IS : 456-2000.

17.0 Testing Charges of Materials and List of approved Labor tries:-

All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges, design mix charges shall be borne by the contractor.

The name of approved laboratories for testing are as below:-

1. Any Indian Institutes of Technology.
2. Any National Institutes of Technology
3. Any MP State Govt. Engineering College.
4. Any Central / State Research Centers.
5. Labs approved by Regional Office, CPWD, Bhopal/SE(Indore).

18.0 Water proofing treatment

- 18.1 The water proofing items should be got done through the specialized firms approved by the competent authority after submission of the documents of experience of similar work, technical data etc.

18.2 GUARANTEE FOR WATER PROOFING TREATMENT

Five years guarantee in prescribed perform attached must be given by the contractor for the water proofing treatment. In addition 10% (ten percent) of the cost of these items would be retained as guarantee to watch the performance of the work executed. However, half of this amount (withheld) would be released after two monsoon seasons after the date of completion of the work, if the performance of the waterproofing works is satisfactory. The remaining withheld amount can be released after completion of five monsoon seasons after 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 and, if not attended to, the same shall be got done by other agency at the risk and cost of the contractor. In any case the guaranteeing firms during the guarantee period should inspect and examine the treatment once in every year and make good any defect observed. However, the security deposit can be released in full, if bank guarantee of equivalent amount for five (5) years is produced and deposited with the department.

19.0 VARIATION IN CONSUMPTION OF MATERIALS

19.1 The variation in consumption of material shall be governed as per CPWD specification and clauses of the contract to the extent applicable. The following specific clauses shall govern the variation in consumption of pig lead.

- i) The pig lead for caulking of joints of SCI pipes shall be issued as per theoretical consumption for SCI pipes of size 100mm, 75mm, 50mm at 0.98 kg., 0.88 kg, 0.77 kg per joint respectively.
- ii) Over and above the theoretical quantities of lead as worked out a variation of 5% shall be allowed for wastage etc. Any difference between the actual consumption of pig lead and theoretical consumption worked out on the above basis including the authorized variation shall be recovered at the rate mentioned under schedule “F”. Where the pig lead is arranged by the contractor, variation of 5% will be allowed. In case variation is on the higher side 5% will be allowed. In case the variation is on the lower side, the quantity of the pig lead less used shall be recovered from the contractor at market rate to be determined by the Engineer-in-charge whose decision in the matter will be final and binding.

20.0 Materials obtained from dismantle:

20.1 The contractors in course of their work should understand that all materials (e.g. stone and other materials) obtained in the work of dismantling excavation etc. will be considered Government property and may be issued to the contractor if required for use in this work at rates approved by the Engineer-in-charge in case credit items of dismantled items are not taken in schedule of quantity.

21.0 Materials brought by the contractor.

- 21.1 The contractors shall have to deposit the approved paints of required color and shade as per actual requirements of the work to be done, with the Engineer-in- Charge at his departmental stores at the site of work.
- a. The paint will be issued to the contractor from time to time according to his requirements for the work in the same manner as the issue of materials stipulated to be issued departmentally.
 - b. Similar procedure shall be followed for water proofing compound.
 - c. The day-to-day receipt and issue quantity account of water proofing compound, paints etc. shall be maintained by the Junior Engineer and signed daily by the contractor or his authorized agent.
 - d. Empty containers should not be removed without the written permission of the Engineer-in charge.

SPECIAL CONDITIONS (REPAIR WORK)

1.0 SCAFFOLDING SYSTEM:

All the scaffolding work required for the execution of work, either internal or external shall be provided by the contractor. It shall be provided strictly with double scaffolding system with all the accessories etc., with adjustable suitable working platforms to access the area to be repaired safely and with ease for surface preparation, application of repairs, inspection etc. It shall be able to take all incidental loads. It should also cater to the safety features for workmen. It shall be stiffened with bracings, runners, connection with the building etc. It shall be ensured that no damage is caused to the building due to scaffolding. Inadvertent damages caused, if any, shall be made good by the contractor at his own cost and to the entire satisfaction of the Engineer-in-Charge.

2.0 PROTECTIVE FABRIC SCREENS:

Protective Fabric screening shall be provided by the contractor with PVC sheet, Hessian cloth etc. covering full height of the structure. **Nothing extra shall be payable on this account.**

It shall be provided by properly stitching the screen, having adequate lapping on sides to prevent any rubbish from falling outside while demolishing, dismantling, guiniting, plastering etc. and to protect passers -by from the falling debris. Screen material shall be fixed by suitable means to the frames of scaffolding etc. and it is to be ensured that sagging of screen does not hinder the repair process.

The contractor shall maintain the protective screen in acceptable working conditions for the entire duration of the repair work as required by the Engineer-in-Charge. All the windows, ventilators, RCC jallis and openings shall be suitably covered and protected, in advance so as not to cause any damage while doing the repair work. If any damage is caused or glass panes are broken, these shall be made good by the contractor at his own cost and to the entire satisfaction of Engineer-in-Charge.

3.0 TEMPORARY BARRICADING:

Proper temporary barricading, on ground, shall be carried out by the contractor to physically define the boundaries of the site of repair / construction activity, for restricted entry of only those involved with the work and to prevent any accidents, but with minimum inconvenience to the residents / occupants. Nothing extra shall be payable on this account.

4.0 FALSE WORK:

The false work required to be carried out to facilitate repair work shall be provided by the contractor and nothing extra shall be payable on this account. Before structural repair is carried out, the structural member to be repaired should be relieved of stresses and strains and for this the self load and imposed load over the structural members being repaired should be suitably transferred to the false work and adjoining existing structural members safely taking into account the capacity of the false work and also of the adjoining structural members. Also sequence of fixing and removal of false work including safe load transfer should be pre - decided and followed.

False work shall be strong enough to withstand all the dead and live loads and forces / impacts caused by dismantling, chipping, ramming, vibration of concrete and other incidental loads

imposed over it including that of working platform, workers and personnel etc. during and after repair work. It shall be made sufficiently rigid by using adequate ties and braces etc. De-shuttering and removal of false work should be done after the lapse of specified time and re-propping done, if required, after de-shuttering, as approved by the Engineer-in-Charge.

False work shall be carried out using steel tubular sections with extension pieces or with steel built up sections to ensure relief to structural members from stresses. No timber ballies etc. shall be used.

