

GOVERNMENT OF INDIA
O/o THE EXECUTIVE ENGINEER(Bhopal)-I
CENTRAL PUBLIC WORKS DEPARTMENT,
BHOPAL.

Notice Inviting **Tender**

(NIT No. :- 19/EE-I/Bhopal/2026-27)

Name of work:- Renovation of Toilets and laying of new sewer line
at Kendriya Vidyalaya No.3, Bhopal.

ESTIMATED COST : **Rs.52,22,920/-**

EARNEST MONEY : **Rs.1,04,458/-**

TIME ALLOWED : **05(Five)Months**

CPWD

1 INDEX

Name of Work:- :- Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.

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Certified that this bid document contains pages from 1 to 137(One to One Hundred Thirty Seven One excluding front and back cover page)

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CORRECTION ----NIL----
CUTTING ----NIL----

INSERTION ----NIL----
OVERWRITING ---NIL----

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2 PRESS TENDER NOTICE

CENTRAL PUBLIC WORKS DEPARTMENT NOTICE INVITING e-TENDER

The Executive Engineer(Bhopal)-I, CPWD, Bhopal invites on behalf of President of India online Percentage rate tenders from approved and eligible contractors of CPWD registered in appropriate class of **composite/ Building & Roads category** for the work of:-

NIT NO.: 19/EE-I/Bhopal/2026-27

Name of Work :- Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.

Estimated Cost:-**Rs.52,22,920 /-**

Earnest Money : **Rs.1,04,458/-**

(EMD in favour of Executive Engineer, Bhopal Central Division-I, CPWD, Bhopal)

Period of Completion : **05(Five) Months**

Last date & time of submission of bids: **Upto 3.00 PM on 20.08.2026.**

The bid forms and other details can be seen and downloaded from the website **<https://etender.cpwd.gov.in>**

3 INFORMATIONS & INSTRUCTIONS FOR BIDDERS FOR e-TENDERING (FORMING PART OF NIT & TO BE POSTED IN WEBSITE)

The Executive Engineer(Bhopal)-I, CPWD, Bhopal on behalf of President of India invites online Percentage Rate tenders from approved and eligible contractors of CPWD registered in appropriate class of **composite/ Building & Roads category** for the work of :-

Name of work & Location	Estimated cost put to bid	Earnest Money	Period of Completion	Last date & time of submission of bid, Earnest Money and other documents as specified in the press notice.	Time & date of opening of bid
Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.	Estimated Cost: ₹ 52,22,920/-	Rs.1,04,458/-	05 (Five) Months	Up to 3.00 PM on 20.08.2026	At 3.30 PM on 20.08.2026

- 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> and <https://eauction.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 scan documents such as Insurance Surety Bonds, Account Payee Demand Draft or Bankers cheque or Fixed Deposit Receipt or/ and Bank Guarantee including e-Bank Gurantee(For Balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of Executive Engineer, Bhopal Central Division-I, CPWD, Bhopal as mentioned in NIT, receipt for deposition of original EMD to Division office of any Executive Engineer (including NIT issuing EE), CPWD and all the other documents as specified in bid document. If the scanned copies of all the documents stipulated in the bid document are not uploaded, then bid will become invalid and shall summarily be rejected.—**
- Those contractors who are not registered or have not updated their profile on the website mentioned above, are required to get themselves registered update their profile beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
- The intending bidder must have valid class-III digital signature to submit the bid.
- On opening date, the contractor can login and see the bid opening process. After opening of bids, he will receive the competitor bid sheets.
- Contractor can upload documents in the form of **JPG** format and **PDF** format.
- Contractor must ensure to quote percentage rate. The column meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue.

CORRECTION ----NIL----
CUTTING ----NIL----

INSERTION ----NIL----
OVERWRITING ---NIL----

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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". **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 bid submission:

(Document should be clear and readable)

- a. Enlistment Order of the Contractor.
- b. **(i) Certificate of Registration for G.S.T.**
(ii) (If the bidder has not obtained GST registration in the state in which the work is to be taken up, then in such a case the bidder shall upload following undertaking with the bid document "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 the 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."
- c. ~~Electrical license from competent authority in the name of Contractor or undertaking that "I, hereby confirm that I will either obtain valid electrical license at the time of execution of electrical work or associate CPWD registered contractor having valid electrical license of eligible class."~~
- d. Address, Phone No. and email id of bidder.
- e. Pan card of Bidder
- f. Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee(as prescribed) of any commercial Bank against EMD.
- g. Copy of receipt for deposition of original EMD issued from division office of any Assistant Engineer (including NIT issuing EE/AE), CPWD.
- h. Undertaking on structural stability and soundness as per prescribed format Form "F" (Page No. 20).
- i. **Undertaking for site inspection (as per Annexure –IV at Page No. 21)[Intending bidders must upload undertaking that they have inspected and examined the site and it's surrounding before submitting their bids.]**
(As per CPWD 6 Sl. No. 12 Page No. 8)]
- j. ERP Training Certificate through any of the CPWD Regional Training Institutes (RTIs, at Delhi, Mumbai, Chennai, and Kolkata or through the National CPWD Academy (NCA), Gaziabad or through any other special training arranged by ERP Unit at CPWD Hq. and the newly enlisted contractors or his authorized representatives shall take compulsory ERP Training within 90 days of the date of issue of enlistment order.

4 NOTICE INVITING TENDER (CPWD 6)

- 1.1 Percentage rate tenders are invited on behalf of President of India from approved and eligible contractors of CPWD registered in appropriate class of **composite/ Building & Roads category** for the work of **Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.**

The enlistment of the contractors should 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 should be valid on the original date of submission of bids. The work is **estimated to Cost: Rs.52,22,920/-** 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, besides indicating the combined estimated cost put to bid, should clearly indicate the estimated cost of each component separately. The eligibility of bidders 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 **last date of submission of tender** which is available as a Govt. of India Publication and also available on website <https://etender.cpwd.gov.in> Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work will be **05(Five) 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.
~~(ii) The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programme of completion submitted by the contractor after award of the work.~~
5. The bid document consisting of plans if any, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen on website <https://etender.cpwd.gov.in> free of cost.
6. After submission of the bid the contractor can re-submit revised bid any number of times or withdraw it before last date and time of submission of bid as notified. No post tender modification is allowed by the tenderers except through negotiations, if required. In case, any tenderer does so, the tender will be rejected and the tenderer will be debarred for future tendering in CPWD for two years by the concerned enlisting authority (in case of CPWD enlisted contractor) and by the concerned CE/ SE (in case of non-enlisted contractor).
7. While submitting the revised bid, contractor can revise the quoted rates but before last

date and time of submission of bid as notified.

8. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
9. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee(as prescribed) of any commercial Bank **(drawn in favour of Executive Engineer, Bhopal Central Division-I, CPWD, Bhopal)** 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 document shall only be issued from the place in which the office of receiving division office is situated). 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. Annexure – 'IV' **at Page No. 21.**

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

A part of earnest money is acceptable in the form of bank guarantee also. In such case, 50% of earnest money or Rs. 20 lakh, whichever is less, shall have to be deposited in shape prescribed above, and may be deposited in shape of Bank Guarantee of any scheduled Bank having validity for **90 (Ninety) Days** from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice 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 press notice 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 **Earnest Money** and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at 03:30 PM on 20.08.2026.

- 9A. The contractors registered prior to 01.04.2015 on e-tendering portal of CPWD shall have to deposit tender processing fee at existing rates, or they have option to switch over to the new registration system without tender processing fee any time.
10. The bid submitted shall become invalid if:
 - (i) The bidder is found ineligible.
 - (ii) **The bidder does not deposit original EMD with Division of EE, inviting bid or division office of any Executive Engineer, CPWD within period of bid submission.**
 - (iii) The bidder does not upload scanned copies of all the documents, stipulated in the bid document.
 - (iv) 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.
 - (v) 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.

(OM No. DG/SOP/2022/07 dated 09.11.2022)

11. The contractor whose bid is accepted will be required to furnish performance guarantee at specified percentage of the ECPT amount or Contract amount, whichever is higher and additional PG as mentioned in schedule E and within the period specified in Schedule F. This guarantee shall be in the form of Insurance Security 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 the action as per EMD declaration Proforma will be taken by the CPWD 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 including Provident Fund Code No. if applicable and also ensure the compliance of aforesaid provisions by the sub-contractors, if any, engaged by the contractor for the said work and Programme Chart (Time and Progress) within the period specified in Schedule F.**
12. The description of work is as follows:- :- **Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.**
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 bidders shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a 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.
13. 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 bidders shall be summarily rejected.
14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
15. 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 bidders shall be bound to perform the same at the rate quoted.

CORRECTION ----NIL----

INSERTION ----NIL----

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OVERWRITING ---NIL----

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16. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the Central Public Works Department or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
17. No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the 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 bid or engagement in the contractor's service.
- 18. The bids for the work shall remain open for acceptance for a period of 30 (thirty) days from the date of opening.**
- (i) If any tenderer withdraws his tender within 7 days after last date and time (24 hours basis) of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to **forfeit 50% of the said earnest money**—take action as per EMD declaration Proforma absolutely **irrespective of letter of acceptance for the work is issued or not.**
 - (ii) If any tenderer withdraws his tender **after** expiry of 7 days **after last date and time (24 hours basis) of submission of bids**, then the Government shall without prejudice to any other right or remedy, be at liberty to take action as per EMD declaration Proforma **forfeit 100% of the earnest money**—absolutely **irrespective of letter of acceptance for the work is issued or not.**
 - (iii) **Withdrawal of the tender, by the tenderer, shall only be made through e-tender portal.**
Any other method i.e. through letter / e-mail etc. shall not be considered.
 - (iv) **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.**
19. This notice inviting Bid shall form a part of the contract document. The successful bidders / contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:
- a. The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b. Standard C.P.W.D. Form 7 or other Standard C.P.W.D. Form as applicable.

20. Jurisdiction of Courts

CORRECTION ----NIL----

INSERTION ----NIL----

CUTTING ----NIL----

OVERWRITING ---NIL----

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**The Court of the place from where the letter of award of work has been issued shall have the jurisdiction to decide any dispute arising out of or in respect of the contract.
In the case of Arbitration, if arise, the seat of Arbitration shall be considered Bhopal.**

- 21.0 (i) **CPWD does not have funds of its own and it carries out the works of client departments from their funds (deposit, budgetary, authorization). The CPWD is making payments to the contractors after getting budget / authorization / deposit from various Ministries / Client Departments. The payment to the contractor can be done only on availability of funds for that work from client department and in case of delay in getting funds from Ministry / Client Department, CPWD will not be responsible for delay in payment and no any extra compensation on this account shall be granted apart from specified elsewhere in this document. The contractor has to quote his tender accordingly considering this aspect.**
(ii) **In case of delay in release of payment of R.A. bill's by the Deptt. Due to non-availability of funds or other reasons, contractor has to pay all labour / workers engaged on the work shall be paid on time without any delay, delay in payment to the contractor shall be governed by Clause 7 of GCC, CPWD, 2023 as modified & corrected up to previous day of the last day of submission of the tender.**
- 22.0 **The bidder must note that there is limited plot area available and so limited space for installation of T&P and storing other construction material. The bidder has to plan work methodology as per available site and no extension of time or additional payment shall be payable on this account.**
- 23.0 **The successful bidder should ensure proper coordination with other agencies executing internal & external finishing and services works in same building. The contractor should ensure to provide working site to other agencies as per agreed completion programme in such a way that pace of other agencies is not affected. No extension of time or additional payment shall be payable on this account.**

5 TENDER AND CONTRACT (CIVIL)

fufonk T E N D E R (CPWD 7)

eu@geu dk; d fy, fufonk vke=.k lpuk] vulph d][k]x]?)M-] vkj p] ykx fofun'k] uD'k ,o fMtkbu] lkeU; fu;e ,o fun'k] Bd d mic/k] fof'k"V 'kr] nj vulph ,o vU; dkxtkr rFkk Bd dh 'krk e fn, x, fu;e rFkk fufonk dkxtkr e mfYyf[kr vU; ckrk dk i< o tkp fy;k gA

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.

e@ge] ,rr}kjk Hkkjr d jk"Vifr d fy, vulph ^p* e fofufn"V le; d vUnjrj fofufn"V dk;] ;Fkk&ek=kvk dh vulph rFkk lHkh lcf/kr fofun'kk] fMtkbuk] uD'kk d vu: i rFkk lkeU; fu;ekoyh d fu;e&1 vkj Bd dh 'krk d [kM&11 e mfYyf[kr fyf[kr vun'kk ,o ,lh lkefx;k] tk inku dh tkrh g vkj mld lc/k e] ,lh 'kr tk ykx gk] d vu: i fu"iknu gr fufonk nrk g@nr g A

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.

ge fufonk dk] bld [kky tku dh fu/kkfjr rkjh[k l rhl %30%fnu d fy; [kyk j[ku rFkk bldh 'krk ,o fuc/kuk e] fdlh idkj dk ifjoru uk dju d fy, lger gA

We agree to keep the tender open for ~~Ten/Fifteen/thirty/forty five/sixty (10/15/30/45/60)~~ days from the due date of its opening in case of single bid system ~~+/Sixty (60) days from the date of opening of technical bid in case tenders are invited on 2 or 3 bid/envelop system~~ (strike out as the case may be) and not to make any modification in its terms and conditions.

A sum of **Rs.1,04,458/-** is hereby forwarded in Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee(as prescribed) of any commercial Bank as earnest money.

A copy of earnest money in form of Insurance Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee(as prescribed) of any 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.

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 of the State.

rkjh[k Dated #.....

Bdnkj d gLrk{kj Signature of Contractor#
Mkd dk i rk Postal Address#

l k{kh Witness : #

i rk Address: #

mi t hfodk Occupation : #

To be filled in by the contractor/witness as applicable

CORRECTION ----NIL----
CUTTING ----NIL----

INSERTION ----NIL----
OVERWRITING ---NIL----

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Letter ACCEPTANCE

I, the undersigned, being a duly authorized officer of the Government of India, do hereby accept the tender of the above mentioned item for the sum of ₹. _____

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

(Rupees _____)

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

- a)
- b)
- c)

For & on behalf of the President of India.
Signature

Dated

Designation

6 SCHEDULE A TO F (CIVIL)**vu l ph 'd' SCHEDULE 'A'**

ek=kvk dh vu l ph % l yXu% Schedule of quantities (Enclosed)	Page No. 117 to 136
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vu l ph 'd' SCHEDULE 'D'

dk; d fy, fo'k'k vi{kk,@nLrkot] ;fn dkb gk] dh vfrfjDr vu l ph

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

-----Nil-----

vu l ph %M% SCHEDULE 'E'

Bd dh lkekU; 'krk dk lnhk Reference to General Conditions of contract	General conditions of contract (GCC Maintenance Works-2023) Applicable GCC is 2023 as modified & corrected up to previous day of the last day of submission of the tender.
dk; dk uke Name of work	Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.
dk; dh vuekfur ykxr Estimated cost of work	₹ 52,22,920/-
/kjkgj jkf'k Earnest money	₹ 1,04,458/- (To be returned after received PG)
fu"iknu xkjVh Performance guarantee	PG shall be 5% of ECPT or contract amount whichever is higher. In case of abnormally low bids as defined further, 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. (e.g. if ECPT is A and quoted amount is 0.7A then the amount of APG shall be 0.8A – 0.7A i.e. 0.10A). The 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 term and conditions of release etc. of APG shall be same as that of PG. (Please refer Page No.63-64 of this NIT) (In favour of Executive Engineer, BCD-I, CPWD, Bhopal)
ifrHkfr fu{ki Security Deposit	2.5% of tendered value

vu l ph 'p' SCHEDULE 'F'

lkekU; fu;e ,o fn'kkfun'ki General Rules & Directions:		
	fufonk vke=.k dju okyk ikf/kdkjh Officer inviting tender	EE(Bhopal)-I/CPWD/Bhopal
	Definitions:	
2(v)	Hkkj l k/kd b thfu;j Engineer-in-Charge	EE(Bhopal)-I/CPWD/Bhopal or his successor.
2(viii)	Lohdkj drk ikf/kdkjh Accepting Authority	As per delegating financial power to CPWD
2(x)	vfrfjDr vkj ykHkk dk ijk dju d fy, Je ,o lkefx;k dh ykxr ij ifr'krrk Percentage on cost of materials and labour to cover all overheads and profits.	15% (Fifteen percent)
2(xi)	njk dh ekud vu l ph Standard schedule of Rates	Delhi Schedule of rate 2023(Civil) with correction slips upto the previous day

CORRECTION ----NIL----

INSERTION ----NIL----

CUTTING ----NIL----

OVERWRITING ---NIL----

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		of the last date of submission of tender.
2(xii)	foHkkx Department	Central Public Works Department
9(ii)	ekud d-yk-fu-fo- Bdk Qke Standard CPWD contract Form GCC 2023 CPWD Form 7/8 as modified & corrected up to	Standard CPWD contract Form General Conditions of Contract Maintenance Works 2023 , CPWD Form 7 as modified & corrected upto previous day of the last date of submission of the tender.

[k.M Clause 1

(i)	Lohdfr i= tkjh gku dh rkjh[k l fu"iknu xkjVh d iLrrhdj.k d fy, vuer le; Time allowed for submission of performance guarantee, Programme Chat (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance	07 days
(ii)	Maximum allowable extension with late fee @ 0.10% per day of performance guarantee amount beyond the period as provided in (i) above	03 days

[k.M Clause 2

	[k.M 2 d rgr ifrdkj fuf'pr dju okyk ikf/kdkjh Authority for fixing compensation under clause 2	CE(Bhopal), CPWD Bhopal or his successor
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[k.M Clause 2A

D;k [k.M 2 d ykx gkxk

Whether Clause 2A shall be applicable

Compensation for delay(upto 25 Lakh)

Not Applicable**[k.M Clause 5**

	dk; vkjHk dh rkjh[k dh x.kuk d fy, Lohdfr i= d tkjh gku dh rkjh[k l fnuk dh l ;k No. of days from the date of issue of letter of acceptance for reckoning date of start	10 Days
--	--	----------------

y{; :- uhp nh xb lkj.kh d vu lkj
Milestone(s) :- as per Table given below

S No	Description of Milestone (Financial)	Time allowed (From date of start)	Amount to be withheld in case of non-achievement of milestone as assessed from the running payments
1.	1/8th of tender value	1/4th of stipulated time period	1.25% of the tendered value
2.	3/8th of tender value	1/2 of stipulated time period	
3.	3/4th of tender value	3/4th of stipulated time period	
4.	Full	Full	
NOTE: 1) Withheld amount shall be released if and when subsequent milestone is achieved within respective time specified. However, in case milestones are not achieved by the bidder for the work, the amount shown against milestone shall be withheld. 2) Intending bidder may submit phasing of activities/milestones based on their resources and methodology at the time of bidding corresponding to physical milestone/financial milestone/stages indicated in the above table. These shall be formed part of the agreement			

	after approval of the accepting authority, otherwise it would be assumed that agency agrees with the above mentioned physical/financial milestones.	
	dk; fu"iknr dju d fy, vueR; le; Time allowed for execution of work	05(Five)Months
(i)	Authority to convey the decision of shifting of milestone and extension of time	Executive Engineer (Bhopal)-I, CPWD, Bhopal or his successor.
(ii)	Authority to decide rescheduling of milestone and Extension of time	CE(Bhopal), CPWD, Bhopal or his successor
(iii)	Shifting of date of start in case of delay in handing over of site	CE(Bhopal), CPWD, Bhopal or his successor
[k.M Clause 5.2		
	Nature of Hindrance Register (either Physical or Electronic)	NA
[k.M Clause 5.4		
	Schedule of rate of recovery for delay in submission of modified program in terms of delay days	
	Sl. No.	Recovery Rs
	I.	500
	II.	1000
	III.	2500
	IV.	5000
[k.M Clause 5A		
[k.M Clause 6 Computerized Measurement Book /		Applicable
Electronic Measurement Book		Electronic Measurement Book
[k.M Clause 7		
	vrfje Hkxrku d fy, ik= gku d fy, vfre ,l Hkxrku d ckn dy Hkxrku ,df=r lkefx;k d vfxek d lek;ktu lfgd;k tku okyk dy dk; 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.10.45 Lacs (Civil)
[k.M Clause 7A		
	Whether clause 7A shall be applicable	YES
[k.M Clause10A		
	dk;LFky i;kx'kkyk e Bdnkj }kjk miyC/k dj; tku ijh{k.k midj.k dh lph List of testing equipment to be provided by the contractor at site lab.	As stated in tender document
[k.M Clause10B (i) Secured Advance of Material		Not Applicable
	D;k [k.M 10 [k (i) ykx gkxk Whether clause 10B (i) shall be applicable	
[k.M Clause10C		
	Component of labour expressed as Percent of value of work	Applicable
		25%
[k.M Clause 11		
	dk; fu"iknu d fy, vuiky Specifications to be followed for execution of work	For Civil: CPWD specification 2019, Volume-I & II with correction slips upto the prevailing last day of submission of tender
[k.M Clause 12		
	Authority to decide deviation upto 1.5 times of tendered amount	Chief Engineer(Bhopal), CPWD, Bhopal or his successor thereof.

CORRECTION ----NIL----

INSERTION ----NIL----

CUTTING ----NIL----

OVERWRITING ---NIL----

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		(In case completion cost shall exceed 1.50 times of the contract amount)					
	Type of Work					Maintenance Work (No Limit)	
12.2 & 12.3	fopyu lhek ftld ij [k.M 12-2 rFkk 12-3 Hkou fuek.k dk; d fy, ykx glx Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work (Other than foundation)					Shall be govern as per OM No.DG/CON/Maintenance 2023/03 dated 18.12.2023	
[k.M Clause 16							
	?kVh gb nj fu/kkfjr dju dh fy, l {ke ikf/kdkjh Competent Authority for deciding reduced rates				Chief Engineer(Bhopal), CPWD, Bhopal or his successor thereof up to 5% of the Contract value.		
[k.M Clause 18							
	dk;LFky ij Bdnkj }kjk yxk; tku okyh vfuoK; e'khujh vktkj ,o l ;=k dh l ph %& List of mandatory machines, tools and plants to be deployed by the contractor at site.				As stated in tender document		
[k.M Clause 19C							
Authority to decide penalty for each default					EE(Bhopal)-I, CPWD, Bhopal		
[k.M Clause 19D							
Authority to decide penalty for each default					EE(Bhopal)-I, CPWD, Bhopal		
[k.M Clause 19G							
Authority to decide penalty for each default					EE(Bhopal)-I, CPWD, Bhopal		
[k.M Clause 19K							
Authority to decide penalty for each default					EE(Bhopal)-I, CPWD, Bhopal		
[k.M Clause 25							
	Designation		Constitution of Dispute Redressal Committee (DRC)				
	Conciliator		A.D.G.(Bhopal), CPWD, Bhopal				
	Arbitrator Appointing Authority		CE(Bhopal), CPWD, Bhopal				
	Seat of Arbitration		Bhopal				
[k.M Clause 32							
Applicable							
	"Requirement of Technical Representative(s) and Recovery Rate"						
	Minimum Qualification of Technical Representative	Discipline	Designation	Minimum experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 36(i)	
						Figures	Words
	Graduate Engineer Or Diploma Engineer	Civil	Principal Technical Representative	2-Years	01(ONE)	Rs.15,000/-PM	Rupees Fifteen Thousand Per Month each
		Civil	(Project Planning/Site/Billing Engineer)	5-Years	01(ONE)		
	"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."						
[k.M Clause 38							
I) (a)	l helUV vkj fcVeu dh vuekuey ek=k fu/kkfjr dju d fy, vu l ph@fooj.k				dykfufo }kjk efnr fnYyh nj vu l ph 2023 d vk/kkj ij		

CORRECTION ----NIL----

INSERTION ----NIL----

CUTTING ----NIL----

OVERWRITING ---NIL----

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	Schedule/statement for determining theoretical quantity of cement & bitumen		on the basis of Delhi Schedule of Rates 2023 printed by C.P.W.D. with correction slips issued up to previous day of last date of submission of tender	
II	vuekueyd ek=kvk e vueR; fopyu Variations permissible on theoretical quantities			
a	IhelV ftu dk;k d fy, fufonk e vuekfur eY; :- 25 yk[k l vf/kd u gk Cement for works with estimated cost put to tender not more than Rs. 25 lakhs		3% plus/minus	
	ftu dk;k d fy, fufonke vuekfur eY; :- 25 yk[k l vf/kd gk for works with estimated cost put to tender more than Rs. 25 lakhs		2 ifr'kr tek@%Vv 2 % plus/minus.	
b	fcVeu l Hkh dk;k d fy, Bitumen for all works		2.5 ifr'kr doy tek vkj %Vv d i{k e 'kU; 2.5% plus only & Nil on minus side	
c	bLlkr iR;d 0;k l] dkV vkj J.kh d fy, iuoyu vkj ljpukRed bLlkr dkV Steel Reinforcement and structural steel sections for each diameter, section and category		2 ifr'kr tek@%Vv 2% plus/minus	
d	l Hkh vU; l kefx;k All other materials		'kU; Nil.	
	vueR; fopyu l vf/kd dh ek=kvk d fy, olyh nj RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION			
	Øe l- Sl No.	en fooj.k Description of item	vdk vkj 'kcnk e og nj ft l ij Bdnkj l olyh dh tk,xh Rates in figures and words at which recovery shall be made from the Contractor	
			vueR; fopyu l vf/kd vkf/kD; Excess beyond permissible variation	veeR; fopyu l vf/kd mi;kx %Vv;k; Less use beyond the permissible variation
	1	IhelV Cement	NA	Not Permitted
	2	bLlkr Steel Reinforcement	NA	Not Permitted

ANNEXURE 'A'

7. INFORMATION AND INSTRUCTION FOR EXECUTIVE ENGINEER FOR E-TENDERING (PRESCRIBED FORMAT OF RECEIPT OF DEPOSITION OF ORIGINAL EMD)

1. The Executive Engineer of all divisions including NIT issuing division /sub division of CPWD should receive the original EMD for tender of other division.
2. The NIT approving authority/EE at the time of issue of NIT shall also fill and upload the following prescribed format of receipt of deposition of original EMD alongwith NIT :-

Receipt of deposition of original EMD (Receipt No...../date.....)
Name of work:- Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal. 1. NIT No:- 19/EE-I/Bhopal/2026-27 2. Estimated Cost:- ₹ 52,22,920/- 3. Amount of Earnest Money Deposit :- ₹ 1,04,458/- 4. Last date of submission of bid :-20.08.2026
1. Name of Contractor :-#..... 2. Form of EMD :-#..... 3. Amount of Earnest Money Deposit.....#..... 4. Date of submission of EMD :-.....#..... Signature, Name and Designation of EMD Receiving officer (EE/AE(P)/AE/AAO) along with Office stamp (# To be filled by EMD receiving EE)

3. The Executive Engineer receiving EMD in original form shall examine the EMD deposited by the bidder and shall issue a receipt of deposition of earnest money to the agency in a given format uploaded by tender inviting EE. The receipt may be issued by the AE(P)/AE/AAO.
4. The Executive Engineer receiving original EMD shall also intimate tender inviting Executive Engineer about deposition of EMD by the agency by email/fax/telephonically.
5. The Original EMD receiving Executive Engineer shall release the EMD after verification from the e-tendering portal website <https://etender.cpwd.gov.in> that the particular contractor is not L-1 tenderer and work is awarded.
6. The tender inviting Executive Engineer will call for original EMD of the L-1 tenderer from EMD receiving Executive Engineer immediately.

Annexure 'F'**8. Undertaking on structural stability and soundness of already completed buildings and infrastructure projects: -**

I / we undertake and confirm that any building / infrastructure constructed by our firm / partnership firm / company has not suffered any failure, making it unfit for intended use, either due to structural design and defects or due to use of sub-standard materials or execution of sub-standard work, poor workmanship or any other reason during the last 25 (twenty-five) years.

I/we, further undertake that if such information comes to the notice of CPWD, then Engineer-in-charge shall be free to terminate the bid / agreement and to forfeit the entire amount of earnest money deposit, performance guarantee and security deposits.

I / we, also undertake that in addition to above, the Engineer-in-charge shall be free to debar us forever from tendering in CPWD.

The decision of Engineer-in-charge or any higher authority shall be final and binding.

**Signature of
Notary with seal**

**Signature of bidder or
an authorized person
Of the firm with stamp**

Note : Affidavit to be furnished on a 'Non-judicial' stamp paper of Rs. 200/- (scanned copy of the notarized affidavit to be uploaded at the time of submission of bid.)

9. FORMAT FOR UNDERTAKING FOR SITE INSPECTION

To,

**The Executive Engineer-I,
C.P.W.D., Bhopal.**

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

NIT No.: - 19/EE-I/Bhopal/2026-27

Name of work: Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.

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.

Submission of a bid by I/we implicate(s) that I/we have read this notice and all other contract documents and has made myself / ourself 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))

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 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.

Bank seal

2. Signature
Name and address

*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.

BLANK

10. CORRECTION SLIP

केन्द्रीय लोक निर्माण विभाग

कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/02

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi

Dated: 08.12.2023

Subject: Modifications in Conditions of Contract, Clause 5 and schedule F in clause 5 of GCC 2023 Maintenance Works

The following amendments are made in the GCC 2023 for Maintenance works.

Existing Provision	Modified Provision
CONDITIONS OF CONTRACT Definitions 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:- (i) to (xvii) (xviii) No provision	CONDITIONS OF CONTRACT Definitions 2. No change:- (i) to (xvii) No Change (xviii) Concurrent delay: Concurrent delays are those delays occurring in the work concurrently in any combination or combination of all delay fall under different sub clauses 5.2, 5.3 and 5.5.
Clause 5 Time and Extension for Delay The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site, notified by the Engineer-in-Charge, whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited by the Engineer in Charge and shall be absolutely at the disposal of the Government without prejudice to any other right or remedy available in law.	Clause 5 Time and Extension for Delay The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site, notified by the Engineer-in-Charge, whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid and such default continues even after time period specified in the notice in writing by the Engineer-in-Charge then the performance guarantee shall be forfeited by the Engineer-in-Charge and shall be absolutely at the disposal of the Government without prejudice to

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(EE (Contact))

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	any other right or remedy available in law. The contract shall stand determined when such decision of forfeiture of the performance guarantee is issued to the contractor.
5.1 As soon as possible but within 7 (seven) working days of award of work and in consideration of	5.1 The contractor as soon as possible but within 7 (seven) days of issue of letter of award of work shall submit a time and progress chart to the Engineer-in-Charge. Such chart shall be made in due consideration of
a. Schedule of handing over of site as specified in the Schedule 'F'	a. Schedule of handing over of site as specified in the Schedule 'F'
b. Schedule of issue of designs as specified in the Schedule 'F',	b. Schedule of issue of design(s) and drawing(s) as specified in the Schedule 'F',
i. the Contractor shall submit a Time and Progress Chart for each mile stone. The Engineer-in-Charge may within 7 (seven) working days thereafter, if required modify, and communicate the program approved to the contractor failing which the program submitted by the contractor shall be deemed to be approved by the Engineer-in-Charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents.	i. The Contractor shall submit a Time and Progress Chart for each milestone. The Engineer-in-Charge may within 7 (seven) days of receipt of such chart, make modifications thereafter, if any, and communicate the approved chart to the contractor, failing which the chart submitted by the contractor shall be deemed to be approved by the Engineer-in-Charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents.
ii. In case of non-submission of construction programme by the contractor, the program approved by the Engineer-in-Charge shall be deemed to be final.	ii. In case of non-submission of time and progress chart by the contractor, the chart prepared by the Engineer-in-Charge shall be deemed to be final.

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iii. The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract. iv. The contractor shall submit the Time and Progress Chart and progress report using the mutually agreed software or in other format decided by Engineer-in-Charge for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery as per Schedule F to be decided by the NIT approving authority shall be made on per week or part basis in case of delay in submission of the monthly progress report v. No provision	iii. The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract. iv. The contractor shall submit the Time and Progress Chart containing upto date progress of work using the mutually agreed software or in the format decided by Engineer-in-Charge. Such chart shall be submitted by the contractor on or before 5th day of each month failing which a recovery as mentioned in Schedule 'F' shall be made at the earliest from running account bill without any notice in this regard. v. While recording the hindrances in the progress of the work, due consideration should be given to the cause of hindrance. The hindrances shall be segregated in following categories : a) delays due to reasons beyond the control of both parties (sub-clause 5.2) b) delays attributable to the Department and concurrent delays (sub-clause 5.3). c) delays solely attributable to the contractor (sub-clause 5.5)
5.2 If the work(s) be delayed by:- i. force majeure, or ii. abnormally bad weather, or iii. serious loss or damage by fire, or iv. civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or v. delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in	5.2 Delays due to reasons beyond the control of both parties: If the work(s) delayed by:- i. force majeure, or ii. abnormally bad weather, or iii. serious loss or damage by fire, or iv. civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or v. delay on the part of other contractors or tradesmen engaged by Engineer-in- Charge in

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executing work not forming part of the Contract, or vi. any other cause like above which, in the reasoned opinion of the Engineer-in-Charge is beyond the Contractor's control	executing work not forming part of the Contract, or vi. any other cause like above which, in the reasoned opinion of the Engineer-in-Charge is beyond the Contractor's control.
Then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.	Then upon the happening of any such event causing delay, the contractor shall within 03 (three) days give online notice thereof through ERP Portal to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the work(s). The contractor shall have no claim on account of any hindrance in case notice(s) are not given by the contractor through ERP portal. The Engineer-in-Charge, on receipt of such notice(s) after considering the factual ground situation, shall either acknowledge or reject the notice(s) In case of rejection, the reason(s) for rejection shall be communicated by Engineer-in-Charge to the agency. The decision of Engineer-in-Charge with regard to nature of event causing delay, its start date and end date, as has been finalized during acknowledgement of notice, shall be final and binding. The end date of such events shall be recorded by Engineer-in-Charge either during acknowledgment of notice or subsequent to acknowledgement if end date of hindrance is after the date of acknowledgement of notice. In absence of notice by the contractor, Engineer-in-Charge or his representative(s) may record the events causing delay within 05 (five)


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	days of occurrence of hindrance on ERP portal provided further that not recording of events causing delay by the Engineer-in-Charge does not ipso facto entitle the contractor for any hindrance.
The contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for events listed in sub clause 5.2.	No change.
5.3 In case the work is hindered in the opinion of the contractor, by the Department or for any reason / event, for which the Department is responsible, the authority as indicated in Schedule 'F' shall, if justified, give a fair and reasonable extension of time and reschedule the mile stones for completion of work.	5.3 Delays attributable to the department In case the work is hindered, in the opinion of the contractor, by the Department or for any reason / event, for which the Department is responsible, then upon the happening of such event causing delay, the Contractor shall within 3 (three) days give online notice there of through ERP Portal to the Engineer-in-Charge but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the work. The contractor shall not be entitled for any hindrance in case notice(s) are not given by the contractor through ERP portal. The Engineer-in-Charge, on receipt of such notice(s) after considering the factual ground situation, shall either acknowledge or reject the notice(s). In case of rejection, the reason(s) for rejection shall be communicated by Engineer-in-Charge to the agency. The decision of Engineer-in-Charge with regard to nature of event causing delay, its start date and end date, as has been finalized during acknowledgement of notice, shall be final and binding.

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	The end date of such events shall be recorded by Engineer-in-Charge either during acknowledgment of notice or subsequent to acknowledgement if end date of hindrance is after the date of acknowledgement of notice. In absence of notice by the contractor, Engineer-in-Charge or his representative(s) may record the events causing delay within 05 (five) days of occurrence of hindrance on ERP portal provided further that not recording of events causing delay by the Engineer-in-Charge does not ipso facto entitle the contractor for any hindrance.
Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law, provided further that for concurrent delays under this sub clause and sub clause 5.2 to the extent the delay is covered under sub clause 5.2 the contractor shall be entitled to only extension of time and no damages.	Such extension of time or rescheduling of milestone(s) shall be without prejudice to any other right or remedy of the parties in contract or in law, provided further that for concurrent delay(s) under this sub clause and sub clause 5.2 to the extent the delay is covered under sub clause 5.2, the contractor shall be entitled to only extension of time and shall have no claim of damages.
5.4	5.4 Rescheduling of milestone(s) and 'extended date of completion'
Request for rescheduling of Milestones or extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed forms i.e. Form of application by the contractor for seeking rescheduling of milestones or Form of application by the contractor for seeking extension of time (Appendix - XVI) respectively to the authority as indicated in Schedule 'F'. The Contractor shall indicate in such a request the period by which rescheduling of milestone/s or extension of time is desired.	The request for rescheduling of Milestone(s) and extension of time, shall be made by the Contractor through ERP Portal once in a month on the basis of hindrances accepted by Engineer-in-Charge under sub-clause 5.2 and sub-clause 5.3. The Contractor shall indicate in such a request number of days by which rescheduling of milestone(s) and/or extension of time is desired.
With every request for rescheduling of milestones, or if at any time the actual progress of work falls behind the approved programme by more than 10% of the stipulated period of completion of contract, the contractor shall produce a revised programme without causing any delay in execution	Deleted

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(EE (Contract))

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of the work. A recovery as specified in Schedule 'F' shall be made on per day basis in case of delay in submission of the revised programme. No provision	The authority as indicated in Schedule 'F', after examining the request, shall give a fair and reasonable extension of time for completion of work and simultaneously reschedule the milestone(s), if required so. The authority shall consider all the hindrances accepted as per sub-clauses 5.2, 5.3 and 5.5. The authority shall decide rescheduling of milestone(s) and extension of time within 21 (Twenty One) days of the request submitted by the contractor through ERP portal. In event of no request by the contractor for rescheduling of milestone(s) and extension of time, the authority as indicated in Schedule F, after affording opportunity to the contractor, may give fair and reasonable extension of time based on hindrances accepted by Engineer-in-Charge and reschedule the milestone(s) once in a month. Such justified extension of time shall determine the 'extended date' of completion of work.
5.4.1 In any such case the authority as indicated in Schedule 'F' may give a fair and reasonable extension of time for completion of work or reschedule the mile stones. E-in-C shall finalize/ reschedule a particular mile stone before taking an	5.4.1 Provided that the end date of any event causing delay shall not fall beyond the date of request for extension of time or rescheduling of milestone(s) by the contractor. In case end date of event falls beyond the date of submission of said request, then period for extension up to date of application shall be considered in the said request for events eligible for consideration and remaining period shall be applied in subsequent request of extension of time or rescheduling of milestone(s). Engineer-in-Charge shall finalize/ reschedule a particular mile stone

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action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 21 days of the date of receipt of such request from the Contractor in prescribed form. In event of non-application by the contractor for extension of time E-in-C after affording opportunity to the contractor, may give, supported with a programme (as specified under 5.4 above), a fair and reasonable extension within a reasonable period of occurrence of the event.

5.5

In case the work is delayed by any reasons, in the opinion of the Engineer-in-Charge, by the contractor for reasons beyond the events mentioned in clause 5.2 or clause 5.3 or clause 5.4 and beyond the justified extended date, without prejudice to right to take action under Clause 3, the Engineer-in-Charge may grant extension of time required for completion of work without rescheduling of milestones. The contractor shall be liable for levy of compensation for delay for such extension of time.

before taking an action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 21 **(twenty one)** days of the date of receipt of such request from the Contractor **on ERP Portal.**

5.5 Delays attributable solely to the contractor

In case the work is delayed by reasons solely attributable to the contractor, then Engineer-in-Charge or his representative(s) may record the event causing delay within 05 (five) days of occurrence of delay in the ERP portal. Contractor shall take the notice of the same for necessary action. He may submit his version, if any within 05 (Five) days. Engineer-in-Charge, considering the version of the contractor, will take decision on such recording of the event and the decision of the Engineer-in-Charge shall be final and binding.

The contractor shall be liable for levy of compensation for such delays (i.e. for the period beyond the justified extended date of completion as determined in sub clause 5.4 and this default of contractor shall be dealt in conjunction with clause 2 of the contract.

In case the work is delayed, due to hindrances attributable solely to the contractor, beyond the justified extended date (as stated in sub clause 5.4), the authority indicated in Schedule 'F', without prejudice to provisions to take action under Clause 3, may grant extension of

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	time required for completion of work without rescheduling of milestone(s) and extend the date of completion.
PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders)	PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect. & Hort. Works in case of Composite Tenders)
SCHEDULE 'F'	SCHEDULE 'F'
Clause 5	Clause 5
Authority to decide:	
i. Extension of time (Engineer in Charge or Engineer in Charge of Major Component in case of Composite Contracts, as the case may be)	i. Authority to convey the decision of shifting of milestone and extension of time (Engineer-in-Charge or Engineer-in-Charge of Major Component in case of Composite Contracts, as the case may be)
ii. Rescheduling of mile stones (Superintending Engineer/ PM/CPM in Charge or Superintending Engineer/ PM/CPM in Charge of Major Component in case of Composite Contracts, as the case may be)	ii. Authority to decide rescheduling of milestone and extension of time (SE/SE&PD/CE/ CE&ED).
iii. Shifting of date of start in case of delay in handing over of site (Superintending Engineer/ PM/CPM in Charge or Superintending Engineer in Charge of Major Component in case of Composite Contracts, as the case may be)	iii. Shifting of date of start in case of delay in handing over of site (SE/SE&PD/CE/CE&ED).

This OM is applicable for all NITs uploaded after date of issue of this OM.

This is issued with the approval of DG CPWD.

08.12.2023
(वी. पी. साहू)

अधीक्षण अभियंता (सी.एंड एम.)

Issued from file No. CSQ/CM/17(1)/2023/ Maintenance e-file 9161772

के.लो.नि.वि. तथा लो.नि.वि. दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु (के.लो.नि.वि.वेबसाइट के माध्यम से)।

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(EE (Contact))

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केन्द्रीय लोक निर्माण विभाग

कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/03

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 18.12.2023

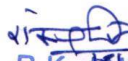
Subject: Modifications in Conditions of Contract, Clause 12 and Schedule E and F of GCC 2023 for Maintenance Works

The following amendments are made in the GCC 2023 Maintenance Works:

Existing provision	Modified provision
CONDITIONS OF CONTRACT	CONDITIONS OF CONTRACT
Definitions 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-	Definitions 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-
(i) to (x)(a)	(i) to (x) (a) No change
(x) (b) Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender documents or the standard Schedule of Rates of the government mentioned in Schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.	(x) (b) Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender documents or the standard Schedule of Rates of the government mentioned in Schedule 'F' hereunder, with the amendments thereto issued previous day of the last date of submission of the tender.
(xi) to (xv)	(xi) to (xv) No change
(xvi) No provision	(xvi) Extra items are those items which are not available in the contract. a. Non Schedule Extra Items are those items which are not available in the Standard Schedule of Rates specified in Schedule F. b. Scheduled Extra Items are those items which are available in the Standard Schedule of Rates specified in Schedule F.
(xvii) No provision	(xvii) Completion cost: The completion cost includes gross amount of work done, amount of extra item(s) and deviation(s) and escalation amount admissible as per agreement etc.

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(EE (Contact))

(xviii) No provision	(xviii) Maintenance work: Maintenance work(s) are those work(s) which includes upgradation, aesthetic improvement, special repair, addition/ alteration, annual repair, comprehensive maintenance work etc.
Clause 12 Deviations/ Variations Extent and Pricing The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for other reasons and the contractor shall be bound to carry out the works in accordance with any instruction given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.	Clause 12 Deviations/ Variations Extent and Pricing No change
The completion cost of any agreement for maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration should not exceed two times the contract amount. Deviation upto 1.25 times of contract amount shall be approved by Engineer-in-Charge with recorded reasons. Deviation beyond 1.25 times upto 1.50 times of contract amount shall be approved by SE/CE (as applicable) with recorded reasons. In exceptional case, ADG/SDG (as applicable) shall have power to approve the deviation beyond 1.50 times upto 2.0	The completion cost shall, in no case, exceed 1.5 times the contract amount. Contractor will devise a system to keep a watch on quantum of work taken up vis-a-vis balance items required to complete defined scope of work and will give the alerts to Engineer-in-Charge before taking up extra item(s), deviation(s) so that completion cost does not exceed above limit. Work executed beyond above limit will neither be recorded nor be paid.


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 (EE (Contact))

times of contract amount with recorded reasons and take suitable corrective action.	Engineer-in-Charge will verify and confirm the alerts before assigning deviation(s) and / or extra item(s) to the contractor. If additional work(s) is required to complete defined scope of work beyond above limit then Engineer-in Charge may take up such work(s) separately. The contractor will not have any claim(s) whatsoever on this account.
12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows : (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus (ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge	12.1 The time for completion of the works shall, in the event of any deviation(s) and extra item(s) resulting in additional cost over the contract amount will be extended, if requested by the contractor, as follows : (i) In the proportion to the additional cost of work, bears to the original contract amount plus (ii) 25% of the time calculated in (i) above.
12.2 Deviation, Extra Items and Pricing Extra items are those which are not available in the contract. For percentage rate tenders, the extra item(s) which are available in the standard schedule of rates specified in Schedule F, shall be paid as per the said schedule rate plus cost index (considered in the estimated cost put to tender) plus/minus percentage above/ below quoted on estimated cost put to tender. For item rate tenders, the extra item(s) which are available in the standard schedule of rates specified in Schedule F, shall be paid as per the said schedule rate plus cost index (considered in the	12.2 Deviation, Extra Items and Pricing Deleted Deleted

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estimated cost put to tender) plus/minus percentage above/ below worked out on the basis of overall contract amount and estimated cost of the work put to tender.