- (a) The columns to be repaired shall be supported for full height of the building, to relieve its axial load through its adjoining intersecting beams and / or slabs etc. all floor levels. This shall be done even if only one storey length out of many stories lengths of the same column has been identified for structural repairs. The loads relieved are required to be transferred directly through props and supports on to the building foundation system or to the firm ground. Under no circumstances, the column load above this storey should be transferred by transfer through adjoining upper or lower intersecting beams alone.
 - (b) The beams to be repaired shall be relieved of stresses and strains by suitably supporting the RCC slabs, which are contributing load to that beam. To avoid over stressing of any existing flexural members receiving the transferred load of the distressed beam, the steel props and supports shall be taken and continued to the firm ground. For upper stories the steel props shall be taken at least two stories below or as directed by the Engineer-in-Charge.
 - (c) The RCC slabs to be repaired shall be relieved from stresses by prop and support and simultaneously care to be taken to avoid its collapse during the repair process. However, supports should preferably be, not farther than 1.2 m X 1.2m. To avoid over stressing of existing flexural members receiving load of the distressed RCC slab, the steel props and supports provided shall be taken and continued to the firm ground or at least two slabs below or as directed by the Engineer-in-Charge.
- 4.0** All warning boards and displays, such as REPAIR WORK IN PROGRESS, KEEP AWAY FROM BUILDING, NO PARKING etc. along with sufficient supervisory staff on ground shall be provided by the contractor, wherever required. Nothing extra shall be payable on this account.
- 5.0** Since the work is to be carried out in the occupied buildings, proper sequencing as regards dismantling of sanitary pipes, GI pipes, toilets etc. shall be done so as to cause minimum inconvenience to the occupants besides taking care of the constraint of keeping the system functional during repairs by making temporary arrangements, as required. Nothing extra shall be payable on this account.
- 6.0** The area of dismantling / guiniting / re-plastering / repairing as per relevant items etc. given in the tender may have to be got done in patches, at different heights / levels also for which nothing extra shall be payable.
- 7.0** Lifting of materials such as cement, sand, wooden planks etc. through the building lifts is prohibited. No mixing or off loading etc. of mortar / cement concrete etc. over the open terrace /

flooring shall be permitted. Arrangements as deemed it shall be made by the contractor for mixing/ lifting/off loading all materials etc. at no extra cost.

8.0 PRODUCT DELIVERY STORAGE AND HANDLING :-

- 8.1 The contractor shall construct storage space for chemicals and other materials to ensure that the storage conditions are as recommended by the manufactures.
- 8.2 All the materials shall be procured and delivered in sealed containers with labels equable and intact.
- 8.3 All the chemicals (polymers, rusticides, epoxy water proofing compound etc) shall be procured in convenient packs, say 20 litres (Kgs.) capacity packing only or as approved by the Engineer-in-Charge, and not in bigger capacity containers, say 200 liter (Kgs.) drums.
- 8.4 All required material shall be got approved, procured and deposited with the departmental supervisory staff. The material will kept in joint custody of the contractor and the department. The watch and ward of such material shall however, remain to be the responsibility of the contractor and no claim, whatsoever, on this account shall be entertained. Different containers of each chemical shall be serially numbered on packing and also consumed in that order. Day to day account of receipt, issue and balance will be regulated by the department and proper account shall be maintained at site of work in the prescribed form as per standard practice.
- 8.5 All the chemicals shall be procured by the contractor directly from the manufacturer or their authorized dealers and copies of challans / cash memos towards the quantity of various chemicals procured shall be made available by the contractor to the department and the same shall be kept in record. The name of manufacturers, manufacturer's product identification, manufacturer's mixing instructions, warning for handling and toxicity and date of manufacturing and shelf life shall be clearly and legibly mentioned on the labels of the each container.
- 8.6 The contractor shall submit for the chemicals procured, manufacturer's and /or authorized dealer's certificate regarding supplying and verifying conformance to the material specification, as specified.
- 8.7 All filled containers shall be handled in safe manner and in a way to avoid breaking container seals.
- 8.8 Empty containers of the chemicals should not be removed from site till the completion of work and shall be removed only with the written approval of the Engineer-in-Charge.
- 8.9 All arrangement for measuring, dosing and mixing of material / chemicals at site has to be made by the contractor. Nothing extra shall be payable on this account.
- 8.10 Contractor shall suitably advise his site Engineer and all the workers as regard safe handling of chemicals. Necessary protective and safety equipment's in form of hand gloves, goggles etc. shall be provided by the contractor at no extra cost and also used at site.
- 8.11 All incidental charges of any kind including cartage, storage and wastage and safe custody of material etc. shall be borne by the contractor and no claim, whatsoever, shall entertained on this account

GUARANTEE TO BE EXECUTED BY CONTRACTOR
FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF
WATER PROOFING WORKS.

This agreement made this _____ day of _____ Two Thousand _____ between _____ son of _____ (hereinafter called the guarantor on one part) and President of India (hereinafter called Government of the other part).

WHEREAS THIS agreement is supplementary to a contract (hereinafter called the contract) dated _____ and made between the GUARANTER OF THE ONE part and the GOVERNMENT of the other part, where by the contractor, interalia, undertook to render to buildings and structures in the said contract recited completely water and leak proof.

AND WHEREAS THE GUARANTER agreed to give a guarantee to the effect that the said structures will remain water and leak - proof for five years from the date of giving the water proofing treatment.

NOW THE GUARANTER 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 five years to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the guarantor will not be responsible for leakage caused by earthquakes or structural defects or misuse of roof or alterations 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 or construction adjoining to existing roof, where by water-proofing treatment is removed in parts :
- c) the decision of the Engineer-in-Charge with regard to cause of leakage shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defects being found, render the building water proof to the satisfaction of Engineer-in-Charge at his cost and shall commence the work for such 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 got done by the Department by some other contractor at the GUARANTER'S cost and risk. 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 execute the water proofing or commits breach the reunder, then the Guarantor will indemnify the principal and his successors against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of GUARANTER in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and/or cost incurred by the Government, the decision of the Engineer-in-Charge will be final and binding of the parties.

IN WITNESS WHERE OF these presents have been executed by the obligor _____ and by _____ and for and on behalf of the PRESIDENT OF INDIA on the day, month and year first above written.

SIGNED, sealed and Delivered by (OBLIGOR) in the presence of :

1. _____

2. _____

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

1. _____

2. _____

**GUARANTEE TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OF DEFECTS
AFTER COMPLETION IN RESPECT OF STRUCTURAL REPAIRS WORKS.**

This agreement made this day of two thousand andbetween..... Son of of(hereinafter called the GUARANTOR of the one part) and the PRESIDENT OF INDIA (hereinafter called the GOVERNMENT of the other part).

WHEREAS THIS AGREEMENT is supplementary to a contract (hereinafter called for contract) datedand made between the GUARANTOR of the one part and the GOVERNMENT of the other part, hereby the contractor interalia, under took to render the buildings and structures on the said contract completely structurally sound.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain sound and strong **for five years** from the date of completion of work.

NOW THE GUARANTOR hereby guarantee that structural repairs done by him will render the structures completely steady & strong and the minimum life of such repairs shall be five years to be reckoned from the date of the completion of works.

Provided that the guarantor will not be responsible for damage caused due to earthquake or misuse of buildings or alteration and for such purpose. The decision of the Engineer-in-Charge with regard to cause of damage shall be final and binding.

During this period of guarantee the guarantor shall make good all defects to the satisfaction of the Engineer-in-Charge at his cost and shall commence the work for such 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 got done by the Department by some other contractor at the GUARANTOR's cost and risk. The decision of the Engineer-in-Charge as to the cost, payable by the GUARANTOR shall be final and binding.

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

An amount equivalent to 2 % of item * will be deducted as from Bills as security and the same will be refunded after five years from the date of completion of work.

IN WITNESS WHEREOF these presents have been executed by the obligator
_____ and by _____ and for and on behalf of the
PRESIDENT OF INDIA on the day, month and year first above written.

SIGNED, sealed and Deliver red by (OBLIGATOR) in presence of

- 1.
- 2.

SIGNED FOR AND ON BEHALF OF THE PRESIDENT OF INDIA

BY

In the presence of:

- 1.
- 2.