In the case of extra item(s) which are not available in the standard schedule of rates specified in Schedule F, the contractor may within fifteen days of the receipt of order or occurrence of the item(s), submit claim for market rate(s), supported with proper analysis of rate and manufacturer's specification for the work, invoices, vouchers, etc. (as applicable),

failing which the rate(s) approved later by the Engineer-in-Charge shall be final and binding.

(a) **Non Schedule Extra Item(s)** - The contractor, shall within fifteen days of the receipt of order to execute extra item(s) or occurrence of the item(s), submit analysis of rate of extra item(s) based on the rate(s) of material(s) available in basic rate of Standard Schedule of Rate mentioned in schedule F and rate(s) of the material(s) based on tax paid bills which are not available in standard Schedule of Rate mentioned in schedule F. For this purpose, the basic rate of material(s) available in Schedule of Rate(s) mentioned in Schedule F will be enhanced or reduced by the applicable cost index, as the case may be.

The rate(s) of the material(s) which are not available in Standard Schedule of Rates, mentioned in Schedule F, shall be based on, tax paid bill(s) for the material(s) as defined in manufacturer's specification.

Material rate(s) from Standard Schedules of Rate(s) shall be given priority in the analysis of rate(s).
The rate of extra item will be

- i. Analyzed rate(s) as above multiplied by (Contract amount divided by estimated cost put to tender), if tendered amount is below the estimated amount put to tender.
- ii. Analyzed rate, if the Contract amount is above the estimated amount put to tender.

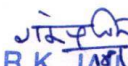
Failing which the rate(s) approved later by the Engineer-in-Charge shall be final and binding.


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Where the contractor submits claim for market rate(s) in the manner prescribed above, the Engineer-in-Charge shall, within 45 days of the receipt of the claims, after giving consideration to the analysis of rates and other documents submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.	Where the contractor submits analysis of rate(s) of extra item(s) in the manner prescribed above, the Engineer-in-Charge shall, within 60 days of the receipt of the analysis of rate, after giving consideration to the analysis of rates and other documents submitted by the contractor, determine the rate(s) of extra item(s). The contractor shall be paid in accordance with the rate(s) so determined. However provisional rate(s) on the basis of invoice will be allowed by the Engineer-in-Charge. Invoice shall be accepted only for material(s) not available in the Standard Schedule of Rates mentioned in Schedule F. The contractor while submitting the tax paid bill of purchased material(s) shall ensure that rate(s) of the materials are reasonable and lowest available in the market. If Engineer-in-Charge feels rates in tax paid bill(s) submitted by contractor are not reasonable then he can modify the rate(s) after giving a notice to the contractor. Engineer-in-Charge is the final authority to decide applicable rate(s) of material(s).
(b) No Provision	(b) Scheduled Extra Items - For percentage rate tender, the extra item(s) shall be paid as per the Standard Schedule of Rates, mentioned in Schedule F, enhanced or reduced by the applicable cost index and further enhanced or reduced by percentage above/ below quoted by the contractor on estimated cost put to tender. - For item rate tender, the extra item(s) shall be paid as per the said schedule rate enhanced or reduced by the applicable cost index and multiplied by (Contract amount divided by estimated cost put to tender).

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(EE (Contact))

The rate(s) of extra items so determined by the Engineer-in-Charge shall be final and binding on the contractor, and shall not be arbitrable.	The rate(s) of extra item(s) so determined by the Engineer-in-Charge shall be final and binding on the contractor.
12.3 Deviation, Deviated Quantities, Pricing All the deviated quantities shall be paid at agreement rates	12.3 No change
12.4 The case of any operation incidental to or necessarily has to be in contemplation of tenderer while quoting filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.	12.4 No Change
12.5 No provision	12.5 Cost index Latest available Cost index at the time of beginning of execution of extra item(s) shall be used in sub-clauses 12.2 (a) and 12.2 (b) for calculation of rate(s) of extra item(s).
12.6 No provision	12.6 Labour rates Labour rates will be based on latest available circulars issued by Central Govt. or State Govt. whichever are higher as well as applicable for the work.
PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders) SCHEDULE 'E' Reference to General Conditions of Contract	PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders) SCHEDULE 'E' Reference to General Conditions of Contract : (GCC EPC Projects 2022/ GCC Maintenance Works 2023/ GCC Construction Works 2023)


R.K. JAIN 14/2/23
 (EE (Contact))

	Applicable GCC is as modified & corrected upto previous day of the last date of submission of the tender. (NIT approving authority to mention one GCC in the space provided above)
SCHEDULE 'F' GENERAL RULES & DIRECTIONS: Officer inviting tender 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	SCHEDULE 'F' GENERAL RULES & DIRECTIONS: No Change Deleted
9 (ii) Standard CPWD contract Form GCC 2020, CPWD Form 7/ 8 as modified & corrected upto	9(ii) Standard CPWD contract Form General Conditions of Contract Maintenance Works 2023 , CPWD Form 7/ 8 as modified & corrected upto previous day of the last date of submission of the tender.
Clause 12 12.2 Deviation Limit beyond which clauses 12.2 shall apply for building work	Clause 12 Deleted

This issues with the approval of DG CPWD.


18.12.2023
(वी. पी. साहू)

अधीक्षण अभियंता(सी.एंड एम.)

Issued from file No. CSQ/CM/17(1)/2023/Maintenance e-file 9163323

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनवि वेबसाईट के माध्यम से)


R.K. JAIN
(EE (Contact))

केन्द्रीय लोक निर्माण विभाग

कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/04

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 08.02.2024

Subject: Modifications in Conditions of Contract and Clause 19 of GCC 2023 for Maintenance Works

The following amendments are made in the GCC 2023 for Maintenance Works:

Existing provision	Modified provision
CONDITIONS OF CONTRACT Definitions 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:- (i) to (xix) (xx) No provision (xxi) No provision	CONDITIONS OF CONTRACT Definitions 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:- (i) to (xix) No change (xx) Adolescent Person: A person who has completed his/her fourteenth year of age but has not completed his eighteenth year. (xxi) Hazardous works: Hazardous process/works are the works as defined in the clause (cb) of the Factory Act, 1948.
Clause 19 Labour Laws to be complied by the Contractor The contractor shall comply with the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971. The contractor shall also obtain a valid licence under the said Act before the commencement of the work, and continue to have a valid licence until its completion. The contractor shall also comply with provisions of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979.	Clause 19 Labour Laws to be complied by the Contractor No change No change No change

The contractor shall also abide by the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986. The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996. Any failure to fulfil these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.	The contractor shall also abide by the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986, amended by Amendment Act No. 35 of 2016 and thereafter time to time. No change No change
Clause 19A No labour below the age of eighteen years shall be employed on the work.	Clause 19A No person below the age of fourteen years shall be employed on the work. However Adolescent Persons can be employed on non-hazardous works/process.
C.P.W.D. Contractor's Labour Regulations 2. DEFINITIONS i. (c) Who is an out worker, that is to say, person to whom any article or materials are premises under the control and management of the principal employer. No person below the age of 18 years shall be employed to act as a workman.	C.P.W.D. Contractor's Labour Regulations 2. DEFINITIONS i. (c) No change. No person below the age of fourteen years shall be employed on the work. However Adolescent Persons can be employed on non-hazardous works/process.

This issues with the approval of DG CPWD.


08.02.2024
(वी. पी. साहू)

अधीक्षण अभियंता(सी.एंड.एम.)

Issued from file No. CSQ/CM/17(1)/2024/Maintenance e-file 9169019

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनवि वेबसाईट के माध्यम से)

**Central Public Works Department
Office Memorandum**

No. DG/CON/Maintenance 2023/05

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD 61.03.2024

NIRMAN BHAWAN, NEW DELHI

Dated: 20.02.2024

Subject: Modifications in Conditions of Contract, Clause 19 and 20 of GCC 2023 for Maintenance Works

The following amendments are made in the GCC 2023 for Maintenance Works:

Existing provision	Modified provision
CONDITIONS OF CONTRACT Definitions 9. Signing of Contract:- The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:- (i) to (iii) No Provision	CONDITIONS OF CONTRACT Definitions 9. Signing of Contract:- The successful tenderer, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:- (i) to (iii) No change In the event of successful tenderer being a firm/company, then the agreement shall be signed by all the partners or directors thereof individually. In the event of the absence of any partner/director, it shall be signed on his behalf by a person holding a power of attorney (duly notarized by notary public or board resolution in case of company) authorizing him to do so.
Clause 19 B Payment of Wages (i) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the C.P.W.D. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.	Clause 19 B Payment of Wages (i) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the C.P.W.D. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971 and Gazette Notification 19.01.2017, S.O 188 (E) extra ordinary part 2 – sec. 3 (ii) amended time to time.

21/02/24
R.K. JAIN
(EE (Contact))

(v) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.	Thus higher of the wages either notified by Govt. of India, Ministry of Labour and/or that notified by the local administration of the State Govt. both relevant to the place of work and the period of reckoning shall be paid by the contractor to the labourer . (v) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, Gazette Notification 19.01.2017, S.O 188 (E) extra ordinary part 2 – sec. 3 (ii) and the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
Clause 20 Minimum Wages Act to be Complied With The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed there under and other labour laws affecting contract labour that may be brought into force from time to time.	Clause 20 Minimum Wages Act to be Complied With The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, Gazette Notification 19.01.2017, S.O 188 (E) extra ordinary part 2 – sec. 3 (ii) amended from time to time and rules framed there under and other labour laws affecting contract labour that may be brought into force from time to time.

This issues with the approval of DG CPWD.

[Signature] 01.03.2024
(V.P. Sahu)

Superintending Engineer (C&M)

Issued from file No. CSQ/CM/17(1)/2023 e-file no. 9163323

To all the concerned officers of CPWD/PWD for information and necessary action please. (Through CPWD Website)

[Signature]
29/01/2024
R.K. JAIN
(EE (Contact))

**Central Public Works Department
Office Memorandum**

No. DG/CON/Maintenance 2023/06

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 01-03-2024

Subject: Modifications in Clause 7 of GCC 2023 for Maintenance Works

The following amendments are made in the GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 7 Payment on intermediate certificate to be regarded as Advances No payment shall be made for work, estimated to cost Rs. Five lac or less till after the whole of the work shall have been completed and certificate of completion given. calendar month of the measurements recorded upto previous month as per clause 6.	Clause 7 Payment on intermediate certificate to be regarded as Advances No change.
The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved.	The contractor shall not be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved.
No provision	However, to expedite the progress of work, Engineer-in-Charge, on the request of contractor, may make interim payment(s) even before the net payment limit specified in schedule 'F' is achieved. In such case(s) no interest / compensation shall be recoverable from contractor. Such payment by Engineer-in-Charge shall not be construed as waiver of limit specified in schedule 'F' for subsequent interim payment(s).

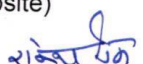
This issues with the approval of DG CPWD.


(V.P. Sahu)

Superintending Engineer (C&M)

Issued from file No. CSQ/CM/17(1)/2023/Maintenance e-file no. 9135972

To all the concerned officers of CPWD/PWD for information and necessary action please. (Through CPWD Website)


R.K. JAIN 03/2024
(EE (Contact))

**Central Public Works Department
Office Memorandum**

No. DG/CON/Maintenance 2023/07

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 05.03.2024

Subject: Modifications in Clause 19 of GCC 2023 for Maintenance Works

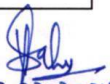
The following amendments are made in the GCC 2023 for Maintenance Works.

Existing provision	Modified provision
Clause 19 Labour Laws to be complied by the Contractor	Clause 19 Labour Laws to be complied by the Contractor
The contractor shall comply with the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971.	No change
The contractor shall also obtain a valid licence under the said Act before the commencement of the work, and continue to have a valid licence until its completion.	No change
The contractor shall also comply with provisions of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979.	No change
The contractor shall also abide by the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986, amended by Amendment Act No. 35 of 2016 and thereafter time to time.	No change.
The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.	No change


R.K. JAIN
 (EE (Contact))

No provision	The contractor shall also comply with the provisions of Sexual Harassment of Women at Workplace (Prevention Prohibition and Redressal) Act, 2013 and amendment thereafter time to time.
Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.	Any failure to fulfil these requirements shall attract the penal provisions of the relevant act and in this contract
Clause 19 M No Provision	Clause 19 M Sexual Harassment of Women at Workplace The contractor shall comply with all provision(s) and guideline(s) of Sexual Harassment of Women at Workplace (Prevention Prohibition and Redressal) Act, 2013 and amendment thereafter time to time or any other rules framed under any labour law affecting women worker(s).

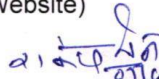
This issues with the approval of DG CPWD.


05.03.2024
(V.P. Sahu)

Superintending Engineer (C&M)

Issued from file No. CSQ/CM/17(1)/2023 e-file no. 9163323

To all the concerned officers of CPWD/PWD for information and necessary action please. (Through CPWD Website)


21/03/2024
R.K. JAIN
(EE (Contact))

**Central Public Works Department
Office Memorandum**

No. DG/CON/Maintenance 2023/08

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 03-06-2024

Subject: Modifications in Clause 36 of GCC 2023 for Maintenance Works

The following amendment is made in the Clause 36 of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 36 If relative working in CPWD then the contractor not allowed to tender The contractor shall not be <u>permitted</u> to tender for works in the CPWD circle (<u>Division in case of contractors of Horticulture/Nursery categories</u>) responsible for award and execution of contracts in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the <u>Superintending Engineer</u> and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working <u>with him in any capacity</u> or are subsequently employed by him and who are near relatives to any <u>Gazetted Officer in the C.P.W.D. or in the Ministry of Housing and Urban Affairs</u>. Any breach of this condition by the contractor would render him liable to be <u>removed from the approved list of contractors of this Department. If however the contractor is registered in any other department, he shall be debarred from tendering in CPWD for any breach of this condition.</u> NOTE: By the term "near relatives" is meant wife, husband, parents and grandparents, children and grandchildren, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.	Clause 36 If relative working in CPWD then the contractor is not allowed to participate in the tendering process The contractor (<u>enlisted or non-enlisted in CPWD</u>) shall not be <u>allowed</u> to <u>participate in the</u> tender for work(s) in the CPWD <u>Zone/circle /Division/Sub-Division</u> 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.
	No change.

This issues with the approval of DG, CPWD.


03-06-2024
(V.P. Sahu)

Superintending Engineer (C&M)

Issued from file No. CSQ/CM/17(1)/2023/ Maintenance e-file 9135972

All CPWD and PWD officers for information and necessary action. (Through CPWD website)

17/05/2024
R.K. JAIN
EE (Contract)

**Central Public Works Department
Office Memorandum**

No. DG/CON/Maintenance 2023/09

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 03-06-2024

Subject: Additions in 'General Rules and Directions' of GCC 2023 for Maintenance Works

The following additions are made in GCC 2023 for Maintenance Works under 'General Rules and Directions':

Existing provision	Modified provision
General Rules and Directions Sl. No. 1 to 16 No Provision	General Rules and Directions No Change 17. Price Preference to SC/ST individual contractor for item rate/percentage rate tender: Price preference in quoted item rate/percentage rate tender shall be applicable to the individual enlisted/non-enlisted SC/ST contractor as under:- i. For work(s) upto and equal to an estimated cost of Rs.2.70 lakh a price preference upto 5% (with reference to the lowest valid tender) may be allowed in favor of individual SC/ST enlisted/non-enlisted contractor. No earnest money is required in such case(s). ii. For work(s) beyond an estimated cost of Rs. 2.70 lakh and upto and equal to estimated cost of Rs. 6.20 lakh, the price preference upto 5% (with reference to the lowest valid tender) may be allowed in favour of individual enlisted SC/ST contractor. However, earnest money at a reduced rate of ½% may be accepted in such cases. iii. The price pretence upto 5% (with reference to the lowest valid price bid) may be allowed in favour of individual SC/ST contractor. The above concession shall be allowed only after proper verification of the individual contractor's claim of belonging to SC/ST community.
Schedule F No Provision	Schedule F Price Preference to SC/ST individual contractor is valid upto (date)

This issues with the approval of DG CPWD.

(Signature)
03-06-2024
(V.P. Sahu)

Superintending Engineer (C&M)

Issued from file No. CSQ/CM/17(1)/2023/Maintenance e-file 9163323

All CPWD and PWD officers for information and necessary action.(Through CPWD website)

(Signature)
R.K. JAIN
EE (Contract)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/10

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 09.10.2024

Subject: Modifications in Clause 10A of GCC 2023 for Maintenance Works.

The following amendment is made in the Clause 10A of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 10A Materials to be provided by the contractor The contractor shall as specified in Schedule F. No Provision	Clause 10A Materials to be provided by the contractor (i) No Change (ii) Maintenance of Material at Site (MAS) Register (a) MAS register of the key materials including Cement, Steel Bitumen, Paint, Primer, Distemper, Varnishes, Tile Adhesive, Admixture, Anti termite chemical Water proofing compound material and other items as required by Engineer-in-Charge, and shall be maintained as per proforma in Appendix-XX of GCC. All the entries in the MAS registers are made by the designated staff of the contractor and same is reviewed weekly by the authorized representative and fortnightly by the Engineer-in-Charge. However, contractor is responsible for maintenance and safe custody of MAS registers.
(b) No provision	(b) The self-attested copies of tax paid bill of all the materials entered in the MAS register shall be submitted by the contractor at the time of review by representative of Engineer-in-Charge. In case of any doubt, genuineness of the tax paid bills; it can be verified by the representative of the Engineer-in-Charge or the Engineer-in-Charge, however, onus of genuineness of tax paid bills rest with the contractor.

R K SINGH
EE(Manual)

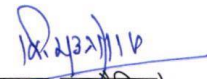
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Appendix-XX
REGISTER OF MATERIAL AT SITE (MAS)

1. Division/Sub-division
2. Name of Work
3. Name of Article/Item
4. Estimated Requirements

S. No.	Date of Receipts (Details of Challans/ Bills, Specific location where Plants and Materials received/ Vehicle No.	Received from/ Issued to	Quantity Received	Date of issue	Specific location where Plants & Materials Displayed / Delivered / issued	Quantity Issued	Balance Quantity	Signature of authorized representative of contractor	Signature of authorized representative of Engineer-in-Charge/ AE/EE/	Remarks
1	2	3	4	5	6	7	8		9	10

This issues with the approval of DG, CPWD.


 (दिनेश कुमार उज्जैनिया)
 अधीक्षण अभियंता (सी.एंड एम.)

Issued from file No. CSQ/CM/17(1)/ Maintenance/2024
e-file 9184028 (DFA/9301389)

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनवि वेबसाईट के माध्यम से)


 R.K. SINGH
 EE(Manual)



केन्द्रीय लोक निर्माण विभाग

कार्यालय झापन

No. DG/CON/Maintenance-2023/11

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi

Dated: 29.10.2024

Subject: Modifications in Conditions of Contract, Clause 10A of GCC Maintenance Works 2023.

Following amendments are made in the GCC Maintenance Works 2023 :-

Existing Provision	Modified Provision
Clause 10A: Materials to be provided by the Contractor (i) The contractor shall, thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor. The contractor shall at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in schedule F. No Provision	No Change Field Laboratory: The contractor shall at his own expense, setup a material testing lab equipped with the testing equipment as specified in schedule F at site for conducting routine field test. External Laboratory: Letter for submitting sample(s) for testing of material shall be sent through e-mail to the Lab by authorized representative of Engineer-in-Charge or Engineer-in-Charge of the work along with name(s) of test(s) to be done on the material. The contractor shall collect the sample(s) from the site and submit it to the lab; make necessary payment for the testing charges. He will inform on the same day through email to

 29.10.24
 R K SINGH
 EE(Manual)

1

No Provision	authorized representative of Engineer-in-Charge and Engineer-in-Charge regarding submission of sample (s) and payment made to the lab. If he either fails to collect or submit the sample(s) to the lab within 03 days or in time as prescribed in the specifications, whichever is earlier, the Engineer-in-Charge shall collect and submit the sample(s) and make necessary payment for testing charges to the lab. In such case, Engineer-in-Charge shall make recovery on account of collection and submission of sample(s) to the lab and paid testing charges etc. from the next R/A bill / Final bill of the contractor. This action of Engineer-in-Charge shall be final and binding. If the contractor fails three times in collection and/or submitting sample(s) and/or fails to make payment for testing charges, the contractor shall be debarred from tendering in CPWD for a period of two years.
Sl. no. (ii) (a) and (b)	No change

This OM is applicable for all NITs uploaded after date of issue of this OM.

This is issued with the approval of DG CPWD.

(दिनेश कुमार उज्जैनिया)
अधीक्षण अभियंता (सी.एंड.एम.)

Issued from file No. CSQ/CM/17(1)/2024/Maintenance e-file- 9184436 (DFA/9303295)

केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनिवि वेबसाइट के माध्यम से)

R K SINGH
EE(Manual)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/12

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 03.01.2025

Subject: Modifications in General Rules and Directions of GCC 2023 for Maintenance Works.

The following amendments are made in the General Rules and Directions of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Applicable for Item Rate Tender only (CPWD - 8) 4 The rates rupee one. In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer. If the revised their tenders. In case of any be forfeited. In case all lowest contractors. Contractor of the work.	Applicable for Item Rate Tender only (CPWD - 8) 4 No change In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit revised price bid online using e-tender website, quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, on the revised template which has been sent to them by the Tender Inviting Authority (TIA), but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer. No change
Applicable for Percentage Rate Tender only [CPWD- 7] 4B In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning	Applicable for Percentage Rate Tender only [CPWD- 7] 4B In case the lowest tendered amount (estimated cost $\pm$ amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit revised price bid online quoting percentage above/


R K SINGH
EE(Manual)

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percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case of any be forfeited.

If the revised their tenders.

In case all process of the work.

below on estimated cost of tender including all sub sections/sub heads as the case may be on the revised template which has been sent to them by the Tender Inviting Authority (TIA), but the revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

No change

This issues with the approval of DG, CPWD.

(Signature)
3/1/25

(दिनेश कुमार उज्जैनिया)

अधीक्षण अभियंता (सी.एंड एम.)

**Issued from file No. CSQ/CM/17(1)/ Maintenance/2024
e-file 9185053 (DFA/9307326)**

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनवि वेबसाइट के माध्यम से)

(Signature)
03.01.25
R K SINGH
EE(Manual)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/13

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 31.01.2025

Subject: Modifications in Clause 7A of GCC 2023 for Maintenance Works

The following amendments are made in the Clause 7A of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 7A No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge.	Clause 7A (a) No Running Account Bill/Final Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge. (b) The following documents shall also be part of the bill submitted by the contractor (these documents shall be owned by the contractor) before making payment:- 1. Details of person employed with date of their employment up to previous month. 2. Documents of payment made to the employees directly into their bank accounts up to previous month. 3. Documents of attendance through biometric attendance or other mode up to previous month. 4. Documents of deposition of EPF and ESI deductions in the employee's accounts up to previous month. 5. Any penalty imposed on the agency for delay in disbursing payment and deposition of EPF and ESI deductions in the employee's accounts up to previous month. 6. Any other document(s) required as per statutory requirements and/or as directed by Engineer-in-Charge. (c) In case, any of the documents submitted by the contractor is found false/forged at a later date, action for debarment of contractor will be taken by the SE/CE concerned.

This issues with the approval of DG, CPWD.

Issued from file No. CSQ/CM/17(1)/2023/Maintenance e-file 9184028 (DFA/9313089)
केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनिवि वेबसाईट के माध्यम से)

R K SINGH
EE(Manual)

**Central Public Works Department
Office Memorandum
No. DG/CON/Maintenance 2023/14
ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD**

NIRMAN BHAWAN, NEW DELHI

Dated: 10.02.2025

Subject: Modifications in Clauses 7, 8, 9 and Schedule F of clause 8 of GCC 2023 for Maintenance Works.

The following amendments are made in the Clauses 7, 8, 9 and Schedule F of clause 8 of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 7 Existing provisions No provision	Clause 7 No change In case of correction / rejection / short documents, it will be mandatory for Engineer-in- Charge to give recorded reasons for correction / rejection / submission of additional documents within seven days after submission of running bill by the contractor.
Clause 8 Completion Certificate Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work and if there is no defect in the work, shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate sum actually realized by the sale thereof.	Clause 8 Completion Certificate Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and the Engineer-in-Charge within seven days of receipt of intimation of completion from contractor will inspect the work and satisfy himself about completion of work, then intimate to the concerned authorities as mentioned in Schedule F for issuance of completion certificate. The concerned authorities will inspect the work and issue completion certificate within thirty days of the receipt of such intimation. The Engineer-in-Charge shall furnish to the contractor a final certificate of completion as the case may be, indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates. No change.

R K SINGH
10.2.25
R K SINGH
EE(Manual)

Page 1 of 3

Clause 9 Payment of Final Bill	Clause 9 Payment of Final Bill
The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period of three months the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Asstt. Engineer, complete with account of materials issued by the Department and dismantled materials.  R K SINGH EE(Mandai)	i. The final bill shall be submitted by the contractor to the Engineer-in-Charge in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final completion certificate furnished by the Engineer-in-Charge whichever is earlier. At the time of submission of the final bill, receipt will be given by the O/o Engineer-in-Charge. ii. In case of correction / rejection / short documents, it will be mandatory for Engineer-in-Charge to give recorded reasons for correction / rejection / submission of additional documents within fifteen days after submission of final measurement and/or final bill by the contractor. iii. Final bill will be accepted with all pre-requisite documents such as sanctioned copies of extra items and deviation in quantities, escalation statements, recovery statement, theoretical statement, completion certificate, final extension of time case, mandatory tests statement, dismantled materials account and other documents as mentioned in clause-7 A etc. iv. An undertaking along the final bill will be submitted by the contractor that "I / we hereby under take that all the measurements/claims payable under this contract have been included in the final bill and will not submit any other bill/claims in future under this agreement thereafter". v. No further claims shall be entertained from the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer in

If the final bill is submitted by the contractor within the period specified above and delay in payment of final bills is made by the department after prescribed time limit, a simple interest @ 5 % (five percent) per annum shall be paid to the contractor from the date of expiry of prescribed time limit, provided the final bill submitted by the contractor is found to be in order.	charge, will, be made within the period of three months. The period of three months will be reckoned from the date of receipt of the bill in complete shape after necessary corrections / additional documents, by the Engineer-in-Charge. vi. In case of foreclosure / determination of contract, if the contractor fails to submit the EOT case, final measurement /bills within 30 days of foreclosure/ determination, the final bill will be prepared and decided by the department. The final bill shall only be paid after withholding amount equivalent to maximum compensation to be levied on the contractor. vii. If the final bill, in complete shape, is submitted by the contractor within the period specified above and delay in payment of final bills is made by the department after prescribed time limit, a simple interest @5% (five percent) per annum may be paid to the contractor from the date of expiry of prescribed time limit, provided the final bill submitted by the contractor contains all the documents as mentioned in para – (iii) & (iv) above.
Schedule F Clause 8 No Provision	Schedule F Clause 8 Competent Authorities to inspect and issue completion certificate (To be filled by NIT approving authority).

This issues with the approval of DG, CPWD.

(दिनेश कुमार उज्जैनिया)
अधीक्षण अभियंता (सी.एंड एम.)

Issued from file No. **CSQ/CM/17(1)/2025/Maintenance**
e-file 9190123 (DFA/9315616)

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनवि वेबसाईट के माध्यम से)

R K SINGH
10.2.25
R K SINGH
EE(Manual)

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केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/ Maintenance 2023/15

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

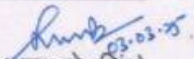
Dated: 03.03.2025

Subject: Modifications in Clause 14 of GCC 2023 for Maintenance Works.

The following amendments are made in the Clause 14 of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 14 Carrying out part work at risk & cost of contractor If contractor: (iii) The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to : (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.	Clause 14 Carrying out part work at risk & cost of contractor If contractor: (iii) The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to : (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor. The contractor, from whom a part work / part incomplete work of any item(s), has been taken out of his hands, shall not be allowed to participate in the tendering/quotation process of part work / part incomplete work of any item(s).

This issues with the approval of DG, CPWD.


(आर. के. सिंह)

कार्यपालक अभियन्ता (एम.)

Issued from file No. CSQ/CM/17(1)/2023/ Maintenance e-file-9184028 (DFA/9319526)

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।

(केलोनवि वेबसाईट के माध्यम से)

R K SINGH
EE(Manual)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/ Maintenance 2023/16

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 16.06.2025

Subject: Modifications in Clause 25.2(b) and 25.6 of GCC 2023 for Maintenance Works.

The following amendments are made in the Clause 25.2(b) and 25.6 of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 25.2 (b) Qualification of Arbitrators: It is a term of this contract that each member of the Arbitral Tribunal shall be Graduate Engineer with experience in execution of public works engineering contracts, and he should have worked earlier at a level not lower than the Chief Engineer (equivalent to level of Joint Secretary to the Government of India). The aforesaid educational qualification and work experience shall be mandatory for appointment as Arbitrator. The age of Arbitrator at the time of appointment shall not exceed 75 years. An Arbitrator may be appointed notwithstanding the total number of active arbitration cases with him. Clause 25.6 Fee payable to Arbitrator(s): The fee payable to the arbitral tribunal shall be as per CPWD OM No.2/2006/SE(TLC)/CSQ/137 dated 19.11.2019 (or latest amendment), and shall be shared equally by both the parties.	Clause 25.2 (b) Qualification of Arbitrators: It is a term of this contract that each member of the Arbitral Tribunal shall be Graduate Engineer (in Civil or Electrical or Mechanical Engineering) with experience in execution of public works engineering contracts and he should have worked earlier at a level not lower than the SAG (Level 14 of 7th CPC) of the Government of India). The aforesaid educational qualification and work experience shall be mandatory for appointment as Arbitrator. The age of Arbitrator at the time of appointment shall not exceed 70 years. Clause 25.6 Fee payable to Arbitrator(s) for arbitration cases, shall be as per the fee given in the fourth schedule of the Arbitration & Conciliation Act, 1996 (or latest amendment), and shall be shared equally by both the parties.

This issues with the approval of DG, CPWD.

(चन्द्र पाल)

अधीक्षण अभियंता (सी. एंड एम.)

Issued from file No. CSQ/CM/17(1)/2025 / Maintenance e-file 9135700 (TLC File)

केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।

(केलोनिवि वेबसाईट के माध्यम से)

R K SINGH
EE(Manual)

केन्द्रीय लोक निर्माण विभाग
कार्यालय झापन

No. DG/CON/Maintenance-2023/17

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi

Dated: 06.11.2025

Subject: Modification of Clause 19L of GCC-2023 for Maintenance Works.

The clause 19L in GCC-2023 for Maintenance Works is being modified:

Existing Provision	Modified Provision
Clause 19 L Contribution of EPF and ESI The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis. The verification of deployment labour will be done through biometric attendance system or any other suitable method by the Engineer in Charge. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order	Clause 19 L Contribution of EPF and ESI It will be mandatory for all the agencies to register with ESI and EPFO departments within 30 days of the award of the work unless exempted by the provisions of ESI and / or EPFO and as amended time to time. The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis. The verification of deployed labour will be done through biometric attendance system or any other suitable method by the Engineer in Charge. The agency shall submit an affidavit on a stamp paper of Rs. 100 that the employees were engaged fully and exclusively on the work for which the claim is being made. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order

This is issued with the approval of DG CPWD.

અધીક્ષણ અભિયંતા

Issued from file No. CSQ/CM/17(1)/2024/ Maintenance e-file 9195855 (DFA/9350595)

के.लो.नि.वि. तथा लो.नि.वि. दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु (के.लो.नि.वि.वेबसाईट के माध्यम से)।

D.P. Jindal
EE (Contract)

केन्द्रीय लोक निर्माण विभाग
कार्यालय झापन

No. DG/CON/ Maintenance 2023/18

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

VIDYUT BHAWAN, NEW DELHI

Dated: 27.02.2026

Subject: Modifications in General Rules & Directions, Clause 1 and Schedule E of GCC 2023 Maintenance Works

The following modifications are made in the General Rules & Directions, Clause 1 and Schedule E of GCC 2023 Maintenance Works.

Existing provision	Modified provision
General Rules & Directions 11 (i) The Contractor whose tender 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.	General Rules & Directions 11 (i) The Contractor whose tender is accepted, will be required to furnish performance guarantee as mentioned in Schedule 'E' and within the period specified in Schedule F.
Clause 1 Performance Guarantee (i) The contractor shall submit an irrevocable Performance Guarantee at specified percentage of the tendered amount as mentioned in Schedule 'E', in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance.	Clause 1 Performance Guarantee (i) The contractor shall submit an irrevocable Performance Guarantee as mentioned in Schedule 'E', in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance.
Sl. No. (ii) to (v)	No change
SCHEDULE 'E' Reference to General Conditions of contract Sl. No. (i)	SCHEDULE 'E' Reference to General Conditions of contract No change

D. P. Jindal
D.P. Jindal
EE (Contract)

(ii) Performance Guarantee : 5% of tendered value. Sl. No. (iii)	(ii) Performance Guarantee : (a) 5% of tendered value or Estimated Cost Put to Tender (ECPT) (whichever is higher). (b) Where the tendered amount is less than eighty percent (80%) of the Estimated Cost Put to Tender (ECPT), the Performance Guarantee, in addition to the requirement under (a) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount. No change
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This issues with the approval of DG, CPWD.

अधीक्षण अभियंता (सी.एंड.एम.)

चंद्रपाल (सी.एंड.एम.)
(Chander Pal, SE (C&M))

Issued from file No. CSQ/CM/17(1)/2026/ Maintenance e-file 9212995
(DFA/ 9365660)

केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनिवि वेबसाईट के माध्यम से)

27/12/21
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D.P. Jindal
EE (Contract)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/19

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Vidyut Bhawan, New Delhi

Dated: 25.03.2026

Subject: Modifications in Clause 6 and Schedule 'F' of GCC 2023 Maintenance Works

The following modifications are made in the Clause 6 and Schedule 'F' of GCC 2023 for maintenance works, for annual repair and maintenance works, special repair works, comprehensive maintenance works and upgradation works amounting upto Rs. 10 crores in Delhi only.

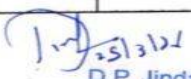
Existing provision	Modified provision
Clause 6: Computerized Measurement Book (CMB)/ Electronic Measurement Book (EMB) through CPWD ERP portal Engineer-in-Charge with the contract. All measurements and levels of work done during the period covering latter half of the preceding calendar month and first half of the calendar month shall be recorded by the contractor and compiled in the shape of the Computerized Measurement Book (CMB) / Electronic Measurement Book (EMB) through CPWD ERP portal / Computerized Level Book (CLB) respectively having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works executed under the contract during the said period. The proforma Computerised Measurement and level books (along with soft copy) shall be submitted in triplicate through letter of transmittal to the Engineer-in-charge giving details of number of CMBs / CLBs and their number of pages by 20th day of every calendar month. In case of EMB, calendar month.	Clause 6: Computerized Measurement Book (CMB)/ Electronic Measurement Book (EMB) through CPWD ERP portal Engineer-in-Charge with the contract. All measurements and levels of work done during the period covering latter half of the preceding calendar month and first half of the calendar month shall be recorded either by contractor or jointly by department and contractor as specified in Schedule F and compiled in the shape of the Computerized Measurement Book (CMB) / Electronic Measurement Book (EMB) through CPWD ERP portal / Computerized Level Book (CLB) respectively having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works executed under the contract during the said period. The proforma Computerised Measurement and level books (along with soft copy) shall be submitted in triplicate through letter of transmittal to the Engineer-in-charge giving details of number of CMBs / CLBs and their number of pages by 20th day of every calendar month.. No change.

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D.P. Jindal
EE (Contract)

All such monthly his/her authorized representative.	No change.
In case of CMB/CLB, corrected and authorized proforma CMB / CLB.	No change.
In case of EMB, record of measurements available on ERP Portal.	No change.
Once the Engineer-in-charge number of the CMB / CLB /EMB to the Contractor.	No change.
If the contractor fails Clause 25 of this GCC.	No change.
Resources deployed shall be sent to the contractor for his record.	No change.
The contractor the Engineer-in-Charge or his/her representative.	No change.
Except where any is available then a mutually agreed method shall be followed.	No change.
The contractor shall the same was executed.	No change.
Engineer-in-Charge or to such checking of measurements or levels.	No change.
It is also a term of defects liability period.	No change.
PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders)	PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders)
Clause 6 : Computerised Measure Book (CMB) / Electronic Measurement Book (EMB)	Clause6: Computerised Measurement Book (CMB) / Electronic Measurement Book (EMB)

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 D.P. Jindal
 EE (Contract)

Mode of measurement : CMB / EMB
Note:- One option to be kept by NIT
approving authority

(a) Mode of measurement:
CMB/ EMB
(b) Measurement to be recorded either
by contractor or jointly by department
and contractor.
Note:-Only one option to be kept by NIT
approving authority in (a) and (b)

This issues with the approval of DG, CPWD.

अधीक्षण अभियंता (सी.एंड.एम.)

चन्द्र पाल (सी.एंड.एम.)
Chander Pal, SE (C&M)

Issued from file No. CSQ/CM/17(1)/2023/Maintenance
e-file 9195855 (DFA/ 9355745)

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनवि वेबसाईट के माध्यम से)

D.P. Jindal
EE (Contract)

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11. PARTICULAR SPECIFICATIONS & SPECIAL CONDITIONS (CIVIL)

1. GENERAL

Unless otherwise specified, CPWD specifications 2019 volume I & II with up to date correction slips. Any additional item of work if taken up subsequently shall also conform to the relevant CPWD specifications mentioned above. If should there be any difference between description of items as given in the schedule of quantities, nomenclature and specifications for individual items of work (special conditions) and I.S. Codes, work shall be got done in the following order of precedence:

- i) Description of items as given in Schedules of quantities.
- ii) Special conditions and particular specifications.
- iii) CPWD Specifications.
- iv) I.S. Codes.
- v) Decision of Engineer-in-Charge

1.1. Wherever any reference to any Indian Standard Specifications of BIS or other International standards of ASTM / BS/EN 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.

1.2. The contractor shall work according to the programme of work as approved by the Engineer-in-charge, for which purpose, the contractor shall submit a programme of the work within 15 days from the stipulated date of start of the work based on computer software such as MS Project etc. and shall update the same every fortnight.

The contractor shall submit monthly progress report of the work in a computerized form. The progress report shall contain the following, apart from whatever else may be required as specified:

- (i) Project information, giving the broad features of the contract of the work under the contract, and the broad structural or 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.
 - (x) Quality assurance and quality control tests conducted during the month, with the results thereof.
 - (xi) Videography 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.
- 1.3. The contractor shall take instructions from the Engineer-in-charge for stacking of materials at site. No excavated earth or building materials shall be stacked on areas where the buildings, roads, services or compound walls are to be constructed.
 - 1.4. Unless otherwise provided in the Schedule of quantities, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building and nothing shall be payable to him on this account.
 - 1.5. 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.
 - 1.6. The contractor shall make his own arrangements for obtaining electric connections, if required, and make necessary payments directly to the department concerned.
 - 1.7. 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 coordinated manner and shall perform it in proper sequence to the complete satisfaction of Engineer-in-Charge. The contractor shall be responsible for any damage due to hindrance caused by him.
 - 1.8. 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 and no extra payment shall be made for fixing the pipes in a different manner.

- 1.9. Any cement slurry added over base surface for bond or for continuation of concreting, for protecting reinforcement bars, its cost shall be deemed to have been included in the respective items, unless specified otherwise and nothing extra shall be payable nor extra cement shall be considered in the cement consumption on this account.
- 1.10. Stacking of materials and excavated earth including its disposal shall be done as per the directions of the Engineer-in-Charge. Double handling of materials or excavated earth if required at any stage shall have to be done by the contractor at his own cost.
- 1.11. No claim for idle establishment & labour, machinery & equipments, tools & plants and the like, for any reason whatsoever, shall be admissible during the execution of work as well as after its completion.
- 1.12. Only Star headed Stainless Steel screws shall be used unless otherwise specified.
- 1.13. **Work shall be carried out in professional manner with finished product serving the intended purpose with specified strength, durability and aesthetics.**
- 1.14. Work activities shall be executed in well thought out sequences such that consequent activities not adversely affecting previously done work. Nothing extra shall be payable to protect the works already done.
- 1.15. 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.
- 1.16. 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.
- 1.17. ***The contractor shall not store /dump construction material or debris on metalled road.***
- 1.18. ***The contractor shall get prior approval from Engineer-in-charge for the area where the construction material or debris can be stored beyond the metalled road. This area shall not cause any obstruction to the free flow of traffic / inconvenience to the pedestrians. It should be ensured by the contractor that no accidents occur on account of such permissible storage.***
- 1.19. ***The contractor shall take appropriate protection measures like raising wind breakers of appropriate height on all sides of the plot / area using CGI sheets or plastic and / or other similar material to ensure that no construction material dust fly outside the plot area.***
- 1.20. ***The contractor shall ensure that all the trucks or vehicles of any kind which are used for construction purposes / or are carrying construction material like cement, sand and other allied material are fully covered. The contractor shall take***

every necessary precautions that the vehicles are properly cleaned and dust free to ensure that enroute their destination, the dust, sand or any other particles are not released in air / contaminate air.

- 1.21. The contractor shall provide mask to every worker working on the construction site and involved in loading, unloading and carriage of construction material and construction debris to prevent inhalation of dust particles.**
- 1.22. The contractor shall provide all medical help, investigation and treatment to the workers involved in the construction of building and carry of construction material and debris relatable to dust emission.**
- 1.23. The contractor shall ensure that C&D waste is transported to the C & D waste site only and due record shall be maintained by the contractor.**
- 1.24. The contractor shall compulsory use of wet jet in grinding and stone cutting.**
- 1.25. The contractor shall comply all the preventive and protective environmental steps as stated in the MoEF guidelines, 2010 or amended thereafter.**
- 1.26. The contractor shall carry out on-Road-Inspection for black smoke generating machinery. The contractor shall use cleaner fuel.**
- 1.27. The contractor shall ensure that all DG sets comply emission norms notified by MoEF.**
- 1.28. The contractor shall use vehicles having pollution under control certificate. The emissions can be reduced by a large extent by reducing the speed of a vehicle to 20 kmph. Speed bumps shall be used to ensure speed reduction. In cases where speed reduction cannot effectively reduce fugitive dust, the contractor shall divert traffic to nearby paved areas.**
- 1.29. The contractor shall ensure that the construction material is covered by tarpaulin. The contractor shall take all other precaution to ensure that no dust particles are permitted to pollute air quality as a result of such storage.**
- 1.30. The paving of the path for plying of vehicles carrying construction material is more permanent solution to dust control and suitable for longer duration projects.**
- 1.31. The agency is permitted for erect the site office, store yard and ground water extraction facility temporarily near the place of construction free of cost only after getting specific approval of Engineer in-charge. Contractor shall remove such structures on completion of work.**
- 1.33. Entry to the campus may be restricted from particular entrance gate and agency has to follow security rules of the campus & nothing extra shall be payable on this account.**
- ~~1.34. The contractor shall make the barricading with CGI sheet of minimum 4.0 metre height of site before commencement of work for which nothing extra shall be paid on this account.~~**

1.35 The contractor shall make necessary arrangement to follow the guidelines/ instruction issued by the concerned government authority for controlling and containing the spread of COVID-19 and nothing shall be paid extra in this regard.

1.36 All necessary arrangements with reference to the implementation of ERP system will be made by agency at site as per direction of Engineer in Charge.

2. FLOORING, SKIRTING, VENEERING, DADO, TREADS & RISERS OF STEPS, JAMBS, SILLS & SOFFITS

- 2.1. Nothing extra shall be payable for using combination of marble, granite and kota in the required pattern at various locations unless otherwise specified.
- 2.2. 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.
- 2.3. 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.
- 2.4. In order to keep the floor finish as per architectural drawings and to provide required thickness of the flooring as per specification, the level of top surface of RCC shall be accordingly adjusted at the time of its centering, shuttering and casting for which nothing extra shall be paid to the contractor.

3. SPECIALISED ITEMS

3.1. LIST OF SPECIALISED ITEMS

- (i) ** Waterproofing treatment work.
- (ii) Steel work in steel bridge work, space frames for long span structures, steel towers.
- (iii) ** Special foundations including all types of piles.
- (iv) RCC Overhead Tank with independent staging.
- (v) Structural Repair and Rehabilitation/Retrofitting works.
- (vi) Soil Investigation and Survey Work.
- (vii) ** Façade cleaning system and façade cleaning.
- (viii) Custom made wooden furniture(factory made).
- (ix) Diaphragm walls.
- (x) Post construction Anti-termite chemical treatment.
- (xi) Water Treatment Plants.
- (xii) Security to vacant bungalows/premises.
- (xiii) Tentage works.
- (xiv) Washing/dry cleaning works.
- (xv) Synthetic play area surface for games.

- (xvi) Electronic/Digital Signages.
- (xvii) Environment Impact Assessment Study and Environment Clearance.
- (xviii) Mechanized Housekeeping work.

Note

:- ** For these works, Specialized Agencies shall have to be associated by the CPWD/Non CPWD Contractors in case the Contractor does not possess the requisite eligibility and experience as per the NIT conditions to carry out these works.