**GUARANTEE TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OF DEFECTS
AFTER COMPLETION IN RESPECT OF ACRYLIC PAINT WORK.**

This agreement made this ----- day of ----- Two thousand and ----
----- between ----- son of ----- of -----

(hereinafter called the Guarantor of the part) and the PRESIDENT OF INDIA
(hereinafter called the Government of the other Part)

WHEREAS THIS AGREEMENT is supplementary to a contract (hereinafter called for Contract) dated ----- and made between the GUARANTOR of the one part and the GOVERNMENT of the other part, hereby the Contractor interalia, under took that the acrylic painting work done on building will remain non flaking and uniform colouring without patches.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to effect that the said Acrylic painting will remain non flaking and uniform colouring without patches for three years from the date of completion of work.

NOW THE GURANTOR hereby guarantee that Acrylic painting done by him will remain non flaking and uniform colouring without patches and the minimum guarantee period of such painting shall be three years to be reckoned form the date of the completion of work.

Provided that the guarantor will not be responsible for damage caused due to earthquake or misuse of buildings or alteration and for such purpose. The decision of the Engineer-in-Charge with regard to cause of damage shall be final and binding.

During this period of guarantee the guarantor shall make good all defects to the satisfaction of the Engineer-in-Charge at his cost and shall commence the work for such 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 got done by the Department by some other contractor at the GUARANTOR'S Cost and risk. The decision of the Engineer-in-Charge as to the cost, payable by the guarantor shall be final and binding.

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

An amount equivalent to 2% of items * will be deducted from Bills as security and the same will be refunded after three years from the date of completion of work.

IN WITNESS WHEREOF these presents have been executed by the obligator -----
----- and by ----- and for and on behalf of the PRESIDENT OF INDIA on the
day, month and year first above written.

SIGNED sealed and Delivered by (OBLIGATOR) in the presence of

1.

2.

SIGNED FOR AND BEHALF OF THE PRESIDENT OF INDIA
BY

In the presence of

1.

2.

On non-judicial stamp paper of minimum Rs. 100

**(Guarantee offered by Bank to CPWD in connection with the execution of contracts) Form of Bank
Guarantee for Earnest Money Deposit /Performance Guarantee/Security Deposit/Mobilization
Advance**

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

OR**

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

2. We, (indicate the name of the bank) (herein after referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs. (Rupees..... only) on demand by the Government within 10 days of the demand.
3. We, (indicate the name of the Bank), do here by undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees only)
4. We, (indicate the name of the Bank), further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending before any Court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.
5. We, (indicate the name of the Bank), further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner

Sr. Dman

A.E.(P)

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our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. We, (indicate the name of the Bank), further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, (indicate the name of the Bank), undertake not to revoke this guarantee except with the consent of the Government in writing.
9. This Bank Guarantee shall be valid up to unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date

Witnesses:

- | | |
|--|---|
| 1. Signature.....
Name and address | Authorized signatory
Name
Designation
Staff code no. |
| 2. Signature
Name and address | Bank seal |

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

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

LIST OF PREFERRED MAKES

Note:

1. The contractor shall obtain prior approval from the Engineer-in-Charge before placing order for any specific material or engaging any of the specialized agencies. The contractor shall make a detailed submittal with catalogues and highlighted proposed specification as well as full details of the works executed by the specialized agencies, as specified.
2. Wherever applicable, the Engineer-in-Charge may obtain prior approval from T.S authority for any material equivalent to that specified in the tender subject to proof being offered by the contractor for equivalence to his satisfaction.
3. Unless otherwise specified, the brand / make of the material as specified in the item nomenclature, in the particular specification and in the list of approved materials attached in the tender, shall be used in the work.
4. In case of non-availability of the brand specified in the contract the contractor shall be allowed to use alternate equivalent brand of the material subject to submission of documentary evidence of non-availability of the specified brand. The necessary cost adjustments on account of above change shall be made for the material.

- a. The following brands shall be used if not otherwise mentioned in the items

MATERIALS:

BRAND/MAKE

1.	Ordinary Portland Cement / Portland Pozzolana Cement	Ultra Tech, A.C.C., Ambuja, Birla Gold, Vikram, Shree Cement, J.K. Cement
2.	Reinforcement Steel	Sail, RINL, Jindal Steel & Power Ltd., JSW Steel Ltd, Tata
3.	Structural Steel/Tubes	Tata Steel, SAIL, RINL, Jindal, APL Apollo
4.	AAC Block	Siporex, Ultratech, Ecolite, J.K. Laxmi (Cement Ltd.), BILTECH, Kansal, Dlite Blocks, Orillite – Kota, Aerocon Build well Pbt. Ltd., Ujjain.
5.	AAC Block Adhesive	Ferrous crete (Ferro-1188), ARDEX ENDURA (White Star), Ultratech (Fixed-Block)
6.	i) Acrylic Smooth Exterior Paint	Asian paint/, Berger, ICI dulux
	ii) Acrylic emulsion paint	Asian paint, Berger, Nerolac, ICI dulux
	iii) Synthetic enamel paint	Asian paint, Nerolac, Berger, ICI dulux
	iv) 1 st quality acrylic distemper	Asian paint, Berger, Nerolac, ICI dulux.
7.	Epoxy Adhesive	FOSROC, Aquomix, Choksey, BAL-ENDURA, Ultratech, Ferrous Crete, Oswal Adhesive
8.	Aluminium Composite Panel	Alpolic, Aluco Bond, Reynobond, Euro bond, Alstrong, Aludecor.
9.	Aluminium Extrusions / sections	Hindalco, Indian Aluminium Co., Jindal
10.	Annealed Float Glass	Saint Gobain, Modi Guard, AIS
11.	Bitumen	Indian Oil, Hindustan Petroleum, Bharat Petroleum
12.	Calcium Silicate Board / Tiles	Aerolite, Hilux, Starpan
13.	CC Paver blocks / Grass Pavers	Nitco, Hindustan, Ultra, KJS Concrete, Duracrete, Mehtab Tiles, Kaptim, Goyal Concrete Pipes, Oswal Industries
14.	Centrifugally Cast Iron Pipe & Fittings	NECO, SKF, BIC, RIF, KAPILANSH, HIF, Electro steel, M/s Raj Pattern Makers & Founders Pvt. Ltd. (RPMF)