3.2. PROCEDURE FOR EXECUTION OF THE SPECIALIZED ITEMS

Such items should be got executed only through associated agencies specialized in these fields. The contractor shall indicate the name(s) of his associated specialized agencies those fulfilling the conditions described in para 16.5 of CPWD Works Manual-2014 as early as possible and within one month of award of work to Engineer-in-Charge for approval of competent authority.

3.3. SPECIALIZED AGENCIES

- (i) Specialized Agencies for items in case of Civil works shall be approved by the competent authority. The contractors shall quote the rates after careful study of contract conditions, specifications, drawings & schedule of quantities.
- (ii) It shall be the responsibility of main contractor to sort out any dispute / litigation with the Specialized Agencies without any time & cost overrun to the Department. The main contractor shall be solely responsible for settling any dispute / litigation arising out of his agreement with the Specialized Agencies. The contractor shall ensure that the work shall not suffer on account of litigation/ dispute between him and the specialized agencies / sub-contractor(s). No claim of hindrance in the work shall be entertained from the Contractor on this account. No extension of time shall be granted and no claim what so ever, of any kind, shall be entertained from the Contractor on account of delay attributable to the selection/rejection of the Specialized Agencies.
- (iii) For specialized items, the main contractor cannot work as a specialized agency unless his name is already included in the list of approved specialized agencies for these items. The contractor shall get these items executed through the specialized agencies as approved by competent authority.

3.4. RATES

- (i) The rates quoted by the Contractor are deemed to be inclusive of site clearance, setting out work, profile, setting lay out on ground, establishment of reference bench mark(s), installing various signage, taking spot levels, survey with total station, construction of all safety and protection devices, compulsory use of helmet and safety shoes, and other appropriate safety gadgets by workers, imparting continuous training for all the workers, barriers, preparatory works, construction of clean, hygienic and well ventilated workers housings in

sufficient numbers as per drawing supplied by Engineer in charge, working during monsoon or odd season, working beyond normal hours, working at all depths, height, lead, lift, levels and location etc. and any other unforeseen but essential incidental works required to complete this work. Nothing extra shall be payable on this account and no extension of time for completion of work shall be granted on these accounts.

- (ii) The rates quoted by the tenderer, shall be firm and inclusive of all taxes and levies (including works contract tax but excluding service tax).
- (iii) No foreign exchange shall be made available by the Department for importing (purchase) of equipment, plants, machinery, materials of any kind or any other items required to be carried out during execution of the work. No delay and no claim of any kind shall be entertained from the Contractor, on account of variation in the foreign exchange rate.
- (iv) All ancillary and incidental facilities required for execution of work like labour camp, stores, fabrication yard, offices for Contractor, watch and ward, temporary ramp required to be made for working at the basement level, temporary structure for plants and machineries, water storage tanks, installation and consumption charges of temporary electricity, telephone, water etc. required for execution of the work, liaison and pursuing for obtaining various No Objection Certificates, completion certificates from local bodies etc., protection works, testing facilities / laboratory at site of work, facilities for all field tests and for taking samples etc. during execution or any other activity which is necessary (for execution of work and as directed by Engineer-in-Charge), shall be deemed to be included in rates quoted by the Contractor, for various items in the schedule of quantities. Nothing extra shall be payable on these accounts. Before start of the work, the Contractor shall submit to the Engineer-in-Charge, a site / construction yard layout, specifying areas for construction, site office, positioning of machinery, material yard, cement & other storage, fabrication yard, site laboratory, water tank etc.
- (v) For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). No claim whatsoever shall be entertained on this account, not with-standing the fact that the Contractor may have to pay extra amounts for any reason, to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour and other statutory bodies regulations and the agreement entered upon by the Contractor with them.
- (vi) All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.

3.5. CLEANLINESS OF SITE

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. Nothing extra shall be payable on this account. 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.

3.6. INSPECTION OF WORK

In addition to the provisions of relevant clauses of the contract, the work shall also be open to inspection by the Chief Engineer, CZ, CPWD/ Superintending Engineer / BCC / Bhopal and other senior officers of CPWD in addition of the Engineer-in-Charge and his authorized representative. The contractor shall at times during the usual working hours and at all times at which reasonable notices of the intention of the Engineer-in-Charge or other officers as stated above to visit the works shall have been given to the Contractor, either himself be present to receive the orders and instructions or have a responsible Site Engineer duly accredited in writing, to be present for that purpose Senior Officers of CPWD Authorities shall be inspecting the on-going work at site at any time with or without prior intimation.

3.7. GUARANTEE FOR WATER PROOFING TREATMENT

The contractor shall give Ten years performance guarantee in the prescribed proforma for the water proofing treatment. In addition 10% (Ten percent) of the cost of water proofing items shall be retained as security, to watch the performance of the work executed. However, half of this amount (withheld) shall be released after five years, after the completion of the work, if no defect comes to notice. If any defect is noticed during the guarantee period, it shall be rectified by the contractor within Seven days after serving the notice by Department and, if not attended to, the same shall be got done through other agency at the risk and cost of the contractor. In any case the guaranteeing firms during the guarantee period shall inspect and examine the treatment once every year and make good any defect observed and Certificate to that effect shall be submitted to Department every year. However, the 10 % security deposit referred above can be replaced with bank guarantee of equivalent amount for relevant period.

4. STAINLESS STEEL RAILING/HANDRAILS:

4.1. GENERAL

The contractor shall apply all materials, labour, tools, ladders, scaffolding and other equipments necessary for the completion and protection of all stainless steel work.

4.2. MATERIAL

All stainless steel pipes and plates shall conform to AISI 304 in 18/8 composition. 18 will be chromium and 8 will be Nickel and carbon content will be 0.03 maximum and the relevant clauses associated with this grade of steel to be followed.

4.3. SURFACE FINISH

Surface finish of all the stainless steel materials will be in 240 grit satin finish / matt finish.

4.4. ACCESSORIES

Fixing will be done by stainless steel expansion bolts of approved size and make as per Engineer-in-charge and welding to be done by using organ welding rods and the surface being duly finished and cleaned by K2 passivation, which is nitric acid plus florid acid solution treatment by which the chances of corrosion will be eliminated and any burn out makes on the metal will also be eliminated.

4.5. COATING MASS

All stainless steel material will have to be coated by a solution of Inox to avoid finger in prints and avoidance of settlement of environment / atmospheric dust.

4.6. MEASUREMENT

All the stainless steel finished parts shall be weighed correct to a gram and paid on weight basis.

4.7. RATE

The rate shall include the cost of all the materials, machinery and labour involved in all the operations described above including cartage, lifts and all taxes like Sales Tax / VAT, Excise duty, Octroi etc. as applicable.

Any incidental additional requirements for execution of this item to the satisfaction of Engineer-in-Charge shall also be treated as included in the item and shown in attached drawing and nothing extra will be paid for such extra work. installation drawings for approval of the Engineer-in-charge-in-Charge and no work shall be performed until the approval of these drawings is obtained.

5. CO-OPERATION WITH OTHER CONTRACTORS/SPECIALIZED AGENCIES / SUB-CONTRACTORS

- 5.1. 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 equipments 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.

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. Therefore, the Tenderers are advised to visit site and get first-hand information of site constraints. Accordingly, they should quote their tenders. Nothing extra shall be payable on this account.

- 5.2. The Contractor shall cooperate with and provide the facilities to the sub-Contractors and other agencies working at site for smooth execution of the work. The contractor shall indemnify the ITBP, Bhopal(M.P.) against any claim(s) arising out of such disputes.
- 5.3. The Contractor shall :
 - (i) Allow use of scaffolding, toilets, sheds etc.
 - (ii) Properly co-ordinate their work with the work of other Contractors.
 - (iii) Provide control lines and benchmarks to his Sub-Contractors and the other Contractors.
 - (iv) Provide electricity and water at mutually agreed rates.
 - (v) Provide hoist and crane facilities for lifting material at mutually agreed rates.
 - (vi) Co-ordinate with other Contractors for leaving inserts, making chases, alignment of services etc. at site.
 - (vii) Adjust work schedule and site activities in consultation with the Engineer-in-Charge and other Contractors to suit the overall schedule completion.
 - (viii) Resolve the disputes with other Contractors/ sub-contractors amicably and the Engineer-in-Charge shall not be made intermediary or arbitrator.
- 5.4. 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, fire fighting, information technology, communication & electronics and any other services.
- 5.5. Other agencies will also simultaneously execute and install the works of sub-station / generating sets, air-conditioning, lifts, etc. for the work and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
- 5.6. 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 contractor or he shall arrange his work with that of the others in an acceptable and in a proper co-ordination manner and shall perform it in proper sequence to the complete satisfaction of others.

6. CONSUMPTION OF PIG LEAD AND IT'S VARIATION FOR SCI SANITARY PIPES AND FITTINGS AS PER IS:3989

In order to ensure that adequate lead is poured properly into the joints and to control waste in use of lead for caulking of joints of SCI pipes and fittings, at the beginning of the work three or four sample joints shall be made and the quantum of lead per joint approved by the Engineer in charge. The actual consumption of lead should be within variation of 5% of the approved sample job. This variation includes allowances of wastage also. If the actual consumption of pig lead is less than the required consumption worked out on the above basis, the recovery on account of less use of lead shall be made from the contractor at market rate to be determined by the Engineer-in-charge, whose decision in the matter shall be final & binding.

7. FIXING OF SCI/CI PIPE

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 allround the pipes to protect it from damage, nothing extra shall be payable on this account.

8. CONDITION FOR CEMENT :-

- 8.1. The Contractor shall procure 43 grade Ordinary Portland cement (conforming to IS : 8112) or Portland slag cement (conforming to IS : 455) or Portland Pozzolana Cement (PPC) (Fly ash based) – conforming to IS : 1489 (Part-I) as required in the work, from reputed manufactures of cement such as ACC, Ultratech, Ambuja and J.K. Cement or from any other reputed cement Manufacturer having a production capacity not less than one million tonnes per annum as approved by ADG for that sub region.

The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves right to accept or reject name(s) of cement manufacture(s) which the contractor proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturer, given by the tenderer, fully or partially.

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 issue 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.

If Portland Pozzolana cement or Portland slag cement is used, suitable modification in de-shuttering time etc. shall be done if need be as per specifications and standards and as directed by Engineer – in – charge and nothing extra shall be payable on this account.

No extra payment / deduction shall be made from the payment to the contractor for using any of the above type of cement.

- 8.2. The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer - in - charge.
- 8.3. For each grade / type, cement bags shall be stored in two separate godowns, one for tested cement and the other for fresh cement (under testing) constructed by the contractor at site of work as per sketch shown in General conditions of contract for CPWD works 2014 with weather proof roofs and walls, for which no extra payment shall be made. The size of the cement godown is indicated in the sketch for guidance only. The actual size of godown shall be as per site requirements and as per the direction of the Engineer in charge and nothing extra shall be paid for the same. The decision of the Engineer-in-charge regarding the capacity required/needed will be final. However, the capacity of each godown shall not be less than 100 tonnes. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with CPWD Engineer-in-charge or his authorized representative and that of other lock with the contractor at the site of work so that the cement is issued from godown according to the daily requirement with the knowledge of both the parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed Proforma and signed daily by the contractor or his authorized agent in token of its correctness.
- 8.4. The cement shall be got tested by Engineer –in –Charge and shall be used on the 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. The cost of tests shall be borne by the contractor.
 - (i) ~~By the contractor, if the results show that the cement does not conform to relevant BIS codes.~~
 - (ii) ~~By the Department, if the results show that the cement conforms to relevant BIS codes.~~
 - (iii) All other charges of sampling, packing and transportation of sample shall also be borne by the Contractor.
- 8.5. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained separately for each type of cement, as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause 42 of the contract and shall be governed by conditions laid therein. However, for consumption lesser beyond permissible theoretical variation recovery shall be made in accordance with conditions of

contract at Schedule A to F (CPWD-8), without prejudice to action for acceptance of work/item at reduced rate or rejection as the case may be. In case of excess consumption no adjustment shall be made.

- 8.6. 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.

9. CONDITIONS FOR REINFORCEMENT STEEL:-

- 9.1. The CPWD/Contractor shall/procure IS marked TMT bars of various grades from
- (i) The Steel Manufacturers such as SAIL, TATA Steel Ltd., RINL, Jindal Steel & Power Ltd and JSW steel Ltd. Or their authorized dealers having valid BIS license for IS :1786-2008(Amendment – 1 November 2012]
 - (ii) The steel manufacturers or their authorized dealers (as per following selection criteria) having valid BIS license for Is: 1786-20089Amendment – 1 November 2012).
 - (iii) The procured steel should have following qualities:-
 - 9.1.iii.1. Excellent ductility, bend ability and elongation of finished product due to possible refining technology.
 - 9.1.iii.2. Consumption of steel should be accurate as per design.
 - 9.1.iii.3. Steel should have no brittleness problem in finished product.
 - 9.1.iii.4. Steel should carry the quality of corrosion and earthquake resistance.
 - 9.1.iii.5. Quality steel with achievement of proper level of sulphur and phosphorus as per IS:1786-2008.
- 9.2. The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.
- 9.3. 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 or written orders from the Engineer-in-charge to do so.
- 9.4. The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more, or as decided by the Engineer-incharge.
- 9.5. 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.
- 9.6. 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

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

- 9.7. The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.
- 9.8. 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 42 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.
- 9.9. 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.
- (i) Reinforcement including authorized spacer bars and lappings 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.
 - (ii) The standard sectional weights referred to shall be as in Table 5.4 in para 5.3.4 in revised CPWD specifications 2009 Vol. I will be considered for conversion of length of various sizes of TMT bars in to standard weight.
 - (iii) 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.
- 9.9.iii.1. 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.
- 9.9.iii.2. 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.

- 9.10. 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.
- 9.11. 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.
- 9.12. 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 reinforcement shall be of reputed brands like SAIL, RINL, Tata, JSW, JSPL or any other equivalent make as approved by the NIT approving authority. **Only corrosion resistant steel rebars with low alloy shall be used. As per O.M. No. -CSQ/SE(TAS)/Steel/2022/257 H dated 23.06.2022 Para No. (3). No extra payment shall be made on account of CRS low alloy steel reinforcement, so agency have to quote their rates accordingly.**

10. SPECIAL CONDITION FOR STRUCTURAL STEEL (TEE, ANGLE, CHANNEL, STRUCTURAL TUBES AND PLATES & R.S. JOIST)

- 10.1. 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.).
In case of non availability of structural steel from primary producers the NIT approving authority may permit use of structural steel procured from steel producers having valid BIS license confirming to IS -2062-2006.
- 10.2. 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.
- 10.3. 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.
- 10.4. The contractor shall supply free of charge the structural steel sample required for testing including its transportation to testing laboratories . The testing charges shall be borne by the contractor.
- 10.5. 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.
- 10.6. In case contractor is permitted to use structural steel other than above mentioned make as in 10.1 then:
- (i) Base Price of Structural Steel as stipulated under Schedule 'F' shall be reduced by 6700/-MT However, for operation of provision of clause 10CA in such case

the indices for structural steel will be considered same as indicated in Indices issued by DG.CPWD for primary producer.

- (ii) The quoted rate of relevant item of tender of structural steel work shall be reduced by 8.00 per Kg.

10.7. 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.

- (i) If the actual weight is more than standard weight only standard weight shall be considered for payment.
- (ii) If the actual weight is less than standard weight but within the permissible variation, only actual weight shall be considered for payment.

11. REINFORCED CEMENT CONCRETE WORK

11.1. DESIGN MIX CONCRETE

- (i) 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.
- (ii) The concrete mix design will be carried out by the contractor through one of the following laboratories / Test houses and ready mix concrete shall conform to accepted design mix. a) MANIT, Bhopal. b) Govt. Engineering College, Ujjain. c) I.I.T., Delhi. d) Govt. Engineering College, Raipur. e) National Council for Cement & Building Materials, Ballabgarh, Haryana, f) G.S.I.T.S., Indore g) MITS, Gwalior, h) Govt. Engineering College, Jabalpur.
- (iii) 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.
- (iv) The contractor shall submit the mix design report from any of above approved laboratories for approval of Engineer-in-Charge within 45 days from the date of issue of letter of acceptance of the tender.
- (v) 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.

- (vi) 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.
- (vii) The Mix shall be designed to produce the grade of concrete having required workability and characteristic strength not less than as specified.
- (viii) 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

- (ix) 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 connected therewith including charges payable to laboratory shall be borne by the Contractor.
- (x) 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, cost of samples and the testing charges for Mix design in all cases shall be borne by the contractor.
- (xi) 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.
- (xii) 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.

- (xiii) 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.
- (xiv) In case of change of parameters of ingredients (sand, cement, coarse aggregate) fresh concrete mix-design to be done as mentioned in paras 9.1.1, 9.1.2 & 9.1.6 to 9.1.10 above and got approved from the Engineer-in-Charge before execution.
- (xv) 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.
- (xvi) Nothing shall be paid extra for installation and cost of batching plant and other arrangement for making necessary test of design mix concrete.
- (xvii) 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.
- (xviii) 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.
- (xix) 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.
- (xx) 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.
- (xxi) 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.

(xxii) 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.

(xxiii) 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.

11.2. USE OF FLY ASH AND FLY ASH BLENDED CEMENTS IN RCC STRUCTURES

(i) General

11.2.i.1. IS : 456-2000 Code of Practice for plain and Reinforced Concrete (as amended up to date) shall be followed in regard to Concrete mix Proportion and its production as under :-

11.2.i.1.1. The concrete mix design shall be done as “Design Mix Concrete” as prescribed in clause – 9 of IS 456 mentioned above.

11.2.i.1.2. Concrete shall be manufactured in accordance with clause 10 of above mentioned IS : 456 covering quality assurance measures both technical and organizational, which shall also necessarily require a qualified Concrete Technologist to be available during manufacture of concrete for certification of quality of concrete.

11.2.i.2. Minimum M25 grade of concrete shall be used in all structural elements made with RCC both in load bearing and framed structure.

11.2.i.3. The mechanical properties such as modulus of elasticity, tensile strength, creep and shrinkage of flyash mixed concrete or concrete using flyash blended cements (PPCs) should not likely to be significantly different and their values are to be taken same as those used for concrete made with OPC. Fly ash when used in the production of concrete shall be strictly in conformity with IS : 3812 (Para 1 & 10).

11.2.i.4. 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. 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.

- 11.2.i.5. In environment subjected to aggressive chloride or sulphate attack in particular, use of flyash admixed or PPC based concrete is recommended. In cases, 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.
- 11.2.i.6. Wet curing period shall be enhanced to a minimum of 10 days or its equivalent. In hot and arid regions, the minimum curing period shall be 14 days or its equivalent.
- (ii) Use of Fly ash Admixed Cement Concrete (FACC) in RCC Structures :- There shall be no bar on use of FACC in RCC structures subject to following additional conditions :-
- 11.2.ii.1. Fly ash shall have its chemical characteristics and physical requirements etc. conforming to IS:3812 (Part-10) and shall be duly certified.
- 11.2.ii.2. To ensure uniform blending of fly ash with cement in conformity with IS:456, a specific facility needs to be created at site with complete computerized automated process control to achieve design quality or with similar facility from Ready Mix concrete (RMC) plants.
- 11.2.ii.3. As per IS:1489 (Part-I), Maximum 35% of OPC by mass is permitted to be substituted with fly ash conforming to IS : 3812 (Part-I) and same is reiterated.
- 11.2.ii.4. Separate storage for dry fly ash shall be provided. Storage bins or silos shall be weather proof and permit a free flow and efficient discharge of flysh. The filter or dust control system provided in the bins or silos shall be of sufficient size to allow delivery of fly ash maintained at specified pressure to prevent undue emission of fly ash dust, which may interfere weighing accuracy.
- (iii) Use of Fly Ash Blended Cements in Cement Concrete (PPCC) in RCC structures
- 11.2.iii.1. 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.
- 11.2.iii.2. 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.
- 11.2.iii.3. While using PPC for structural concrete work, no further admixing of fly ash shall be permitted.

11.3. FORMWORK FOR EXPOSED CONCRETE SURFACES

- (i) Where it is specifically shown on the drawings to have original fair face finish of concrete surface without any rendering of plastering, formwork shall be carried Out by using plywood on steel plates of approved quality.
- (ii) The forms shall be constructed so as to produce a uniform and consistent texture and pattern on the face of the concrete. The formwork shall be placed so that all horizontals are constructed of lumber and are not paneled and the formwork joints shall be staggered.
- (iii) To achieve a finish which shall be free of board marks, the formwork shall be faced with plywood or equivalent material in large sheets. The sheets shall be arranged in an approved pattern. Whenever possible, joints between sheets shall be arranged to coincide with architectural feature, sills, window heads or change in direction of surface. All joints between panels shall be vertical or horizontal unless otherwise directed. Suitable joints shall be approved between sheets. The joints shall be arranged and fitted so that no blemish or mark is imparted to the finished surfaces.
- (iv) Forms for exposed concrete surfaces shall be constructed with grade strips (the underside of which indicate top of pour) at horizontal constructions joints, unless the use of groove strips is specified on the drawings. The reset forms shall be tightened against the concrete so that the forms will not be spread and permit abrupt irregularities or loss of mortar. Supplementary form ties shall be used as necessary to hold the reset forms tight against the concrete.
- (v) For fair faced concrete, the position of through bolts will be restricted and generally as indicated on the drawings.
- (vi) Plywood and steel plates used in the formwork for obtaining exposed surfaces shall be got approved from Engineer-in-Charge on each use. However no forms will be allowed for reuse if it is doubtful to produce desired texture of exposed concrete.
- (vii) Cement of only approved shade shall be used preferably of single lot to achieve integrity of texture.

11.4. CLASS OF SURFACE FINISH

- (i) For Beams & Slabs :
The finish shall be uniform, dense and smooth. no grout, no grain pattern, no crazing and no major blemishes shall be permitted. Abrupt irregularities not exceeding 3mm and gradual irregularities less than 5mm in 2m length only shall be permitted.
- (ii) For Columns/Wall/Fins :
The finish shall be uniform and smooth levelling the surface of the compacted concrete shall be done with a screed board with power floating the surface and over that steel trowelling the surface under firm pressure characteristics of finish shall be brush marks < 3mm gradual irregularities less than 10mm in 2m.

11.5. TOLERANCE IN FINISHED CONCRETE

The formwork shall be so made as to produce a finished concrete true to shape, lines, level, plumb and dimensions as shown in the drawings subject to the following tolerance unless otherwise specified in this specification or drawings.

(i) Wall/Column/Fins:

i	Variation from the plumb	$\pm 6\text{mm}$	Upto 3m height
ii	Variation from the plumb of conspicuous liner	$\pm 6\text{mm}$	Upto 6m height
iii	Variation in the size of wall openings	(+)15mm (-) 6mm	
iv	Variation in parapet wall thickness Upto 30cm thickness	$\pm 6\text{mm}$	

Slab, Beam & Girder Forms:

Variation from the level or from the specified grid for beam soffit before removal of shores,

- | | |
|---------------|-------------------|
| (a) In any 3m | $\pm 6\text{mm}$ |
| (b) In any 6m | $\pm 10\text{mm}$ |

All the tolerances mentioned above shall apply to concrete dimensions only, and not to positioning of vertical steel or dowels. The tolerances given above are specified for local aberration in the finished concrete surface and should not be taken as tolerance for the entire structure taken as whole for the setting and alignment of formwork. Any error, within the above tolerance limits, or any other if noticed in any of the structure after part or portion stripping of forms, shall be corrected in the subsequent work to bring back the structure to its true line, level and alignment.

11.6. Ultrasonic pulse velocity method test for RCC as per technical circular No. 18 issued vide CE(CSQ) letter No. G-2/SE(QA)/CSQ/69 dated 12.02.2013 shall be carried out as a routine test to assess the homogeneity and uniformity of concrete. The fulfilling criteria and other conditions shall be as detailed, as per the method stated in the aforesaid circular.

12. PARTICULAR SPECIFICATIONS FOR AAC BLOCK MASONRY

- 12.1. The AAC Blocks shall be procured from approved manufacturers.
- 12.2. The blocks shall be stored at site in stacks on a level dry surface.
- 12.3. The mortar used for joining the blocks shall be mixed in the proportion 1:4 (1 Cement : 4 coarse sand) by volume.
- 12.4. The thickness of joints in the masonry shall not exceed 10 mm and shall be of uniform thickness.

- 12.5. Maximum height of wall built on any day shall not be more than 1.2 metres (i.e. 6 layers).
- 12.6. The joints in the masonry shall be recessed and no flush pointing shall be done.
- 12.7. A slip membrane with PVC sheet shall be introduced as per the recommendation of blocks manufacturer before laying the first course on the plinth beam.
- 12.8. The blocks shall not be soaked in water and instead they shall be dipped in water and taken out immediately to have only moist surface.
- 12.9. The vertical joints of the masonry shall be broken to have a minimum overlap of 100 mm.
- 12.10. Bed joint 2 Nos. 6mm dia reinforcement bars may be placed in the joints after every 3rd course in two successive layers as per the recommendation of the manufacturers to have good lateral stability.
- 12.11. It shall be ensured that the lintels are rest at either end of window opening only on full block and not on half or part blocks reinforcement shall be placed in the sill course of window openings in two successive horizontal joints and extend the same at least to 600 mm on either side of the jamb surface.
- 12.12. At a RCC column interface an MS anchor ("L" shape) may be placed and fixed with screws at every 4th course so as to anchor the wall with RCC column for better lateral stability. The anchor shall be got approved from Engineer-in-Charge.
- 12.13. Curing of the masonry shall be done only by spraying water and no flooding shall be done by water jets / buckets.
- 12.14. The chases in the wall surface for electrical conduits shall be done only by means of electrically operated saw to cut two parallel lines and the portion between the cuts shall be chiseled carefully. The depth of vertical chases should be limited to 1/3 rd of wall thickness and horizontal chases should not be more than 1/6th of wall thickness. The chases have to be properly packed with cement mortar 1:4 (1 cement : 4 sand) between pipes and chases.
- 12.15. The blocks shall be cut using a carpenter saw to have half blocks or any other suitable size block to close the masonry course or to break the vertical joint from the bottom course. Hammer or a masons trowel shall not be used to cut the blocks.
- 12.16. GI wire mesh shall be fixed on all column wall and beams- wall junctions before taking up the plaster work.
- 12.17. The rates of the item include all the elements described above.

13. EQUIPMENTS AND PLANTS (Refer Clause 18 of Schedule 'F')

- 13.1. The contractor has to deploy necessary tools & plants in required numbers to ensure smooth & timely execution of work, at his own cost & risk as per the requirement of work at different stages. The decision of Engineer-in-Charge shall be final regarding

use of particular T&P(s) at a particular time(s) & the contractor has to adhere to the same strictly. The following description & quantum of T&P is given for general guidance which is not mandatory. However, the successful contractor shall give a list of tools and plants which he proposes to deploy to ensure smooth and timely execution as per different milestone fixed and timely completion of work while submitting the programme and progress chart.

I.	Fully Automatic Batching Plant (15.00 cum)	As per Requirement
II.	Steel Centring and shuttering	As per Requirement
III.	Excavator Cum Loader.	As per Requirement
IV.	Concrete mixer with hopper.	As per Requirement
V.	Plate Vibrator.	As per Requirement
VI.	Needle Vibrator.	As per Requirement
VII.	Bar Bending Machine.	As per Requirement
VIII	Bar Cutting Machine.	As per Requirement
IX	Compressor 5 cmm.	As per Requirement
X	Earth compactor 2 T	As per Requirement
XI	Floor grinding machine	As per Requirement
XII	Welding machine	As per Requirement
XIII	DG Set(63 KVA)	As per Requirement
XIV	Grinder, Drilling machine etc.	As per Requirement
XV	Water Pump	As per Requirement
XVI	Chase cutter	As per Requirement
XVII	Concrete Pump	As per Requirement.
XVIII	Road Roller	As per Requirement

13.2. To achieve the program of work as per programme the contractor must bring at site the required shuttering materials required for cement concrete and RCC work etc. within 30 days from the date of start of work. All other equipments shall be brought, installed and commissioned at site of work at least one week before their actual planned use at site. Work shop facilities for fabrication/addition and alterations, and other allied works shall be arranged by the contractor at his own cost.

13.3. The list of equipment/T&P/machinery as per para 14.1 is for general guidance. In addition to these, machinery / equipment as required shall be arranged by the contractor in case the requirement at any stage exceeds as per the programme finalized at his own cost and nothing extra whatsoever on this account shall be paid. This include equipment for arrangement of concrete from RMC producing plants also.

13.4. All the equipment, T&P and machinery shall be kept in good condition.

14. SAFETY MEASURES AT CONSTRUCTION SITE

In order to ensure safe construction, following shall be adhered for strict compliance at the site:-

- 14.1. The work site shall be properly barricaded.
- 14.2. Adequate signages indicating 'Work in Progress – Inconvenience caused is Regretted' or Diversion Signs shall be put on the sites conspicuously visible to the public even during night hours. These are extremely essential where works are carried out at public places in use by the public.
- 14.3. The construction malba at site shall be regularly removed on daily basis.
- 14.4. All field officials and the workers must be provided with safety helmets, safety shoes and safety belts.
- 14.5. Proper MS pipe scaffoldings with work – platforms and easy-access ladders shall be provided at site to avoid accidents.
- 14.6. Necessary First-Aid kit shall be available at the site.
- 14.7. The contractor shall be responsible for the watch and ward / guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to client department. No extra payment shall be made on this account.
- 14.8. For works below ground level the contractor shall keep that area free from water. If de-watering or bailing out of water is required the contractor shall do it at his cost and nothing extra shall be paid except otherwise provided in the items of schedule of quantities.
- 14.9. The Contractor shall make all necessary arrangements for protecting from rains, fog or likewise extreme weather conditions, the work already executed and for carrying out the further work, during monsoon including providing and fixing temporary shelters, protections etc. Nothing extra shall be payable on this account. Also, no claims for hindrance shall be entertained on this account.
- 14.10. In case of flooding of site on account of rain or any other cause and any consequent damage, whatsoever, no claim financially or otherwise shall be entertained notwithstanding any other provisions elsewhere in the contract agreement. Also, the Contractor shall make good, at his own cost, the damages caused, if any. Further, no claims for hindrance shall be entertained on this account.

The above provisions shall be followed in addition to the provisions of General Condition of Contract.

15. LIST OF EQUIPMENT FOR SITE LABORATORY TO BE MADE AVAILABLE BY THE CONTRACTOR AT HIS OWN COST (Refer Clause 10 A of Schedule 'F')

15.1. LABORATORY TESTING INSTRUMENTS

(i) Balances As per Requirement

- | | | |
|--|---|-------------------------------|
| <ul style="list-style-type: none"> 15.1.i.1. 7 Kg. to 10 Kg. capacity, semi-self indicating type – accuracy 10 gm. 15.1.i.2. 500 gm. Capacity, semi-self indicating type – accuracy 1 gm. 15.1.i.3. Pan balance – 5 Kg. capacity – accuracy 10 gms. | } | As per
Requirement |
|--|---|-------------------------------|

- (ii) Ovens—electrically operated, thermostatically controlled upto 1100 C—sensitivity 10 C. – **As per Requirement**
- (iii) Sieves : as per IS 460 – 1962. **As per Requirement**

15.1.iii.1. I.S. sieves – 450 mm internal dia, of sizes 100mm, 80 mm, 63 mm, 50mm, 40 mm, 25mm, 20 mm, 12.5 mm, 10 mm, 6.3mm, 4.75 mm, 2.36mm complete with lid and pan. – **As per Requirement**

15.1.iii.2. I.S. sieves - 200 mm internal dia (brass frame) consisting of 2.36 mm, 1.18 mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns with lid and pan. – **As per Requirement**

- (iv) Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly -
 - (v) Equipment for slump test—slump cone, steel plate, tamping rod, steel scale, scoop-As per Requirement
 - (vi) Dial gauges, 25 mm travel – 0.01 mm / division least count
 - (vii) 100 tones compression testing machine, electrical cum manually operated.
 - (viii) Graduated measuring cylinders 200 ml capacity
 - (ix) Enamel trays (for efflorescence test for bricks).
 - 15.1.ix.1. 300 mm X 250 mm X 40 mm
 - 15.1.ix.2. Circular plates of 2850 mm dia
- As per Requirement**

15.2. FIELD TESTING INSTRUMENTS

Following instruments in sufficient quantity as directed by the Engineer- in- Charge shall be made available by the contractor. It shall be ensured that the instruments always remain in serviceable condition else the same will be replaced.

- (i) Steel tapes
 - (ii) Vernier Calipers.
 - (iii) Micrometer screw 25 mm gauge.
 - (iv) A good quality plumb bob.
 - (v) Spirit level, minimum 30 cms long with 3 bubbles for horizontal vertical.
 - (vi) Wire gauge (circular type) disc.
 - (vii) Foot rule.
 - (viii) Long nylon thread.
 - (ix) Rebound hammer for testing concrete
 - (x) Dynamic penetrometer.
- As per Requirement**

- | | | |
|--|--|----------------------------------|
| <ul style="list-style-type: none"> (xi) Magnifying glass (xii) Screw driver 30 cms long (xiii) Ball pin hammer, 100 gms. (xiv) Plastic bags for taking samples (xv) Moisture meter for timber (xvi) Earth resistance tests (for Electrical Divisions) (xvii) Meggar (for Electrical Divisions) (xviii) Total station |  | <p>As per Requirement</p> |
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16. SPECIFICATIONS FOR FLY ASH BRICKS

All fly ash bricks as brought to the site shall conform to the strength & durability parameters as prescribed in the tender and CPWD specifications.

- 17.** The contractor shall submit 'Method Statement' for the approval soon after the award of work. 'Method Statement' is a statement by which the construction procedures for important activities of construction are stated, checked and approved. Method Statement shall have description of the item with elaborate procedures in steps to implement the same. The specification of the materials involved their testing and acceptance criteria, equipments to be used, precautions to be taken, mode of measurements etc.

18. TESTING OF MATERIALS.

- 18.1.** The contractor shall arrange carrying out of all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing unless specified otherwise. In all cases cost of samples and to & fro carriage shall be borne by the contractor. Contractor shall establish a laboratory at site of work at his own cost. The laboratory shall be equipped with all necessary equipment as per requirement of specification or as per direction of Engineer-in-Charge. A list of laboratory equipments to be maintained by the contractor is enclosed at para 16 page 59 & 60. Establishing the laboratory at site shall not absolve the contractor from fulfilling the criteria of getting the test done in independent approved laboratories as per DG/MAN/308. The decision of the Engineer-in-Charge of allowing any test in the site laboratory shall be final.
- 18.2.** Even ISI marked materials may be subjected to quality test at the discretion of the Engineer-in-charge besides testing of other materials as per the specifications described for the item/material. Whenever ISI marked materials are brought to the site of work the contractor shall, if required by the Engineer-in-charge, furnish manufacturer test certificate or test certificate from approved testing laboratory to

establish that the material procured by the contractor for incorporation in the work satisfy the provisions if IS codes relevant to the material and/or the work done.

- 18.3. Sub-standard Material/Work : In case any material/work is found substandard the same shall be rejected by the Engineer-in-Charge and the same shall be removed from the site of work within 48 hour, failing which the same shall be got removed by the Engineer-in-Charge at the risk and cost of the contractor without giving any further notice and time.

19. CONDITIONS OF CONTRACT SPECIFIC TO GREEN BUILDING PRACTICES

The contractor shall strictly adhere to the following conditions as part of his contractual obligations:

19.1. SITE

- (i) The contractor shall ensure that adequate measures are taken for the prevention of erosion of the top soil during the construction .The contractor shall prepare and implement the Erosion and Sedimentation Control Plan (ESCP) provided to him after approval by the Engineer- in- Charge as part of the larger Construction Management Plan(CMP). The contractor shall obtain the Erosion and Sedimentation Control Plan(ESCP) Guidelines if required from the Engineer in Charge and then prepare “working plan” for the following month’s activities as a CAD drawing showing the construction management, staging & ESCP. At no time soil should be allowed to erode away from the site and sediments should be trapped where necessary.

The contractor shall ensure that all the top soil excavated during construction works is neatly stacked and is not mixed with other excavated earth. The contractor shall take the clearance of the Engineer in Charge before any excavation. Top soil should be stripped to a depth of 20 cm (centimeters) from the areas to be disturbed, for example proposed area for buildings, roads, paved areas, external services and area required for construction activities etc. It shall be stockpiled to a maximum height of 40 cm in designated areas, covered or stabilized with temporary seeding for erosion prevention and shall be reapplied to site during plantation of the proposed vegetation or as directed by the engineer in charge. Top soil shall be separated from subsoil, debris and stones larger than 50 mm (millimetre) diameter. The stored top soil may be used as finished grade for planting areas.

- (ii) The Contractor should follow the construction plan as proposed by the Architect / Engineer in Charge to minimize the site disturbance such as soil pollution due to spilling. If required use of staging and spill prevention and control plan to restrict the Spilling of the contaminating material on site needs to be resorted. Protection of top soil from erosion by collection storage and reapplication of top soil, constructing sediment basin, contour trenching, mulching etc., may also be directed by the engineer in charge.
- (iii) No excavated earth shall be removed from the campus unless suggested otherwise by Engineer in Charge. All subsoil shall be reused in

backfilling/landscape, etc as per the instructions of the Engineer in Charge. The surplus excavated earth shall be disposed of by the contractor as per the direction of the engineer in charge at his own cost for reuse. A certificate of reuse as required by the Engineer-in-Charge shall be submitted by the contractor.

- (iv) The contractor shall not change the natural gradient of the ground unless specifically instructed by the Engineer in Charge. This shall cover all natural features like water bodies, drainage gullies, slopes, mounds, depressions, etc. Existing drainage patterns through or into any preservation area shall not be modified unless specifically directed by the Engineer-in-Charge.
- (v) The contractor shall not carry out any work which results in the blockage of natural drainage.
- (vi) The contractor shall ensure that existing grades of soil shall be maintained around existing vegetation and lowering or raising the levels around the vegetation is not allowed unless specifically directed by the Engineer-in-Charge.
- (vii) Contractor shall reduce pollution and land development impacts from automobiles use during construction.
- (viii) Overloading of trucks is unlawful and creates the erosion and sedimentation problems, especially when loose materials like stone dust, excavated earth, sand etc. are moved. Proper covering shall be used by the contractor. Also, no overloading shall be permitted.

19.2. CONSTRUCTION PHASE AND WORKER FACILITIES

- (i) The contractor shall specify and limit construction activity in pre-planned/designated areas and shall start construction work after securing the approval for the same from the Engineer in Charge. This shall include areas of construction, storage of materials, and material and personnel movement.
- (ii) Preserve and Protect Landscape during Construction

19.2.ii.1. The contractor shall ensure that no trees, existing or otherwise, shall be harmed and damage to roots. These shall be prevented during trenching, placing backfill, driving or parking heavy equipment, dumping of trash and protected from oil, paint, and other materials detrimental to plant health. These activities shall be restricted to the areas outside of the canopy of the tree, or, from a safe distance from the tree/plant by means of barricading. Trees will not be used for support; their trunks shall not be damaged by cutting and carving or by nailing posters, advertisements or other material. Lighting of fires or carrying out heat or gas emitting construction activity within the ground, covered by canopy of the tree is not at all permitted.

19.2.ii.2. The contractor shall take steps to protect trees or saplings if any identified for preservation within the construction site using tree guards of approved specification.

- 19.2.ii.3. Contractor should limit all construction activity within the specified area as per the Construction Management Plan (CMP) approved by Engineer in Charge.
- 19.2.ii.4. The contractor shall avoid cut and fill in the root zones, through delineating and fencing the drip line (the spread limit of a canopy projected on the ground) of all the trees or group of trees. The zones of movement of heavy equipment, parking, or excessive foot traffic shall be separated from the fenced plant protection zones.
- 19.2.ii.5. The contractor shall ensure that maintenance activities during construction period shall be performed as needed to ensure that the vegetation remains healthy.
- (iii) Contractor shall be required to develop and implement a waste management plan, quantifying material diversion goals. He shall establish goals for diversion from disposal in landfills and incinerators, if required, and adopt a construction waste management plan to achieve these goals. A project wide policy of “Nothing leaves the Site” shall be followed. The Contractor’s ingenuity is especially called towards meeting this prerequisite/ credit (as per IGBC LEED India, New Construction v1.0 & GRIHA , MNRE) and may consider recycling cardboard, metal, brick, acoustical tile, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation, designating a specific area(s) on the construction site for segregated or commingled collection of recyclable material, and track recycling efforts throughout the construction process, identifying construction haulers and recyclers to handle the designated materials at his cost. The diversion may include donation of materials to charitable organizations and salvage of materials on-site.
- (iv) Contractor shall collect all construction waste generated on site. He may consider at segregating wastes based on their utility and examine means of sending such waste to manufacturing units which use them as raw material or other site which require it for specific purpose. Typical construction debris could be broken bricks, steel bars, broken tiles, spilled concrete and mortar etc.
- (v) The contractor shall provide potable water and other amenities for all workers as per the contract.
- (vi) The contractor shall provide the minimum level of sanitation and safety facilities for the workers at site as described in CPWD General Conditions of contract. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and effluent; provide clean drinking water and latrines and urinals as per applicable provisions. Adequate toilet facilities shall be provided for the workmen within easy access of their place of work. The total no. to be provided shall not be less than 1per 30 employees in any one shift. Toilet facilities shall be provided from the start of building operations, connection to a sewer shall be made as soon as practicable. Every toilet shall be so constructed that the occupant is sheltered from view and protected from the weather and falling objects. Toilet facilities shall be maintained in a sanitary

condition. A sufficient quantity of disinfectant shall be provided and natural or artificial illumination shall also be provided.

- (vii) The contractor shall ensure that air pollution due to dust/generators is kept to a minimum, preventing any adverse effects on the workers and other people in and around the site. The contractor shall ensure proper screening, covering stockpiles, covering brick and loads of dusty materials, wheel-washing facility, gravel pit, and water spraying. Contractor shall also ensure the following activities to prevent air pollution during construction:

19.2.vii.1. Clear vegetation only from areas where work will start right away

19.2.vii.2. Vegetate / mulch areas where vehicles do not ply.

19.2.vii.3. Apply gravel / landscaping rock to the areas where mulching / paving is impractical

19.2.vii.4. Identify roads on-site if applicable that would be used for vehicular traffic. Upgrade vehicular roads (if these are unpaved) by increasing the surface strength by improving particle size, shape and mineral types that make up the surface & base and add surface gravel to reduce source of dust emission to limit amount of fine particles (smaller than 0.075mm) to 10 – 20%

19.2.vii.5. Water spray, through a simple hose for small projects, to keep dust under control. Fine mists should be used to control fine particulate. However, this should be done with care so as not to waste water. Heavy watering can also create mud, which when tracked onto paved public roadways, must be promptly removed. Also, there must be an adequate supply of clean water nearby to ensure that spray nozzles don't get plugged.

19.2.vii.6. Water spraying shall be done on:

Any dusty materials before transferring, loading and unloading

Area where demolition work is being carried out

Any un-paved main haul road

Areas where excavation or earth moving activities are to be carried out

19.2.vii.7. The contractor shall ensure that the speed of vehicles within the site is limited to 10 km/hr.

19.2.vii.8. All material storages should be adequately covered and contained so that they are not exposed to situations where winds on site could lead to dust / particulate emissions.

19.2.vii.9. Spills of dirt or dusty materials will be cleaned up promptly so the spilled material does not become a source of fugitive dust and also to prevent of seepage of pollutant laden water into the ground aquifers.

When cleaning up the spill, ensure that the clean-up process does not generate additional dust. Similarly, spilled concrete slurries or liquid wastes should be contained / cleaned up immediately before they can infiltrate into the soil / ground or runoff in nearby areas

19.2.vii.10. Provide hoardings of not less than 3m high along the site boundary, next to a road or other public area at his cost.

19.2.vii.11. Provide dust screens, sheeting or netting to scaffold along the perimeter of the building at his cost

19.2.vii.12. Cover stockpiles of dusty material with impervious sheeting at his cost.

19.2.vii.13. Cover dusty load on vehicles by impervious sheeting before they leave the site at his cost.