15.	Ceramic Tiles	Kajaria, Somany, Nitco, Johnson, RAK Ceramics, Orient Bell.
16.	Chequered / Tactile Tiles	Dura, Eurocon, Modern, Hindustan, Johnson, Eavison, NITCO, Oswal Industries
17.	CI Manhole Cover	BIC, SKF, NICO, Hepco, Kapilansh, RIF, RPMF
18.	CI Double flanged non-return valves	Kirloskar, Sant, Kartar
19.	CP fittings	Jaquar, Marc, Kohler, Grohe, M/s Status Sanitech Private Limited., Prayag, PRIMA
20.	CPVC Pipes & Fittings	Astral, Ashirvad, Prince, Supreme, Finolex, VECTUS, Prayag Polymers Pvt. Ltd.
21.	Curtain Carrier / Drapery Rod	Marvel, Vista levlor, Johnson.
22.	Dash fastener, Expansion Bolt	Hilti, Bosch Fischer
23.	Hydraulic Door closer, Floor springs	Dorma, Hettich, Hafele, Geze, Hardwyn, Ozone, Godrej.
24.	Ductile Iron Pipe (Water Supply)	Electro steel, Kesoram, KDUPL, Electro Spun, TATA DUCTURA, JINDAL
25.	EPDM Gasket	Hanu, Anand, Lescuyer
26.	GRC / Tactile Tile	Unistone, Eurocon, Dazzle, Pavit
27.	Epoxy Grouting Compound	Pidilite, Ferrous Crete (Ferro-102), MYK, LATICRETE, Ardexendura, Ultratech.
28.	Epoxy Primer & Paints	Berger, Pidilite, CICO, BASF, SIKA, Asianpaints
29.	Fire Check door	Godrej, Shakti Horman, Navair, Dorma Kaba.
30.	Float Glass Mirror	Modiguard, Saint Gobain, AIS, M/s Gold Plus Glass Industries Ltd.
31.	Flush Doors (ISI Mark only)	Century, Kitlam, Archid, Greenply, Marino, Duro, Jayna, Gujcon, Durian, A-1 Flush Doors.
32.	Friction Stay	Earl-Bihari, Geze, Hettich, Securistyle, Ebco, Godrej.
33.	Galvanized/Stainless Steel Anchor Fasteners	Shakti, Arrow, Hilti, Fischer
34.	GI Pipe & fittings	Tata, Zenith, Jindal, Prakash Surya, Swastik, Unik, Zoloto.
35.	GI Sheet	Sail, TATA, Jindal
36.	Gun Metal Gate Valve	Zoloto, Leader, SANT, Prayag Polymers Pvt. Ltd.
37.	Glass Mosaic Tile	Bisazza, Italia, Palladio, Mridul
38.	Gypsum Board (False Ceiling)	Boral Gypsum, India Gypsum, Saint- Gobain, Western
39.	Gypsum Plaster	Ferrouscrete, Ultratech, Gyprock (Elite 90), Western
40.	FRP Door	Fiberways, Bhatt FRP, Cappello, Jayna, Shiv Shakti
41.	FRP chajja, FRP Shutters & Frame	Fibreways Technology Faridabad (Haryana), Fiber utility, Bhatt FRP or equivalent,
42.	Hardener	Hardcrete of Snowcem India, Pidilite, CICO, Asian Paints, Ferrous Crete.
43.	HDPE Pipes	VECTUS, Emco, Polyfins, Pioneer, Plyfab, Astral, Supreme, Prayag Polymers Pvt. Ltd.
44.	Jet Assembly for EWC/Health Faucet	Parryware, Jaquar, Marc, Grohe, Kohler.
45.	Kitchen loft tank	Sintex, Tirupati Structurals Ltd, KMS Plast world P.Ltd. Planet Plastics, Sri Kamakshi Traders, Sreyah Novel InC.
46.	Laminate and Veneers	Merino, Greenlam, Formica, Kitlam,
47.	Locks / Latch	Godrej, Dorma, Yale, Doorset, Hafele
48.	Marine Plywood / BWP Ply	Duro, Century, Greenlam

49.	Melamine Polish	Asian paints, Pidilite, ICI Dulux, Berger
50.	Metal False Ceiling	Nitobond, Armstrong, Trac, Durlum, Lafarge, Anutone, Hunter Douglas, WESTERN.
51.	Mineral Fibre/ GRG Ceiling	Armstrong, Daiken, Anutone, Diamond, Credence, Saint Gobain, Gyproc, Lafarge.
52.	M.S. Pipe (Railing)	Jindal, Tata, RINL, Prakash Surya
53.	M.S. Tubes	Tata, Apollo, Prakash Surya, RINL.
54.	Multi-coat Synthetic Plaster/ Textured Exterior wall paint	Spectrum, Heritage, BASF, SIKA Ultratech, Asian paints, Fosroc, Berger
55.	Plywood,	Greenply, Century, Duro
56.	Polycarbonate Sheet	Bayer, Macrolux, Danpalon India Ltd., DPI Day Lighting.
57.	Poly sulphide / Silicon Sealent	Pidilite, Fosroc, Tuffseal, Chouksey Chemicals, Ferrous Crete.
58.	PPR Pipes	SFMC, SAFE, Poiner Industries, Vectus, Prayag Polymers Pvt. Ltd.
59.	Precast CC interlocking Tiles/ Precast Concrete Pipes, Manhole cover/ Drain cover etc.	Hindustan, Paver India, KK
60.	Precoated Profile Sheet	Tata, Bhushan or equivalent, National
61.	Pre-laminated Particle Board	Ecoboard, Action-Tesa, Duro, Century Ply, Greenlam
62.	Pressed steel door frame	M/s Engineers & Fabricator, Raipur, M/s J.K. Enterprises, Jaipur, M/s Jangid Engineering Works, Jaipur, M/s Swastik Super Industries, Mohali, M/s SKS Steel Industries, New Delhi.
63.	PTMT Fitting	Prayag, Polytuf, Pearl, Mellenium.
64.	PVC Cistern	Steelbird, Jindal, Seabird, Prayag, Commander
65.	PVC Connection Pipe	Supreme, Prince, Finolex
66.	PVC Rain Water Pipe & Fitting (SWR) Pipes	Finolex, Kisan, Kasta, Supreme, Astral, Prince, Vectus
67.	PVC Shutter & frame / WPC Shutter & frame	Poly green, Rajshri, Plasto green, Sintex, Black cobra
68.	PVC Water storage Tank (Only ISI)	VECTUS, Water well, Plasto, Sintex.
69.	Ready Mix Concrete (RMC)	Lafarge, Alchon, ACC, L&T, Grasim, Ultratech, RMC Ind
70.	Ready Mix Plaster	Ultratech, Ferrous Crete, Saint Gobain, Asian Paint.
71.	Sluice Valve	Kirloskar, Venus, Kalpana, SANT, KARTAR, Zoloto
72.	Solid PVC frames and shutters	Polygreen, Rajshri, Plastogreen, Sintex
73.	Stainless Steel	Jindal, Salem, Tata, Sail
74.	Stainless steel Sink with or without Draining board.	Nirali, Hindware, Frankee, Neelkanth, Jaquar, Prayag Polymers Pvt. Ltd., JINDAL
75.	Stainless steel Door/Window fittings & Fixtures	Dorma, Ozone, D.Line, Hettich, Kich, Geze, Doorset, HAFELE, PRAYAG.
76.	Structural steel section	TATA, SAIL, RINL, JSW Steel Ltd., Jindal Steel & Power Ltd., APL Apollo.
77.	Super plasticizer / admixture	Sika, Fosroc, Chouksey Chemicals, BASF, Pidilite, Asian paint, Berger,
78.	Tensile Fabric	Bluestone, Encon, Structure Flex
79.	Tile Adhesive	Ferrous Crete (Ferro-1122), Ardex Endura (Gold Star), PIDILITE (Fevimate XL), WEABR (Saint-Gobin) Sika, Thermo shield, Fosroc, Oswal Adhesive

80.	Towel Ring/Towel Rod/Towel Rack	Marc, Jaquar, Kolher, Grohe, Prayag.
81.	Tubular Steel Window	M/s Engineers & Fabricator, Raipur, M/s J.K. Enterprises, Jaipur, M/s Swastik Super Industries, Mohali (Punjab) M/s Jangid Engg. Jaipur
82.	UPVC Pipes & Fittings	Astral Flowguard, Ashirvad, Prince, Supreme, Finolex, VECTUS, Prayag Polymers Pvt. Ltd., TEXMO
83.	UPVC Windows	Fenesta, Aluplast, Kommerling, Duraplast, Wintech, NCL, ENCRAFT, RAJ SHRI.
84.	Urinal, Washbasin, Orrisa Pattern W.C., Wall mounted European W.C. Seat with Cistern	Hindware, Parryware, Jaquar, Cera, Kohler, Grohe, Toto, Prayag.
85.	Vitrified Tile	Johnson -Marbonite, Somany, Kajaria, NITCO, RAK
86.	Wall Putty	JK, BIRLA, SARAPUTTY, Asian, Ferrous Crete, Western
87.	Waste Pipe	Kamal, Viking, Jaquar, Prayag Polymers Pvt. Ltd.
88.	Water Proofing Compound	Pidilite, Cico, Impermo, Fosroc, BASF, Ardex Endura, Sika, Asian paints, Kryton Buildmat Co. Pvt. Ltd., Berger.
89.	White Cement	JK White, Birla White, Grasim
90.	CRS steel bars Fe-500D or more	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd. (RINL), JSW Steel Ltd., Jindal Steel & Power Ltd.
91.	UPVC windows (profile)	Fenesta, Kommerling, Aluplast, Duroplast
92.	UPVC Doors and window hardware	Rotto, Dorset, Kinlong
93.	APP Membrane	Swastik, Sika, Asian paints, IWL
94.	Expansion joint	D.S Brown, CS Group, Sanfield, Vexcolt
95.	Vertical/Roller blinds	D-Décor, Vista Levoural, Deck, Hunder Duglus
96.	Anti-carbonation paint	SIKA, BASF, Asian Paints
97.	Rockwool/glass wool	Saint Gobain, Armacell, Roxul Rockwool
98.	Acoustical wooden panel, fabric panel, pet panel, acoustical false ceiling	Knauf India Pvt. Ltd., Credence acoustic and ceilings Pvt. Ltd, Anutone acoustics Pvt. Ltd., Topakustik AG
99.	Compactors	Neelkamal, DAVIS, DURION
100.	Chair (Cantilever Frame)	Godrej, Methodex, Durian
101.	Stainless Steel factory made modular kitchen basket	Godrej Interio, Haecker, Hafele, Herman Miller, Sleek, Zuari, Johnson Kitchen, Asian, Jindal.

Note: All the makes approved by the O/o ADG (Bhopal), CPWD, Bhopal, till the last date of submission of the bids are also approved.

SCHEDULE OF QUANTITY					
Name or work: - Renovation of Type-III Quarters (4 Nos. G+1) Block No. F (Campus B / Wall Side) at Central Bureau of Narcotics at Neemuch (M.P.)					
SL No.	Description	Qty.	Unit	Rate	Amount
1	CEMENT CONCRETE (CAST IN SITU)				
1.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
1.1.1	1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)	1	cum	6518.60	6519.00
1.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:				
1.2.1	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	3	cum	10357.55	31073.00
	Sub-Total				37592.00
2	REINFORCED CEMENT CONCRETE				
2.1	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:				
2.1.1	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1	cum	10852.95	10853.00
2.2	Centering and shuttering including strutting, propping etc. and removal of form for				
2.2.1	Suspended floors, roofs, landings, balconies and access platform	13	sqm	927.25	12054.00
2.3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in				

	position and binding all complete above plinth level.				
2.3.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	144	kg	107.85	15530.00
	Sub-Total				38437.00
3	CLADDING WORK				
3.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.				
3.1.1	Granite stone slab of all colour and texture except black, Cherry/Ruby red				
3.1.1.1	Area of slab upto 0.50 sqm	25	sqm	4170.70	104268.00
3.1.1.2	Area of slab over 0.50 sqm	26	sqm	3848.70	100066.00
3.2	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				
3.2.1	Granite work	35	metre	510.95	17883.00
3.3	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3(1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	98	sqm	1267.95	124259.00
	Sub-Total				346476.00
4	WOOD AND P. V. C. WORK				
4.1	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately,				

	all complete as per direction of Engineer-in-charge. (Note: Butt hinges and necessary screws shall be paid separately)				
4.1.1	Kiln seasoned and chemically treated hollock wood				
4.1.1.1	30 mm thick shutters	13	sqm	2676.85	34799.00
4.2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick.				
4.2.1	Particle Board 12 mm thick				
4.2.1.1	Pre-laminated particle board with decorative lamination on both sides, Grade I, Type II, IS:12823 marked	6.5	sqm	2053.45	13347.00
4.2.2	Fly proof stainless steel grade 304 wire gauge with 0.5 mm dia. wire and 1.4 mm wide aperture with matching wood beading	6.5	sqm	1800.45	11703.00
4.3	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
4.3.1	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	38	sqm	3167.95	120382.00
4.3.2	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws	16	sqm	2819.25	45108.00
4.4	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
4.4.1	Fixed to openings /wooden frames with rawl plugs screws etc.	418	kg	238.35	99630.00
4.5	Providing and fixing powder coated telescopic drawer channels 300 mm long with necessary screws etc. complete as per directions of Engineer- in-charge,	16	one set	414.20	6627.00
4.6	Providing and fixing factory made Fiberglass Reinforced plastics (F.R.P.) chajja 4 mm thick of required colour, size and design made by Resin	13	sqm	5207.45	67697.00

	Transfer Moulding (RTM) Machine Technology, resulting in void free compact laminate in single piece, having smooth gradual slope curvature for easy drainage of water and duly reinforced by 2 nos vertically and 1 nos horizontally 50x2 mm thick M.S. flat with 12 mm in built hole for grouting on the existing wall along with the 50 mm flanges duly inserted and sealed in the wall complete in one single piece casted monolithically, including all necessary fittings . The FRP Chajja should be manufactured using unsaturated Polyester resin as per IS: 6746, duly reinforced with fibre glass chopped strand mat (CSM) as per IS: 11551 complete with protective Gel coat U/V coating on Top for complete resistance from the extreme of temperature, weather & sunlight (Only plan area of chajjas shall be measured for making payment).				
4.7	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws:				
4.7.1	30 mm thick shutters				
4.7.1.1	With ISI marked stainless steel butt hinges of required size				
4.7.1.1.1	Kiln seasoned and chemically treated hollock wood	17	sqm	3619.60	61533.00
4.8	Providing and fixing factory made uPVC glazed/wire mesh windows/ doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for Series R1 and R2 profiles and 2.10 mm for Series R3 and R4 profiles conforming to EN: 12608 in any shape, colour and design duly reinforced with galvanized mild steel section made of required shape & size as per CPWD Specification, uPVC extruded glazing beads, interlocks and Inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8 mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 : Part 1 to 14, plastic packers, plastic caps and necessary				

	stainless steel screws etc. Profile of frame, sash & mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-Charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-Charge. Wire mesh / Glazing of plain/ toughened/ laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS: 16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering Institute, to be provided by the manufacturer for (i) Sites with basic wind speed > 45 m/sec as per IS 875 — Part 3 (ii) Sites with structure height more than 20m for all wind speeds				
4.8.1	Three track three panels sliding window with Aluminium channel for roller track, wool pile, nylon rollers with SS 304 body.				
4.8.1.1	Using R2 series with frame (70 mm & above) x (40 mm & above) & sash (25 mm & above) x (50 mm & above) with zinc alloy (zamak) powder coated touch locks with hook. (Height upto 1.2 metre).	14	sqm	8748.35	122477.00
4.8.2	Fixed window/ ventilator without mullion /transom.				
4.8.2.1	Using R2 series with frame (39 mm & above) x (39 mm & above). (Height upto 1.2 metre)	4	sqm	8054.75	32219.00
4.8.3	Casement window single panel with S.S. 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles.				
4.8.3.1	Using R2 series with frame (39 mm & above) x (39 mm & above) & sash (39 mm & above) x (60 mm & above). (Height upto 1.2 metre)	1	sqm	14449.25	14449.00
4.9	Providing and fixing bright /matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete.				
4.9.1	125 mm	148	each	119.20	17642.00