- (viii) Contractor shall be required to provide an easily accessible area that serves the entire building and is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals. He shall coordinate the size and functionality of the recycling areas with the anticipated collections services for glass, plastic, office paper, newspaper, cardboard, and organic wastes to maximize the effectiveness of the dedicated areas. Consider employing cardboard balers, aluminum can crushers, recycling chutes, and collection bins at individual workstations to further enhance the recycling program.
- (ix) The contractor shall ensure that no construction leachate (e.g. cement slurry etc.), is allowed to percolate into the ground. Adequate precautions will be taken to safeguard against this including reduction of wasteful curing processes, collection, basic filtering and reuse. The contractor shall follow requisite measures for collecting drainage water run-off from construction areas and material storage sites and diverting water flow away from such polluted areas. Temporary drainage channels, perimeter dike/swale, etc. shall be constructed to carry the pollutant-laden water directly to the treatment device or facility (municipal sewer line).
- (x) Staging (dividing a construction area into two or more areas to minimize the area of soil that will be exposed at any given time) should be done to separate undisturbed land from land disturbed by construction activity and material storage.
- (xi) The contractor shall comply with the safety procedures, norms and guidelines (as applicable) as outlined in the document Part 7 Constructional practices and safety, 2005, National Building code of India, Bureau of Indian Standards. A copy of all pertinent regulations and notices concerning accidents, injury and first-aid shall be prominently exhibited at the work site. Depending upon the scope & nature of work, a person qualified in first-aid shall be available at work site to render and direct first-aid to casualties. A telephone may be provided to first-aid assistant with telephone numbers of the hospitals displayed. Complete reports of

- all accidents and action taken thereon shall be forwarded to the competent authorities.
- (xii) The contractor shall ensure the following activities for construction workers safety, among other measures at his cost.
- 19.2.xii.1. Guarding all parts of dangerous machinery.
 - 19.2.xii.2. Precautionary signs for working on machinery.
 - 19.2.xii.3. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
 - 19.2.xii.4. Durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.
 - 19.2.xii.5. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
 - 19.2.xii.6. Provide protective equipment; helmets etc.
 - 19.2.xii.7. Provide measures to prevent fires. Fire extinguishers and buckets of sand to be provided in the fire-prone area and elsewhere.
 - 19.2.xii.8. Provide sufficient and suitable light for working during night time.
- (xiii) The storage of material shall be as per standard good practices as specified in Part 7, Section 2 - Storage, Stacking and Handling practices, NBC 2005 and shall be to the satisfaction of the Engineer in Charge to ensure minimum wastage and to prevent any misuse, damage, inconvenience or accident. Watch and ward of the Contractor's materials shall be his own responsibility. There should be a proper planning of the layout for stacking and storage of different materials, components and equipments with proper access and proper maneuverability of the vehicles carrying the materials. While planning the layout, the requirements of various materials, components and equipments at different stages of construction shall be considered.
- (xiv) The contractor shall provide for adequate number of garbage bins around the construction site and the workers facilities and will be responsible for the proper utilization of these bins for any solid waste generated during the construction. The contractor shall ensure that the site and the workers facilities are kept litter free. Separate bins should be provided for plastic, glass, metal, biological and paper waste and labelled in both Hindi and English with suitable symbols.
- (xv) The contractor shall prepare and submit 'Spill prevention and control plans' before the start of construction, clearly stating measures to stop the source of the spill, to contain the spill, to dispose the contaminated material and hazardous wastes, and stating designation of personnel trained to prevent and control spills. Hazardous wastes include pesticides, paints, cleaners, and petroleum products.

- 19.2.xv.1. Contractor shall collect & submit the relevant material certificates for materials if directed by the Engineer in charge with high recycled (both post-industrial and post-consumer) content, including materials like RMC mix with fly-ash, glass with recycled content, calcium silicate boards etc.
- (xvi) Contractor shall collect the relevant material certificates for rapidly renewable materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheat board, strawboard and cork etc.
- (xvii) Where possible, the contractor shall select materials / vendors, harvested and manufactured regionally, within a 800-km radius of the project site.
- (xviii) Contractor shall adopt an IAQ (Indoor Air Quality) management plan to protect the HVAC system during construction, control pollutant sources, and interrupt pathways for contamination. He shall sequence installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, and gypsum wallboard. He shall also protect stored on-site or installed absorptive materials from moisture damage.
- (xix) The contractor shall ensure that a flush out of all internal spaces is conducted prior to handover. his shall comprise an opening of all doors and windows for 14 days to vent out any toxic fumes due to paints, varnishes, polishes, etc.
- (xx) Contractor shall make efforts to reduce the quantity of indoor air contaminants that are odorous or potentially irritating harmful to the comfort and well-being of installer and building occupants. Contractor shall ensure that the VOC (Volatile Organic Compounds) content of paints, coatings and primers used must not exceed the VOC content limits mentioned below in case items of such paints are/is available in schedule of quantities.

19.2.xx.1. Paints

Non-flat - 150 g/L , Flat (Mat) - 50, g/L ,Anti corrosive/ anti rust - 250 g/L

19.2.xx.2. Coatings / Clear wood finishes

Varnish - 350 g/L , Lacquer - 550 g/L, Floor coatings - 100 g/L, Stains - 250 g/L

19.2.xx.3. Sealers

Waterproofing sealer - 250 g/L, Sanding sealer - 275 g/L, Other sealers - 200 g/L

- (xxi) The VOC (Volatile Organic Compounds) content of adhesives and sealants used if prescribed in the schedule of quantities must be less than VOC content limits mentioned: Architectural Applications VOC Limit (g/l less water) Indoor Carpet adhesives - 50 g/L, Carpet Pad Adhesives - 50 g/L, Wood Flooring Adhesive - 100 g/L, Rubber Floor Adhesives - 60 g/L, Sub Floor Adhesives – 50 g/L, Ceramic Tile Adhesives - 65 g/L, VCT and Asphalt Tile adhesives - 50 g/L, Dry Wall and Panel Adhesives - 50 g/L, Structural Glazing Adhesives - 100 g/L, Multipurpose Construction Adhesives – 70 g/L, Substrate Specific Application VOC Limit (g/l

less water), Metal to Metal - 30 g/L, Plastic Foams - 50 g/L, Porous material (except wood) - 50 g/L, Wood - 30 g/L, Fiber Glass – 80 g/L

- (xxii) Wherever required, Contractor shall meet and carry out documentation of all activities on site, supplementation of information, and submittals in accordance with IGBC LEED India New Construction v1.0 or GRIHA program standards and guidelines. Towards meeting the aforementioned building environmental rating standard(s) expert assistance shall be provided to him up on request.
- (xxiii) Water Use during Construction Contractor should spray curing water on concrete structure and shall not allow free flow of water. Concrete structures should be kept covered with thick cloth / gunny bags and water should be sprayed on them. Contractor shall do water ponding on all sunken slabs using cement and sand mortar.
- (xxiv) The Contractor shall remove from site all rubbish and debris generated by the Works and keep Works clean and tidy throughout the Contract Period. All the serviceable and non-serviceable (malba) material shall be segregated and stored separately. The malba obtained during construction shall be collected in well formed heaps at properly selected places, keeping in a view safe condition for workmen in the area. Materials which are likely to cause dust nuisance or undue environmental pollution in any other way, shall be removed from the site at the earliest and till then they shall be suitable covered. Glass & steel should be dumped or buried separately to prevent injury. The work of removal of debris should be carried out during day. In case of poor visibility artificial light may be provided.
- (xxv) The contractor shall provide O & M Manuals wherever applicable.
- (xxvi) The contractor shall make himself conversant with the Site Waste Management Program Manual and actively contribute to its compilation by estimating the nature and volume of waste generated by the process/installation in question.
- (xxvii) Materials & Fixtures for the project:
 - 19.2.xxvii.1. Contractor will produce wherever feasible certificate regarding distance of the source of the relevant material.
 - 19.2.xxvii.2. Unless otherwise stated cement used at site for reinforced concrete, precast members, mortar, plaster, building blocks, etc shall be PPC (Portland Pozzolana Cement). The PPC must meet the requirements of IS 1489 (Part I) as regards to fly ash content in cement The contractor shall obtain from the PPC manufacturer the certificate regarding fly ash content in the PPC in each batch of consignment.
 - 19.2.xxvii.3. The contractor has to comply as per MoEF issued notification 8.0.763(E) dated 14th Sept.1999 containing directive for greater fly ash utilization. Every construction agency engaged in the construction of

buildings within a radius of 50 km radius of a Thermal Power Plant, have to use of 100% fly ash based bricks/blocks in their construction.

19.2.xxvii.4. The contractor shall ensure that all paints, polishes, adhesives and sealants used both internally and externally, on any surface, shall be Low VOC products. The contractor shall get prior approval from the Engineer in Charge before the application of any such material.

19.2.xxvii.5. All plumbing and sanitary fixtures installed shall be as per the prescription of the Engineer in Charge and shall adhere to the minimum LPM (litres per minute) and LPF (litres per flush) mentioned. The contractor shall employ 100% zero ODP (ozone depletion potential) insulation; HCFC (hydro-chlorofluorocarbon)/ and CFC (chlorofluorocarbon) free HVAC and refrigeration equipments and / halon-free fire suppression and fire extinguishing systems.

19.2.xxvii.6. The contractor shall ensure that all composite wood products/agro-fibre products used for cabinet work, etc do not contain any added urea formaldehyde resin.

(xxviii) Resources Consumed During Construction:

19.2.xxviii.1. The contractor shall ensure that the water and electricity is not wasted during construction. The Engineer in Charge can bring to the attention any such wastage and the contractor will have to ensure that such bad practices are corrected.

19.2.xxviii.2. The contractor shall install necessary meters and measuring devices to record the consumption of water, electricity and diesel on a monthly basis for the entire tenure of the project.

19.2.xxviii.3. The contractor shall ensure that all run-off water from the site, during construction is collected and reused to the maximum.

19.2.xxviii.4. The contractor shall use treated recycled water of appropriate quality standards for construction, if available.

19.2.xxviii.5. No lights shall be turned on during the period between 6:00 AM to 6:00 PM, without the permission of the Engineer in Charge.

(xxix) Construction Waste:

Contractor shall ensure that wastage of construction material is within 3%.

19.2.xxix.1. All construction debris generated during construction shall be carefully segregated and stored in a demarcated waste yard. Clear, identifiable areas shall be provided for each waste type and measures employed to segregate the waste on site into inert, chemical, or hazardous wastes.

19.2.xxix.2. All construction debris shall be used for road preparation, back filling, etc, used if described in the schedule of quantities and as per the

instructions of the Engineer in Charge, with necessary activities of sorting, crushing, etc.

19.2.xxix.3. No construction debris shall be taken away from the site, without the prior approval of the Engineer in Charge.

19.2.xxix.4. The contractor shall recycle the unused chemical/hazardous wastes such as oil, paint, batteries, and asbestos.

19.2.xxix.5. If and when construction debris is taken out of the site, after prior permissions from the Engineer in Charge, then the contractor shall ensure the safe disposal of all wastes and will only dispose of any such construction waste in approved dumping sites.

(xxx) Documentation

19.2.xxx.1. The contractor shall, during the entire tenure of the construction phase, submit the following records to the Engineer in Charge on a monthly basis:

- Water consumption in litres
- Electricity consumption in 'kwh' units
- Diesel consumption in litres
- Quantum of waste (volumetric/weight basis) generated at site and the segregated waste types divided into inert, chemical and hazardous wastes.
- Digital photo documentation to demonstrate compliance of safety guidelines as specified here and in the Appendix on Safety Conditions.

19.2.xxx.2. The contractor shall, during the entire tenure of the construction phase, submit the following records to the Engineer in Charge on a fortnightly basis:

- Quantities of material brought into the site, including the material issued to the contractor by the Engineer in charge.
- Quantities of construction debris (if at all) taken out of the site
- Digital photographs of the works at site, the workers facilities, the waste and other material storage yards, pre-fabrication and block making works, etc as guided by the Engineer in Charge.

19.2.xxx.3. The contractor shall submit a document after construction of the buildings, a brief description along with photographic records to show that other areas have not been disturbed during construction. The document should also include brief explanation and photographic records to show erosion and sedimentation control measures adopted. (Document CAD drawing showing site plan details of existing vegetation, existing buildings, existing slopes and site drainage pattern, staging and spill prevention

measures, erosion and sedimentation control measures and measures adopted for top soil preservation during construction

19.2.xxx.4. The contractor shall submit to the Engineer in Charge after construction of the buildings, a detailed as built quantification of the following:

- a. Total materials used,
- b. Total top soil stacked and total reused
- c. Total earth excavated
- d. Total waste generated,
- e. Total waste reused,
- f. Total water used,
- g. Total electricity, and
- h. Total diesel consumed.

19.2.xxx.5. The contractor shall submit to the Engineer in Charge, before the start of construction, a site plan along with a narrative to demarcate areas on site from which top soil has to be gathered, designate area where it will be stored, measures adopted for top soil preservation and indicate areas where it will be reapplied after construction is complete.

19.2.xxx.6. The contractor shall submit to the Engineer in Charge, a detailed narrative (not more than 250 words) on provision for safe drinking water and sanitation facility for construction workers and site personnel.

19.2.xxx.7. Provide supporting document from the manufacturer of the cement specifying the fly-ash content in PPC used in reinforced concrete.

19.2.xxx.8. Provide supporting document from the manufacturer of the pre-cast building blocks specifying the fly ash content of the blocks used in an infill wall system.

19.2.xxx.9. The contractor shall, at the end of construction of the buildings, submit to the Engineer in Charge, submit following information, for all material brought to site for construction purposes, including manufacturer's certifications, verifying information, and test data, where Specifications sections require data relating to environmental issues including but not limited to:

- Source of products: Supplier details and location of the supplier.
- Project Recyclability: Submit information to assist Owner and Contractor in recycling materials involved in shipping, handling, and delivery, and for temporary materials necessary for installation of products.

- Recycled Content: Submit information regarding product post industrial recycled and post consumer recycled content. Use the “Recycled Content Certification Form”, to be provided by the Commissioning Authority appointed for the Project.
- Product Recyclability: Submit information regarding product and product’s component’s recyclability including potential sources accepting recyclable materials where ever applicable.

19.2.xxx.10. Provide final certification of well-managed forest of origin to provide final documentation of certified sustainably harvested status: Acceptable wood “certified sustainably harvested” certifications shall include:

- Wood suppliers’ certificate issued by one of the Forest Stewardship Council-accredited certifying agencies;
- Suppliers’ invoice detailing the quantities of certified wood products for project;
- Letter from one of a certifying agency corroborating that the products on the wood supplier’s invoice originate from certified well-managed forests.

19.2.xxx.11. Clean tech: Provide pollution clearance certificates from all manufacturers of materials

19.2.xxx.12. Indoor Air quality and Environmental Issues: Submit emission test data, sourced from the manufacturers, produced by acceptable testing laboratory listed in Quality Assurance Article for materials as required in each specific Specification section.

- Certifications from manufacturers of Low VOC paints, adhesives, sealant and polishes used at this particular project site.
- Certification from manufacturers of composite wood products/agro fibre products on the absence of added urea formaldehyde resin in the products supplied to them to this particular site.
- Submit environmental and pollution clearance certificates for all diesel generators installed as part of this project.

Provide total support to Engineer in Charge and Green Building Consultants appointed by the Engineer- in- Charge in completing all Green Building Rating related formalities, including signing of forms, providing signed letters in the contractor’s letterhead whenever required.

(xxxi) Equipment:

19.2.xxxi.1. To ensure energy efficiency during and post construction all pumps, motors and engines used during construction or installed, shall be subject to approval and as per the specifications of the Engineer in Charge.

19.2.xxi.2. All lighting installed by the contractor around the site and at the labour quarters during construction shall be CFL bulbs of the appropriate illumination levels. This condition is a must, unless specifically prescribed.

19.2.xxi.3. The contractor is expected to go through all other conditions of the LEED & GRIHA rating stipulations.

19.3. Failure to adhere to any of the above mentioned items, without approval of the Engineer in Charge, shall be deemed as a violation of contract and the contractor shall be held liable for penalty as per terms of the agreement.

20. CONDITIONS FOR READY MIX CONCRETE :-

20.1. 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.

20.2. For procurement of ready mix concrete from approved RMC plants, the contractor shall, within a 15 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.

20.3. 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.

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.

- 20.4. The ready mix concrete should be produced in RMC plant using fully automatic batching plant having capacity to produce 30 cum/hr. The plant should have computerized control and shall give print out of all the ingredients.
- 20.5. 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.
- 20.6. 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.
- 20.7. 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.
- 20.8. 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.
- 20.9. 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.
- 20.10. 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.
- 20.11. 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.
- 20.12. 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.
- 20.13. 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.
21. **The rates tendered by contractor shall be all inclusive & shall apply to all heights, lifts, leads & depths of work and nothing extra shall be payable to him on account of same.**

ANNEXURE - B

(SPECIMEN)

**(Ref. para 3.7 of Particular Specifications and Special conditions)
GUARANTEE TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OF DEFECT AFTER
COMPLETION IN RESPECT OF WATER PROOFING WORKS**

The Agreement made thisday oftwo thousand and betweenson ofof(hereinafter called the **Guarantor** of the one part) and the 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 **GUARANTOR** of the one part and the Government of the other part, whereby the Contractor, inter alia, undertook to render the buildings and structures in the said contract recited completely water and leak – proof.

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

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

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

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

During this period of guarantee the **guarantor** shall make good all defects and in case of any defect being found, render the building water –proof to the satisfaction of the Engineer-in-Charge at his cost, and shall commence the work for 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 **GUARANTOR** fails to execute the water proofing or commits breach thereunder 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 the decision of the Engineer – in – Charge will be final and binding on the parties.

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

Signed, sealed and delivered by OBLIGOR in the presence of –

- 1.
- 2.

Signed for and on behalf of THE PRESIDENT OF INDIA byin the presence of –

- 1.
- 2.

CORRECTION ----NIL----
CUTTING ----NIL----

INSERTION ----NIL----
OVERWRITING ---NIL----

AE(P)

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12. LIST OF APPROVED MATERIALS (CIVIL)

Note :

1. Unless otherwise specified, the brand/make of the material as specified in the item nomenclature or in the particular specifications or in the list of approved materials attached in the tender, shall be used in the work.
2. The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material/ Brand/ Make.
3. Whenever the specified brand of material is not available than, the NIT approving authority may approve any material equivalent to that specified subject to proof being offered by the Contractor for its equivalence and its non-availability to his satisfaction.
4. If any brand which have been approved by the ADG(RBH)/CE(Bhopal) till the date of last date of submission of respective tender shall be deemed as approved brand even if it has not been mentioned in approved brand or make in the NIT.

MATERIALS:		BRAND/MAKE
1.	AAC Block	Aerocon, Ultratech, Ecolite, Concrelite, BILTECH, Dlite Blocks, Orillite – Kota, E-Crete
2.	AAC Block Adhesive	Ferrous crete(Ferro-1188), ARDEX ENDURA (White Star), Ultratech (Fixo- Block), Berger Home Shield, Dlite Blocks
3.	(a) Acrylic Exterior paint	Apex Ultima of Asian Paints, Weather Coat all Guard of Berger, Weather Shield Max of Dulux, JK Maxx
	(b) Acrylic Emulsion paint	Royal Luxury Emulsion of Asian Paints, Silk Luxury emulsion of Berger Paint, Velvet touch emulsion of Dulux, JK Maxx
	(c) Acrylic Distemper	Tractor Uno acrylic distemper of Asian Paints, Bison acrylic distemper of Berger Paint, Duwel acrylic distemper of Dulux, JK Jambo acrylic distemper of JK Maxx
	(d) Synthetic Enamel Paint	Apcolite of Asian Paint, Luxol of Burger Paint and Dulux Paint, JK Maxx
4.	Acoustic wall panel	Knauf, Armstrong, Himalayan, Acoustic Hunter Douglas, MCRA, Bollard
5.	Aluminium Composite Panel	Alpolic, Aluco Bond, Reynobond, Euro bond, Alstrong, Aludecor. Alex, Viva
6.	Aluminum Door window hardware (ISI Mark only)	Shalimar, Archie, Classic(ISI)
7.	Aluminium Extrusions /	Hindalco, Indian Aluminium Co., Jindal

	sections	
8.	Annealed Float Glass	Saint Gobain, Modi Guard, Asahi
9.	Auditorium Chairs/ Furniture	Godrej, Wipro, Methodex, Bonton, Penworker, Durian, Harman Miller, Featherlite, Haworth & Geeken
10.	Bitumen	Indian Oil, Hindustan Petroleum, Bharat Petroleum
11.	Calcium Silicate Board / Tiles	Aerolite, Hilux, Starpan
12.	CC Pavers / Grass Pavers*	Nitco, Ultra, KJS Concrete, Duracrete, Mehtab Tiles, Kaptim, Khalsa, Dalal, Mehtab Tiles, Ratnesh Multi Products
13.	Centrifugally Cast Iron Pipe & Fittings	NECO, SKF, BIC, RIF, KAPILANSH, HIF, Electrosteel, RPMF, Electrotherm
14.	Ceramic Tiles	Kajaria, Somany, Nitco, Johnson, RAK Ceramics, Cera
15.	Channelled Perforated Wall Panels	Knauf, Armstrong, Himalayan, Acoustic Hunter Douglas
16.	Chequered	Dura, Eurocon, Modern, Hindustan, Johnson, NITCO
17.	CI Double flanged non-return valves	Kirloskar, Sant, Kartar
18.	C.I. Hubless pipe	SKF, NECO, Kapilansh, RPMF
19.	CI Manhole Cover	SKF, NICO, Hepco, Kapilansh
20.	CI / SCI Spun pipes and fittings	NECO, HEPSCO, Bengal Iron Corporation, Kapilansh
21.	Cover Block	Khalsa, Balaji, Simcom
22.	CP fittings	Jaquar, Marc, Kohler, Hindware, Prayag Polymers(P), Ltd., PRIMA, Cera, Xen Bath Fittings
23.	CPVC Pipes & Fittings	Astral, Ashirvad, Prince, Supreme, Finolex, VECTUS, Prayag
24.	CRCA Steel sheet	TATA, Jindal, Sail
25.	Curtain Carrier / Drapery Rod/ Curtain & Venetian Blinds.	Marvel, Vista levlor, Johnson, DECK.
26.	Dash fastener, Expansion Bolt	Hilti, Bosch, Fischer
27.	Ductile Iron Pipe (Water Supply)	Electro steel, Kesoram, Electro Spun, TATA DUCTURA, Swastic, Electrotherm
28.	Elastomeric Antifungal	Ultima of Asian Paints, Weathershield of ICI Dulux,