4.1	Providing and fixing stainless steel soft closing spring hinges at 0 degree hinges (hydraulic type) of approved make/brand to cupboard shutters with full threaded steel screws including making necessary recess in board and finished etc. complete as per direction of Engineer-in-charge.	50	each	272.00	13600.00
4.11	Providing and fixing stainless steel soft closing heavy type telescopic drawer channels of approved make 500 mm long with screws etc. complete as per direction of Engineer-in-charge,	24	one set	885.10	21242.00
4.12	Providing and fixing ready made 304 grade stainless steel Modular kitchen basket and accessories such as right angle basket (Plain Cup & Saucer, plant, Partition, Bottle rack, Thali, Cutlery) kitchen utensil basket, Dinner set basket, kitchen grain basket, Multipurpose basket as per site requirement including finishing (wherever required) and fittings. The same shall be fixed with necessary stainless steel nuts & bolts, Stainless Steel screws & telescopic channel etc. as per direction of Engineer-in-charge. (For payment purpose only weight of Stainless steel basket shall be considered excluding weight of all fixing accessories such as nuts, bolts, fasteners telescopic basket channels etc. Payment of providing and fixing telescopic channel shall be paid separately)	72	kg	533.25	38394.00
4.13	Providing and fixing 2 mm thick 16 to 19 mm wide PVC edge binding tape of approved quality for cupboard/wardrobe shutters including necessary synthetic resin hot pressed to edges on binding machine etc. complete as per direction of Engineer-in-charge.	20	metre	43.80	876.00
	Sub-Total				721725.00
5	STEEL WORK				
5.1	Providing and fixing 1 mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
5.1.1	Using M.S. angles 40x40x6 mm for diagonal braces	4	sqm	5804.35	23217.00
5.2	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-				

	sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				
5.2.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	450	kg	141.70	63765.00
5.3	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
5.3.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	36	kg	172.60	6214.00
	Sub-Total				93196.00
6	FLOORING				
6.1	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
6.1.1	40 mm thick with 20 mm nominal size stone aggregate	3	sqm	614.20	1843.00
6.2	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	13	sqm	1096.55	14255.00
6.3	Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement, all complete as per direction of Engineer-in-charge.	160	sqm	954.15	152664.00

6.4	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.				
6.4.1	Size of Tile 600x600 mm	20	sqm	1623.05	32461.00
6.5	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).				
6.5.1	Size of Tile 600x600 mm	170	sqm	1725.35	293310.00
6.6	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
6.6.1	Polished Granite stone slab of all colour and texture except Black, Cherry/Ruby Red	47	sqm	3071.05	144339.00
	Sub-Total				638872.00
7	ROOFING				
7.1	Providing gola 75x75 mm in cement concrete 1:2:4(1 cement :2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement: 3 fine sand) as per standard design :				
7.1.1	In 75x75 mm deep chase	53	metre	305.15	16173.00
	Sub-Total				16173.00
8	FINISHING				

8.1	12 mm cement plaster of mix:				
8.1.1	1:6(1 cement: 6 fine sand)	331	sqm	333.35	110339.00
8.2	15 mm cement plaster on the rough side of single or half brick wall of mix:				
8.2.1	1:6 (1 cement: 6 fine sand)	88	sqm	383.00	33704.00
8.3	20 mm cement plaster of mix:				
8.3.1	1:4(1 cement: 4 fine sand)	389	sqm	471.35	183355.00
8.4	Finishing walls with Acrylic Smooth exterior paint of required shade:				
8.4.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	439	sqm	160.60	70503.00
8.5	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
8.5.1	Two or more coats on new work	33	sqm	155.90	5145.00
8.6	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	1440	sqm	156.05	224712.00
8.7	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.				
8.7.1	Two coats	1002	sqm	137.45	137725.00
8.8	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
8.8.1	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	30	sqm	70.35	2111.00
8.9	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	200	sqm	25.15	5030.00
	Sub-Total				772624.00
9	REPAIRS TO BUILDING				
9.1	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	200	sqm	3.45	690.00
	Sub-Total				690.00

10	Dismantling and Demolishing				
10.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
10.1.1	Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	9	cum	2434.25	21908.00
10.2	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
10.2.1	Of area 3 sq. metres and below	63	each	367.20	23134.00
10.3	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	441	kg	5.65	2492.00
10.4	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead :				
10.4.1	100 mm dia pipe	40	metre	78.00	3120.00
10.5	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :				
10.5.1	15 mm to 40 mm nominal bore	80	metre	149.80	11984.00
10.6	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	331	sqm	54.65	18089.00
10.7	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	30	cum	263.95	7919.00
	Sub-Total				88646.00
11	SANITARY INSTALLATIONS				
11.1	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and				

	fixtures complete, including cutting and making good the walls and floors wherever required :				
11.1.1	W.C. pan with ISI marked white solid plastic seat and lid	4	each	6515.55	26062.00
11.2	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
11.2.1	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	4	each	1879.20	7517.00
11.3	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :				
11.3.1	Kitchen sink with drain board				
11.3.1.1	510x1040 mm bowl depth 250 mm	4	each	6945.60	27782.00
11.4	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
11.4.1	Flexible pipe				
11.4.1.1	32 mm dia	4	each	119.55	478.00
11.4.1.2	40 mm dia	4	each	119.55	478.00
11.5	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	4	each	1607.95	6432.00
11.6	Providing and fixing soil, waste and vent pipes :				
11.6.1	100 mm dia				
11.6.1.1	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	64	metre	1180.75	75568.00
11.7	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :				
11.7.1	For 100 mm dia pipe	18	each	362.85	6531.00
11.8	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm				

	thick, bolts and nuts complete.				
11.8.1	100 mm dia				
11.8.1.1	Sand cast iron S&S as per IS - 3989	4	each	705.20	2821.00
11.9	Providing and fixing plain bend of required degree.				
11.9.1	100 mm dia				
11.9.1.1	Sand cast iron S&S as per IS : 3989	8	each	570.05	4560.00
11.1	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
11.10.1	100x100x100 mm				
11.10.1.1	Sand cast iron S&S as per IS - 3989	12	each	925.70	11108.00
11.11	Providing and fixing single equal plain junction of required degree :				
11.11.1	100x100x100 mm				
11.11.1.1	Sand cast iron S&S as per IS - 3989	8	each	811.90	6495.00
11.12	Providing and fixing terminal guard :				
11.12.1	100 mm				
11.12.1.1	Sand cast iron S&S as per IS - 3989	6	each	506.00	3036.00
11.13	Providing and fixing collar :				
11.13.1	100 mm				
11.13.1.1	Sand cast iron S&S as per IS - 3989	16	each	513.15	8210.00
11.14	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter :				
11.14.1	100 mm	88	each	622.50	54780.00
11.15	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
11.15.1	100 mm inlet and 100 mm outlet				
11.15.1.1	Sand cast iron S&S as per IS: 3989	12	each	1996.50	23958.00
	Sub-Total				265816.00
12	WATER SUPPLY				
12.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply and all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC				

	solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall				
12.1.1	20 mm nominal dia Pipes	15	metre	335.00	5025.00
12.1.2	25 mm nominal dia Pipes	15	metre	401.55	6023.00
12.1.3	32 mm nominal dia Pipes	25	metre	518.75	12969.00
12.1.4	40 mm nominal dia Pipes	48	metre	702.95	33742.00
12.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings and fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.				
12.2.1	20 mm nominal dia Pipes	24	metre	537.60	12902.00
12.2.2	25 mm nominal dia Pipes	44	metre	627.25	27599.00
12.3	Providing and fixing uplasticised PVC connection pipe with brass unions :				
12.3.1	30 cm length				
12.3.1.1	15 mm nominal bore	12	each	85.00	1020.00
12.4	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	2000	per litre	11.00	22000.00
12.5	Providing and fixing PTMT grating of approved quality and colour.				
12.5.1	Circular type				
12.5.1.1	100 mm nominal dia	16	each	37.60	602.00
12.6	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball.				
12.6.1	25 mm nominal bore, 152 mm long, weighing not less than 440 gms	4	each	523.80	2095.00
	Sub-Total				123977.00
13	DRAINAGE				
13.1	Providing and fixing square-mouth S.W. gully				

	trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:				
13.1.1	100x100 mm size P type				
13.1.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	each	2707.65	5415.00
	Sub-Total				5415.00
14	ALUMINIUM WORK				
14.1	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
14.1.1	With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	27	sqm	1176.80	31774.00
	Sub-Total				31774.00
15	WATER PROOFING				
15.1	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	34	sqm	617.05	20980.00
	Sub-Total				20980.00
16	NEW TECHNOLOGIES AND MATERIALS				
16.1	Providing and fixing factory made Kitchen Cabinet Shutter/Partition 20 mm nominal thickness of approved shade, quality and make, made from rigid foam sheets (Single extruded) having density 600 Kg/cum and laminated on both side by laminate Sheet/PVC foil	88	sqm	5350.55	470848.00

	lamination. The exposed edges shall be sealed with PVC edge beading of same shade and colour. The shutter shall be fire retardent having necessary screw holding capacity. Shutter shall be fixed to frame using approved hinges with necessary stainless steel screws, all complete as per direction of Engineer-in-charge.				
16.2	Chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge				
16.2.1	25 mm average thickness	30	sqm	126.75	3803.00
16.3	Cleaning of reinforcement from rust from the reinforcing bars to give it a total rust free steel surface by using alkaline chemical rust remover of approved make with paint brush and removing loose particles after 24 hours of its application with wire brush and thoroughly washing with water and allowing it to dry, all complete as per direction of Engineer-In-Charge.				
16.3.1	Bars upto 12 mm diameter	40	metre	8.25	330.00
16.4	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-In-charge complete in all respect.				
16.4.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	30	sqm	141.20	4236.00
16.5	Providing, mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement: 4 graded coarse sand with polymer minimum 2% by wt. of cement used) as per specifications and directions of Engineer-in-charge. Note: Measurement and payment: The pre-measurement of thickness shall be done just after the surface preparation is completed and Payment under this item shall be made only after proper wet curing has been done and				

	surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and/or the 75 mm size cube crushing strength at the end of 28 days to be not less than 30 N/Sqmm2).				
16.5.1	25 mm average thickness in 2 layers.	30	sqm	587.35	17621.00
16.6	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid door/window/Clerestory windows & other Frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frame density of 750 kg/cum, screw withdrawal strength of 2200 N (Face) & 1100 N (Edge), minimum compressive strength of 58 N/mm2, modulus of elasticity 900 N/mm2 and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixed in position with M.S hold fast/lugs/SS dash fasteners of required dia and length complete as per direction of Engineer-In- Charge. (M.S hold fast/lugs or SS dash fasteners shall be paid for separately). Note: For WPC solid door/window frames, minus 5 mm tolerance in dimensions i.e depth and width of profile shall be acceptable. Variation in profile dimensions on plus side shall be acceptable but no extra payment on this account shall be made.				
16.6.1	Frame size 45 x 70 mm	43	metre	705.85	30352.00
16.7	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid plain flush door shutter of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm2, modulus of elasticity 850 N/mm2 and resistance				

	to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S screws, all as per direction of Engineer-In- Charge. (Note: stainless steel butt hinges and necessary S.S screws shall be paid separately)				
16.7.1	30 mm thick	14	sqm	4346.70	60854.00
	Sub-Total				588044.00
17	Non Schedule				
17.1	Providing and fixing 15 mm CP brass Bib cock jaquar cat no OPP-CHR-15037 PM Grohe cat no 20 238 000 or kohler cat no. K-37319IN-4-CP with wall flange complete as per direction of Engineer-in-charge (Contractor shall provide 10-year warrantee certificate and manufacturer's test certificate including copy of invoice of each item)	4	Each	2065.81	8263.00
17.2	Providing and fixing C.P. brass 2-way bib cock make of Jaquar CAT No. ARI-CHR-39041 or Grohe CAT No. 20284001 or Kohler CAT No. K-16094IN-4-CP with wall Flange complete as directed by Engineer-in-charge. (Contractor shall provide 10-year warrantee certificate and Manufacturer's Test Certificate including copy of invoice of each item.)	4	Each	2149.98	8600.00
17.3	Providing and fixing C.P. brass over head shower rose of Jaquar Rain showers series CAT no. OHS-CHR-1989 with shower arm of Jaquar CAT no. SHA-CHR-49483 or Kohler CAT no. K-759241N-CP with shower arm of Grohe CAT no. 28576000 etc. complete as per direction of Engineer-in-charge (Contractor shall provide 10-year warrantee certificate and manufacturer's test certificate including copy of invoice of each item.)	4	Each	3151.00	12604.00
17.4	Deduct for taking away dismantled doors, windows and clerestory windows architrave etc. all complete as per direction of Engineer in Charge. The dismantled material shall be the property of the contractor and nothing extra shall be paid for dismantling. (The doors/windows of area upto 3.0 sqm shall be considered as one number and above 3.0 sqm upto 6.0 sqm as two numbers and part thereof)	-63	Each	200.00	-12600.00

17.5	Providing and fixing C.P. Brass Hand shower (HEALTH FAUCET) with 1 m long easy flex tube with 15 or 20 mm inlet of Jaquar allied series model no. ALD-CHR-577 or Kohler cat no. K-12927IN-CP or Grohe cat. no. 26354000 etc. complete as per direction Engineer-in-Charge. (Contractor Shall Provide 10 year Warrantee certificate and Manufacturer's Test Certificate including copy of invoice of each item).	4	Each	1793.72	7175.00
17.6	Credit/ Deduct taking away the dismantled material (unserviceable) received from work as per direction of Engineer-in-Charge. Reinforcement bars, GI pipes, CI or SCI pipes, MS tanks, MS grills other similar steel and GI, MS fittings items, GI sheets etc.	1113	Kg	-31.00	-34503.00
17.7	Providing and fixing Sigle lever exposed parts kit of Divertor of make Jaquar Code No. ALI-CHR-85065NK or Grohe CAT No. 29065000 or Kohler CAT No. K-72290IN-4FP-CP with concealed body for single lever Diverter-Chrome of make Jaquar Code No. ALD-CHR-065M Grohe CAT No. 33963000 or Kohler CAT No. K-882IN-CP respectively, including cutting and making good the walls wherever required complete in all respect as per direction and approval of Engineer-in-charge. (Contractor shall provide 10-year warrantee certificate and Manufacturer's Test Certificate including copy of invoice of each item.)	4	Each	5271.05	21084.00
17.8	Providing and fixing 15 mm CP brass angular stop cock with wall flange make of Jaquar cat no ALI-CHR-15053M or equivalent make like Grohe cat no 26 021 000 or Kohler cat no. K-23515IN-4-CP with wall flange etc complete for mixer and geyser points as per direction of Engineer-in-charge (Contractor shall provide 10 year warrantee certificate and manufacturer's test certificate including copy of invoice of each item)	16	Each	1237.50	19800.00
17.9	Providing and fixing CP brass soap dish holder make of Jaquar cat no ACN-1131N or kohler cat no K-5634IN-CP or Grohe cat no. 40 754 001 complete as per direction of Engineer-in-charge (Contractor shall provide 10 year warrantee certificate and manufacturer's test certificate including copy of invoice of each item)	4	Each	841.00	3364.00
17.1	Providing and fixing 15 mm CP brass sink cock	8	Each	2196.55	17572.00