	Exterior Paint	Alguard of Berger
29.	EPDM Gasket	Hanu, Anand, Lescuyer
30.	Epoxy Adhesive	FOSROC, Aquomix , Choksey, BAL-ENDURA, Berger Paints India Ltd.
31.	Epoxy Grouting Compound	Pidilite, Ferrous Crete(Ferro-102), MYK- LATICRETE, Berger Paints India Ltd., Ultratech
32.	Epoxy Primer & Paints	Berger, Pidilite, CICO, BASF, SIKA, Asian Paints
33.	Fibre Glass Acoustical Suspended Ceiling	Knauf, Armstrong, Himalayan, Acoustic Hunter Douglas
34.	Fire Check door (Metal/Wooden)	Navair International Pvt. Ltd., Pacific, Shakti Harmann, C4 fire, ASES
35.	Float Glass Mirror	Modifloat, Saint Gobain, Asahi, TATA float
36.	Flush Doors (ISI Mark only)	Century, Archid, Greenply, Marino, Duro, Jayna, Gujcon, Durian, A1 flush door, M.P. Wood, Black Cobra
37.	Friction Stay	Albihari, Geze, Hettich, Securistyle, Ebco
38.	FRP Door	Fiberways, Jayna, Shiv Shakti
39.	FRP Chajja	Fiberways, Jayna, Shiv Shakti
40.	Galvanized/Stainless Steel Anchor Fasteners	Shakti, Arrow, Hilti, Fischer
41.	GI Pipe & fittings	Tata, Zenith, Jindal, Prakash Surya, Swastik
42.	GI Sheet	Sail, TATA, Jindal, National, Bhushan
43.	Geotextile	Manas, Osian, Wadhwa
44.	GRC	Unistone, Dalal, Swastic
45.	Gun Metal Gate Valve , Ball valve	Zoloto, Leader, SANT
46.	Glass Mosaic Tile	Bisazza, Italia, Palladio, Mridul
47.	Gypsum Board (False Ceiling)	Boral Gypsum, India Gypsum, Saint- Gobain, WESTERN
48.	Gypsum Plaster	Asian Paints, Fosroc, BASF, Sika, Saint-Gobain, Pidilite, WESTERN
49.	Hardener	Hardcrete of Snowcem India, Pidilite, CICO., Berger Paints India Ltd.
50.	HDPE Pipes	VECTUS, Emco, Polyfins, Pioneer, Plyfab, Jain Irrigation, Kissan, Prayag
51.	Hydraulic Door closer, Floor springs	Dorma, Hettich, Hafele, dorset, Hardwin, kelvin, Godrej
52.	Jet Assembly for EWC/Health Faucet	Parryware , Jaquar, Marc, Hindware
53.	Kerb Stone	Mehtab, Hindustan, Concreto, Kaptim, K.K., Khalsa
54.	Kitchen loft tank	Sintex, Tirupati Structurals Ltd, KMS Plast world P.Ltd. Planet Plastics, Sri Kamakshi Traders, Sreyah Novel InC.
55.	Laminate and Veneers	Merino, Greenlam, Formica, Kitlam, Durian, Black Cobra
56.	Locks / Latch	Godrej, Harrision, Dorma, Yale, dorset, Hafele
57.	Marine Plywood / BWP	Duro, Century, Kitply, Greenply, Archidply, Durian, Black

	Ply/Plywood	Cobra
58.	Melamine Polish	Asian Paints, Pidilite, ICI Dulux, Berger
59.	Metal False Ceiling	Nitobond, Armstrong, Trac, Durlum, Lafarge, Anutone, Hunter Douglas, Hi-steel / MCRA / Bollard, WESTERN
60.	Mineral Fibre/ GRG Ceiling	Armstrong, Daiken, Anutone, Diamond / Hi-steel
61.	M.S. Pipe (Railing)	Jindal, Tata, RINL, Prakash Surya, Apollo
62.	M.S. Tubes	SAIL, Tata, Apollo, Prakash Surya, RINL, JSW and JSPL
63.	Multi-coat Synthetic Plaster/ Textured Exterior wall paint	Spectrum, Heritage, Ultratech, Asian Paints, Berger Paints India Ltd. / JK Maxx
64.	PL.AL.PL. Pipes	Kitech, Vectus, Jindal
65.	Polycarbonate Sheet	Bayer, Macrolux, Danpalon, DPI Daylights, Fibreways
66.	Polysulphide / Silicon Sealant	Pidilite, Fosroc, Tuffseal, Berger Paints India Ltd.
67.	Pre-coated Profile Sheet	Tata, Bhushan (Jindal), National, Jindal
68.	POP (Plaster of paris)	JK-Laxmi, Sriram Nirman, Sakarni
69.	PPR Pipes	SFMC, SAFE, Poiner Industries, Vectus
70.	Precast CC interlocking Tiles	Hindustan, Paver India, KK, Dalal, Unistone, Mehtab Tiles
71.	PVC Cistern	Steelbird, Jindal, Prayag, Commander, Shakti, Jaquar, Hindware
72.	PVC Connection Pipe	Supreme, Prince, Finolex
73.	PVC Rain Water Pipe & Fitting (SWR) Pipes	Finolex, Kisan, Kasta, Supreme, Astral, Prince, Vectus , Prayag
74.	PVC Shutter	Polygreen, Rajshri, Plastogreen, Sintex, Black Cobra, Fiberways
75.	PVC Water storage Tank (Only ISI)	VECTUS, Water well, Plasto, Sintex, Gangotri, Prayag
76.	Ready Mix Concrete (RMC)	ACC, L&T, Grasim, Ultratech, RMC Ind, Supermax
77.	Ready Mix Plaster	Ready Plast (Ultratech), Silico Plast, Perma Plast, Insta Plast
78.	Road Safety Products	Shakti or equivalent
79.	Rust Remover	Perma, Sunanda, Dr. Fixit, Fosroc, Sika
80.	SBR Polymer	Perma, Sika, Roff Bond, Fosroc
81.	Sluice Valve	Kirloskar, Venus, Kalpana, SANT, KARTAR, Zoloto
82.	Solid PVC frames and shutters	Polygreen, Rajshri, Plastogreen, Sintex
83.	Stainless Steel	Jindal, Salem or equivalent
84.	Stainless steel Sink with or without Draining board.	Nirali, Hindware, Frankee, Neelkanth, Jaquar, Prayag, Cera, Xen Bath Fittings
85.	Stainless steel Door/Window fittings & Fixtures	Dorset, Prayag, Dorma, Ozone, Hettich, Kich, Geze
86.	Structural steel section	TATA, SAIL, RINL, JSW Steel Ltd., Jindal Steel & Power Ltd. (JSPL)
87.	Super plasticizer / admixture	Sika, Fosroc, Chouksey Chemicals, BASF, Asian Paints, Berger Paints India Ltd.
88.	Tactile	Somany, Johnson, Dura, Dalal & NITCO
89.	Tensile Fabric	Bluestone, Encon, Structure Flex

90.	Telescopic Drawer Channels	Godrej, Hetich, Ebco
91.	Tile Adhesive	Ferrous Crete(Ferro-1122), Ardex Endura (Gold Star), PIDILITE (Fevimate XL), WEABR(Saint-Gobin) Sika, Thermoshield, Asian Paints, Berger Paints India Ltd., Ultratech (tile-fixo), JK Tilo
92.	Towel Ring/Towel Rod/Towel Rack	Marc, Jaquar, Kohler, Grohe, Hindware, Prayag
93.	Tubular Seallar Window/ M.S. Tubular Window	M/s Engineers & Fabricator, Raipur, M/s J.K. Enterprises, Jaipur, M/s Swastik Super Industries, Mohali (Punjab) M/s Jangid Engg. Jaipur
94.	UPVC Pipes & Fittings	Astral, Flowguard, Ashirvad, Prince, Supreme, Finolex, VECTUS, Prayag, Plugra
95.	UPVC Windows	Fenesta, Aluplast, Kommerling, Duraplast, SIMTA ASTRIX, Plugra
96.	Urinal, Washbasin, Orrisa Pattern W.C., Wall mounted European W.C.Seat with Cistern	Hindware, Parryware, Jaquar, Cera, Kohler, Grohe, Prayag
97.	Vitrified Tile, Rectified Tile	Johnson, Marbonite, Somany, Kajaria, NITCO, RAK, Cera
98.	Wall Putty	JK, BIRLA, SARAPUTTY, Asian Paints, Berger Paints India Ltd
99.	Waste Pipe	Kamal, Viking, Jaquar
100.	Water Proofing Compound (Liquid)	Pidilite, Cico, Impermo, Fosroc, BASF, Ardex Endura, Sika, Berger Home Shield.
101.	Water Proofing membrane-PU based	Asian Paints, Berger Home Shield or equivalent
102.	White Cement	JK White, Birla White, Grasim
103.	Wire Meshdoor	A-1 Teak, Century, Greenply, M.P. Wood, Durian
104.	Wooden Frames	A-1 Teak, Century, Greenply, M.P. Wood, Durian
105.	Wooden Flooring	Armstrong, Action Tesa, DECK
106.	Wood polymer composite (WPC) Door frames and shutters	Sintex, Rajshri, Plastiwood, Alstone, Polygreen, Black Cobra, Plugra, A-1 Teak,

* Paver blocks produced at site under controlled condition may also be allowed after approval of Engineer-in-charge

- Note : 1) In case approved make for any material/item is not specified in the NIT, the decision of finalizing a particular brand shall rest with EE-I, CPWD, Bhopal or his successor there off.**
- 2) In case of non-availability of a particular material/item from specified manufacturers/makes, the decision of EE-I, Bhopal, CPWD, Bhopal or his successor there off in selection of alternate manufacture/ make is final.**

13. SCHEDULE OF QUANTITY

N/W	Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.						
SLNo	Description	Qty	Unit	Rate	Amount	DSR No.	
1	EARTH WORK					2	
1.1	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:					2.1	
1.1.1	All kinds of soil					2.10.1	
1.1.1.1	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	200.00	metre	352.15	70430.00	2.10.1.2	SR
2	CEMENT CONCRETE (CAST IN SITU)					4	
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					4.1	
2.1.1	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)	28.00	cum	6518.60	182521.00	4.1.10	SR
2.2	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:					4.2	

2.2.1	1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	8.00	cum	9895.20	79162.00	4.2.3	SR
2.2.2	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).	40.00	cum	8519.20	340768.00	4.2.8	SR
3	REINFORCED CEMENT CONCRETE					5	
3.1	Centering and shuttering including strutting, propping etc. and removal of form for					5.9	
3.1.1	Foundations, footings, bases of columns, etc. for mass concrete	40.00	sqm	392.15	15686.00	5.9.1	SR
4	MASONRY WORK					6	
4.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :					6.4	
4.1.1	Cement mortar 1:6(1 cement : 6 coarse sand)	2.00	cum	9105.95	18212.00	6.4.2	SR
4.2	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.					6.13	
4.2.1	Cement mortar 1:4(1 cement :4 coarse sand)	15.00	sqm	1123.80	16857.00	6.13.2	SR
5	CLADDING WORK					8	
5.1	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.					8.2	

5.1.1	Granite stone slab of colour black, Cherry/Ruby red					8.2.2	
5.1.1.1	Area of slab upto 0.50 sqm	4.00	sqm	5413.50	21654.00	8.2.2.1	SR
5.1.1.2	Area of slab over 0.50 sqm	12.00	sqm	5136.30	61636.00	8.2.2.2	SR
5.2	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	16.00	each	978.70	15659.00	8.5	SR
5.3	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.					8.1	
5.3.1	Granite Stone of approved shade	17.00	sqm	4051.85	68881.00	8.10.2	SR
5.4	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.	830.00	sqm	1267.95	1052399.00	8.31	SR
6	WOOD AND P. V. C. WORK					9	

6.1	Extra for providing frosted glass panes 4 mm thick (weight not less than 10 kg per sqm) instead of ordinary float glass panes 4 mm thick (weight not less than 10 kg per sqm) in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	20.00	sqm	176.40	3528.00	9.12	SR
6.2	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.					9.48	
6.2.1	Fixed to steel windows by welding	150.00	kg	219.10	32865.00	9.48.1	SR
6.3	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :					9.7	
6.3.1	100X58X1.90 mm	224.00	each	107.10	23990.00	9.70.2	SR
6.4	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	14.00	each	983.15	13764.00	9.84	SR
6.5	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :					9.96	
6.5.1	250x16 mm	56.00	each	260.60	14594.00	9.96.2	SR
6.6	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :					9.97	
6.6.1	200x10 mm	56.00	each	99.70	5583.00	9.97.3	SR

6.7	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :					9.1	
6.7.1	100 mm	112.00	each	59.55	6670.00	9.100.2	SR
7	FLOORING					11	
7.1	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.	260.00	sqm	1096.55	285103.00	11.37	SR
8	FINISHING					13	
8.1	12 mm cement plaster of mix:					13.1	
8.1.1	1:6(1 cement: 6 fine sand)	25.00	sqm	333.35	8334.00	13.1.2	SR
8.2	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :					13.61	
8.2.1	Two or more coats on new work	15.00	sqm	155.90	2339.00	13.61.1	SR
8.3	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.	400.00	sqm	156.05	62420.00	13.8	SR
8.4	Wall painting with premium acrylic emulsion paint of interior grade, 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.					13.83	

8.4.1	Two coats	400.00	sqm	142.80	57120.00	13.83.2	SR
8.5	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	400.00	sqm	19.75	7900.00	13.88	SR
9	REPAIRS TO BUILDING					14	
9.1	Repair to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sqm and under, including cutting the patch in proper shape, raking out joints and preparing plastering the wall surface with white cement based polymer modified self curing mortar, including disposal of rubbish, all complete as per the direction of Engineer-In-Charge.	25.00	sqm	670.95	16774.00	14.75	SR
9.2	Dismantling W.C. Pan of all sizes including disposal of dismantled materials including malba all complete as per directions of Engineer-in-Charge.	36.00	each	134.10	4828.00	14.82	SR
10	Dismantling and Demolishing					15	
10.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.					15.2	
10.1.1	Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	26.00	cum	1503.60	39094.00	15.2.2	SR
10.2	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :					15.12	
10.2.1	Of area 3 sq. metres and below	70.00	each	367.20	25704.00	15.12.1	SR
10.3	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.					15.23	
10.3.1	For thickness of tiles 10 mm to 25 mm	1090.00	sqm	73.40	80006.00	15.23.1	SR

10.4	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead :					15.42	
10.4.1	100 mm dia pipe	550.00	metre	78.00	42900.00	15.42.2	SR
10.5	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	36.00	each	112.05	4034.00	15.52	SR
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.	840.00	sqm	54.65	45906.00	15.56	SR
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.	85.00	cum	263.95	22436.00	15.6	SR
11	SANITARY INSTALLATIONS					17	
11.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 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:					17.1	
11.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	26.00	each	6767.40	175952.00	17.1.1	SR

11.2	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 :					17.2	
11.2.1	W.C. pan with ISI marked white solid plastic seat and lid	10.00	each	6515.55	65156.00	17.2.1	SR
11.3	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :					17.5	
11.3.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	12.00	each	12071.75	144861.00	17.5.1	SR
11.4	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:					17.7	
11.4.1	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap	20.00	each	2226.35	44527.00	17.7.2	SR
11.5	Providing and fixing CP Brass 32 mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	4.00	each	1034.80	4139.00	17.22A	SR
11.6	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					17.28	
11.6.1	Semi rigid pipe					17.28.1	

11.6.1.1	32 mm dia	20.00	each	103.90	2078.00	17.28.1.1	SR
11.7	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.	4.00	each	1607.95	6432.00	17.31	SR
11.8	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :					17.32	
11.8.1	Rectangular shape 1500x450 mm	8.00	each	2093.00	16744.00	17.32.4	SR
11.9	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	8.00	each	1083.50	8668.00	17.33	SR
11.1	Providing and fixing soil, waste and vent pipes :					17.35	
11.10.1	100 mm dia					17.35.1	
11.10.1.1	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	160.00	metre	1169.30	187088.00	17.35.1.3	SR
11.11	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. :					17.37	
11.11.1	For 100 mm dia pipe	80.00	each	362.85	29028.00	17.37.1	SR
11.12	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					17.38	
11.12.1	100 mm dia					17.38.1	

11.12.1.1	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	16.00	each	567.20	9075.00	17.38.1.3	SR
11.13	Providing and fixing heel rest sanitary bend					17.4	
11.13.1	100 mm dia					17.40.1	
11.13.1.1	Sand cast iron S&S as per IS - 3989	16.00	each	548.70	8779.00	17.40.1.2	SR
11.14	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					17.43	
11.14.1	100x100x100 mm					17.43.1	
11.14.1.1	Sand cast iron S&S as per IS - 1729	16.00	each	726.55	11625.00	17.43.1.1	SR
11.15	Providing and fixing terminal guard :					17.56	
11.15.1	100 mm					17.56.1	
11.15.1.1	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	16.00	each	427.80	6845.00	17.56.1.3	SR
11.16	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 :					17.6	
11.16.1	100 mm inlet and 100 mm outlet					17.60.1	
11.16.1.1	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	28.00	each	854.55	23927.00	17.60.1.3	SR
11.17	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	22.00	each	168.35	3704.00	17.71	SR
11.18	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	16.00	each	231.95	3711.00	17.72	SR
12	WATER SUPPLY					18	

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					18.7	
12.1.1	32 mm nominal dia Pipes	230.00	metre	518.75	119313.00	18.7.4	SR
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.					18.8	
12.2.1	15 mm nominal dia Pipes	25.00	metre	497.80	12445.00	18.8.1	SR
12.2.2	20 mm nominal dia Pipes	140.00	metre	537.60	75264.00	18.8.2	SR
12.3	Providing and fixing uplasticised PVC connection pipe with brass unions :					18.21	
12.3.1	45 cm length					18.21.2	
12.3.1.1	15 mm nominal bore	60.00	each	97.75	5865.00	18.21.2.1	SR
12.4	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :					18.22	
12.4.1	100 mm diameter	18.00	each	193.95	3491.00	18.22.1	SR
12.5	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :					18.49	
12.5.1	15 mm nominal bore	26.00	each	506.80	13177.00	18.49.1	SR
12.6	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.					18.51	

12.6.1	15 mm nominal bore	18.00	each	798.95	14381.00	18.51.1	SR
12.7	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931					18.53	
12.7.1	15 mm nominal bore	60.00	each	574.30	34458.00	18.53.1	SR
13	DRAINAGE					19	
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:					19.4	
13.1.1	100x100 mm size P type					19.4.1	
13.1.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	16.00	each	2707.65	43322.00	19.4.1.1	SR
13.2	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :					19.6	
13.2.1	150 mm dia. R.C.C. pipe	50.00	metre	556.45	27823.00	19.6.2	SR
13.2.2	250 mm dia. R.C.C. pipe	100.00	metre	899.80	89980.00	19.6.3	SR
13.2.3	300 mm dia. R.C.C. pipe	50.00	metre	994.30	49715.00	19.6.4	SR
13.3	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :					19.7	

13.3.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :					19.7.1	
13.3.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	17.00	each	12770.55	217099.00	19.7.1.1	SR
13.4	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials within 50 m lead as per direction of Engineer-in- charge:					19.24	
13.4.1	Rectangular manhole 90x80 cm and 45 cm deep	17.00	each	2540.85	43194.00	19.24.1	SR
14	ALUMINIUM WORK					21	
14.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :					21.1	
14.1.1	For fixed portion					21.1.1	

14.1.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	270.00	kg	530.90	143343.00	21.1.1.2	SR
14.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)					21.1.2	
14.1.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	90.00	kg	634.45	57101.00	21.1.2.2	SR
14.2	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):					21.3	
14.2.1	With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	15.00	sqm	1176.80	17652.00	21.3.1	SR
15	WATER PROOFING					22	
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.	140.00	sqm	617.05	86387.00	22.5	SR

16	NEW TECHNOLOGIES AND MATERIALS					26	
16.1	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					26.28	
16.1.1	25 mm average thickness	30.00	sqm	126.75	3803.00	26.28.3	SR
16.2	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.					26.29	
16.2.1	Bars upto 12 mm diameter	150.00	metre	8.25	1238.00	26.29.1	SR

16.3	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).					26.32	
16.3.1	12 mm average thickness.	30.00	sqm	388.65	11660.00	26.32.1	SR

16.4	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/mm ² , modulus of elasticity 900 N/mm ² 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.					26.86	
16.4.1	Frame size 45 x 85 mm	275.00	metre	926.35	254746.00	26.86.2	SR

16.5	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/mm ² , modulus of elasticity 850 N/mm ² 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)					26.87	
16.5.1	30 mm thick	106.00	sqm	4346.70	460750.00	26.87.1	SR
	Total				5288303.00		
	Modified Estimated Cost after using correction factor on DSR 2023 on account of GST @ 0.973 * 5288303 = 5145519				5145519.00		
	Cost Index				0.00		
	Total				5145519.00		
17	Non Schedule Items						
17.1	Providing and fixing C.P. brass two way bib cock with flange of approved brand and Manufacturere (Jaquar make model no :-CON-041KN, Hindware Cat No- F690005, Cera Cat No. F3001163 or equivalent) etc complete as per direction of Engineer in charge.	10.00	each	1222.45	12225.00		

17.2	Providing and fixing stainless steel jali (grating) with or without hole for waste pipe for floor/Nahani trap 100 mm dia.	28.00	each	118.65	3322.00		
17.3	Providing and fixing C.P. brass hand shower (Health Faucet) with 8 mm dia ,1.00 to 1.20 metre long flexible tube with wall hook of approved brand and manufacturere (Jaquar make model no. ALD-573, Hindware Cat No. F160195, Cera Cat No. F8030110AB or equivalent) etc all complete as per direction of Engineer in Charge.	10.00	each	1302.17	13022.00		
17.4	Credit for dismantled G.I. pipe & CI pipe which shall be the property of contractor.	530.00	Kg	-41.12	-21792.00		
17.5	Providing and fixing Oval type white vitreous under counter wash basin of approved brand and make like M/s Jaquar Co. Cat. No FLS-WHT - 5701,or Kohler Cat No. K-2211IN-O or Cera Cat No. S 2030103 or Hindware Zen Seires Cat No. 10049 or equivalent, 32 mm C.P. brass waste of Jaquar make ALD -709 or Cera of standard pattern, 15 mm CP Brass Swann Neck Pillar tap of Jaquar make CON-127BKN or Cera Cat No F-2002104 standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required:	4.00	each	7293.25	29173.00		
17.6	Providing and fixing 40 mm dia UPVC concealed pipe for drainage of waste water from wash basin, urinals etc upto floor traps including all fittings i.e elbows, tees, reducers, couplers, & connectors etc with clamps at 1.00 m spacing. The rates includes cost of cutting chases, making good the walls and testing of joints complete as per the direction of Engineer in charge.	80.00	metre	538.45	43076.00		

CORRECTION ----NIL----
CUTTING ----NIL----

INSERTION ----NIL----
OVERWRITING ---NIL----

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17.7	Credit for taking away the dismantled old material received from work: wooden door/wire mesh door shutter with/without frame, window shutter with/without frame, Glass window shutters, wooden trunks, wooden ballies and plywood except Teak wood material which will be the property of contractor etc. (of area upto 3.0 sqm.)	70.00	each	-82.80	-5796.00		
17.8	Providing & fixing fly proof wire gauze to aluminium windows, clerestory windows & doors with Aluminium beading and all necessary screws all complete as per direction of Engineer in Charge. (Aluminium Beading shall be paid seperately in respective item)						
	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	5.00	sqm	834.20	4171.00		
	Total				5222920.00		

14. PROFORMA FOR QUOTING THE RATES

Name of Work :- Renovation of Toilets and laying of new sewer line at Kendriya Vidyalaya No.3, Bhopal.

NIT No. 19/EE-I/Bhopal/2026-27

Sr. No .	Name of Component	Estimated Cost	Percentage above or below the estimated cost	% in figures	Total Cost (Rs.)
1.	Civil Work	Rs.52,22,920/-	Above / Below / At Par		
	Total Cost	Rs.52,22,920/-			

1. Only one of the options is to be filled. More than one option will be rejected.
2. Rate filled in any form shall be considered only in %age.
3. Rate filled at any other place in the document will not be considered.
4. No condition will be accepted.

Signature of Bidder with full Address :

Date :

CORRECTION ----NIL----
CUTTING ----NIL----

INSERTION ----NIL----
OVERWRITING ---NIL----

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