	table mounted with angular knob jaquar cat no FLR-5347N or kohler cat no. K-10877IN-4-CP or Grohe cat no 31 288 000 for sink complete as per direction of Engineer-in-charge (Contractor shall provide 10 year warrantee certificate and manufacturer's test certificate including copy of invoice of each item)				
17.11	Providing and fixing stainless steel (304 grade) Sliding door bolt of make Godrej, Dorset, Define, Dorma, Ozone, Kich or equivalent with minimum flap thickness as per manufacturar specification, with necessary star headed stainless steel screws & bolts, etc. complete of approved make as per direction of Engineer-In-Charge. Size: 300x16 mm (Sample should be got approved before item is brought at site)	88	Each	730.00	64240.00
17.12	Providing and fixing stainless steel (304 grade) Tower bolt of make Godrej, Dorset, Define, Dorma) Ozone, Kich or equivalent with minimum flap thickness as per manufacturar specification with necessary star headed stainless steel screws, nuts, bolts, etc. complete of approved make as per direction of Engineer-In-Charge. Size 250x10mm (Sample should be got approved before item is brought at lased site)	44	Each	334.94	14737.00
17.13	Providing & fixing Fly Proof Wire Gauge to windows, clerestory windows & doors with aluminium U beading, nuts & bolts complete (aluminium U beading will be paid for separately in the concern item) complete. Stainless steel (grade 304) wire gauze of 0.50 mm dia wire and 1.4 mm aperture on both directions.	8	Sqm	1048.30	8386.00
17.14	Providing and fixing Stainless Steel Single Towel Rail 600 mm long make of Jaquar cat no. ACN-CHR-1111SM or Kohler cat no. K-5630IN-CP or Grohe cat no 40 509 001 with necessary stainless steel screws etc. complete as per direction of Engineer-in-charge (Contractor shall provide 10 year warrantee certificate and manufacturer's test certificate including copy of invoice of each item)	8	Each	1763.00	14104.00
	Sub-Total				152826.00
	Total				3943263.00
	Modified Estimated Cost after using correction factor on DSR 2023 on account of GST @ 0.973 * 3790437 = 3688095				3840921.00

	Add Cost Index @1% on SR&DR Total 3,688,095.00				36881.00
	Total				3877802.00

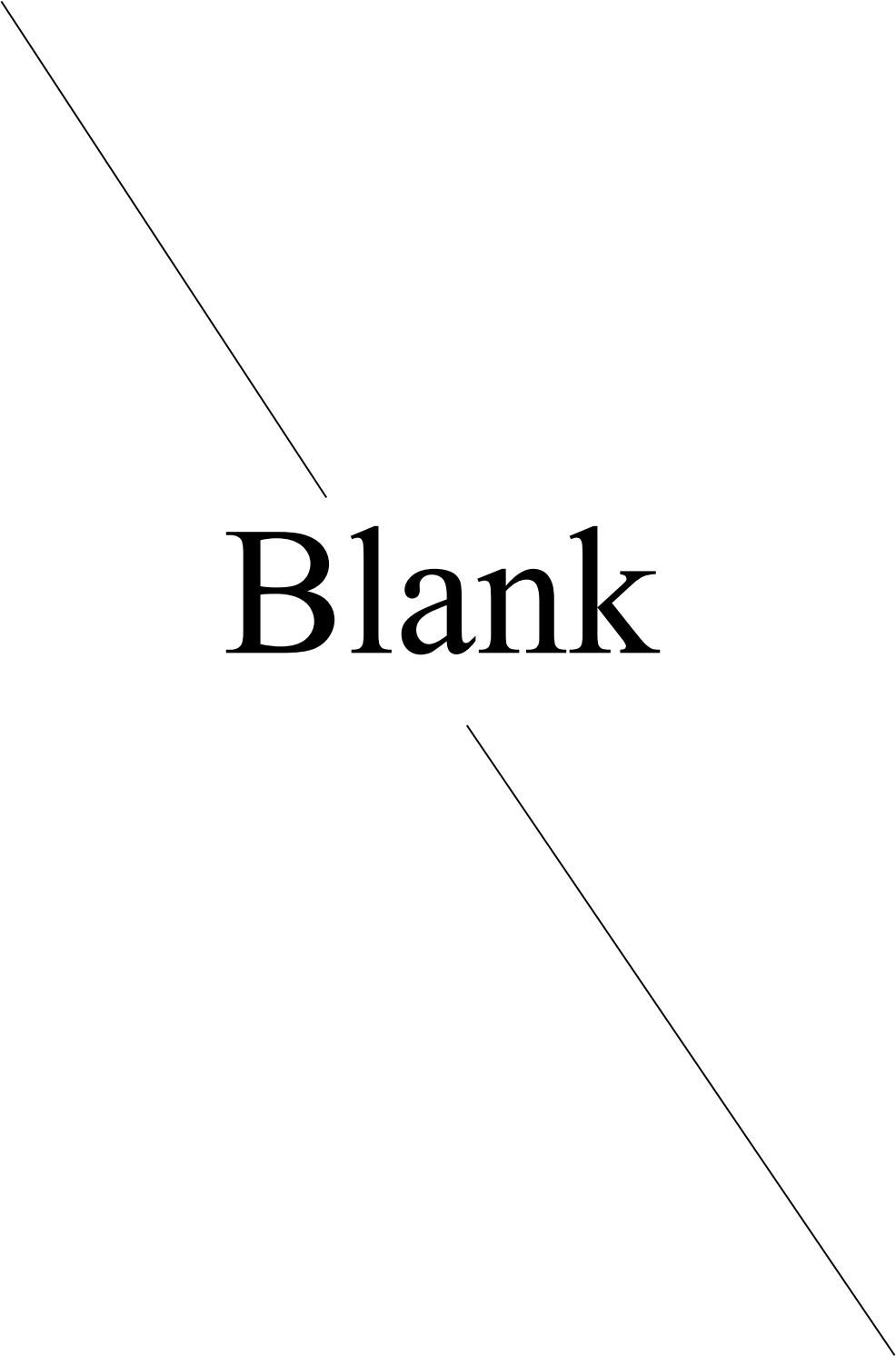
Assistant Engineer (P)
Indore-1, CPWD, Indore

Executive Engineer
Indore-1, CPWD, Indore

Sr. Dman

A.E.(P)

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