NIT No. 57/EE/MUMBAI-II/2026-27

Name of work: One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.

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GOVERNMENT OF INDIA

CENTRAL PUBLIC WORKS DEPARTMENT

NOTICE INVITING e-TENDER

The Executive Engineer, Mumbai - II, (Formerly EE, MCD-V), CPWD, Mumbai-37 invites on behalf of the President of India, online Percentage rate bids from approved and eligible contractors of **CPWD - CIVIL/COMPOSITE** for the following work :-

NIT No.: 57/EE/MUMBAI-II/2026-27

Name of Work: One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.

Estimated Cost: Rs. 18,45,813/-

Earnest Money: Rs 36,916/-

Period of completion : 11 (Eleven) Months

Last time and date of submission of bid: **05/12/2026**

The bid forms and other details can be obtained from the website **www.etender.cpwd.gov.in**. The tender notice is also available on website

CHECK LIST FOR CONTRACTORS FOR SUBMISSION OF BIDS

1. The bidder should read all the instructions, terms & conditions, contract clauses, nomenclature of items, specifications etc. contained in the tender documents very carefully, before quoting the rates. The tenderer should also read the CPWD General Conditions of Contract 2023 for **Maintenance work** (with correction slips upto last date of submission of tender)which will be part of the agreement.
2. The agency shall quote the rate for complete scope of work in figures.
3. The contractor shall quote his rates keeping in mind the scope of work, time line, specifications, terms & conditions, additional conditions and special conditions etc. and nothing shall be payable extra whatsoever unless otherwise specified.
4. The contractor shall also furnish 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** in addition to the other deposits mentioned elsewhere in the contract for proper of the agreement. The Performance Guarantee shall be in the shape of FDR or Bank guarantee as per Performa given in Annexure enclosed.
5. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must be disclosed that the firm is duly registered under the Indian partnership act, 1952.
6. GST / other taxes as applicable shall be paid by the contractor himself. Amount quoted by the bidder shall be inclusive of all taxes & nothing extra shall be payable. The department shall deduct the mandatory deductions at source from the R.A bills as applicable. However for statutory deduction of income tax & GST, necessary TDS certificate shall be given by department. The contractor shall quote his rates considering all such deductions.
7. The tender, which is not duly signed by authorized signatory or is conditional shall be treated as non-responsive and shall be summarily rejected.
8. Online bid documents submitted by intending bidders shall be opened only of those bidders, whose EMD deposited with any division office of CPWD, anywhere in India and other documents scanned and uploaded are found in order.

INFORMATION & INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING

The Executive Engineer, Mumbai - II, (Formerly EE, MCD-V), Kendriya Sadan, 2nd floor, Sector-7, CGS Colony, Antop Hill, Mumbai-37 (Telephone No.9826076931, Email Id-mumeemcd5.cpwd@gov.in) on behalf of the President of India invites online Percentage rate bids from approved and eligible contractors of **CPWD - CIVIL/COMPOSITE** for the following work:-

NIT No	**57/EE/MUMBAI-II/2026-27**
Name of Work	One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.
Location	Powai, Mumbai
Estimated cost put to bid	Rs. 18,45,813/-
Earnest Money	Rs. 36,916/-
Period of Completion	11 (Eleven) Months
Last date & time of online submission of bid	Up to 15:00 Hrs. on **05/12/2026**
Time and date of opening of bid	Up to 15:30 Hrs. on **05/12/2026**

1. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
2. Information and Instructions for bidders posted on website shall form part of bid document.
3. 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 www.etender.cpwd.gov.in or www.cpwd.gov.in free of cost.
4. 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. (The EMD document shall only be issued from the place in which the office of receiving division office is situated) and uploading the mandatory scanned documents such as Demand Draft or pay order or Banker's Cheque or Deposit at call Receipt or Fixed Deposit Receipts and Bank Guarantee of any Commercial Bank towards EMD in favour of Executive Engineer as mentioned in NIT, receipt for

deposition of original EMD to Division Office of any Executive Engineer, CPWD and other documents as specified.

A part of earnest money (EMD) is acceptable in the form of bank guarantee also. In such cases, 50% of earnest money or Rs. 20 Lakh whichever is less, will have to be deposited in shape prescribed above and balance can be accepted in form of Bank Guarantee issued by a Commercial bank. The bank guarantee submitted as a part of Earnest Money shall be valid for a period of six months or more from the last date of submission of bid.

5. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
6. The intending bidder must have valid class-III digital signature to submit the bid.
7. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
8. Contractor can upload documents in the form of JPG format and PDF format. Bidder should ensure that the document uploaded is legible and full documents page is properly scanned.
9. Contractor must ensure to quote his percentage rate (above/below) in the attached schedules. However, if a tenderer does not quote any percentage above / below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
10. The bid submitted shall become invalid and e-tender processing fee shall not be refunded if:
    (i) The bidder is found ineligible.
    (ii) The bidder does not upload the scan copies of all the documents stipulated in bid document
    (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
    (iv) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section /subhead in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

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

i. Copy of receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/AE), CPWD.

ii. Treasury Challan/Demand Draft/Pay order or Banker`s Cheque/Deposit at Call Receipt/ FDR/Bank Guarantee of any Commercial Bank against **EMD drawn in favour of Executive Engineer, MCD-V, CPWD, Mumbai.**

iii. Enlistment order of the contractor

iv. GST registration certificate, if already obtained by the bidder. If the bidder has not obtained GST registration **as applicable** then he shall scan & upload following undertaking along with bid documents.

"If work is awarded to me, I / we shall obtain GST registration certificate **as applicable**, within one month from date of receipt of award letter or before release of any payment by CPWD, whichever is earlier, falling which I / we shall be responsible for any delay in payments which will be due towards me / us on account of work executed and/or any action taken by CPWD or GST department in this regard."

v. Permanent Account Number (PAN) as issued by the Income Tax Department.

vi. ERP (Enterprise Resource Planning) Training Certificate in the name of the Proprietor/ Agency/ Authorised representative issued by the Competent Authority of CPWD.

All modifications/addendums/corrigendum issued regarding this bidding process, shall be uploaded on website only and shall not be published in any Newspaper.

If any information furnished by the applicant is found incorrect at a later stage, he shall be liable to be debarred from tendering/taking up of works in CPWD. The department reserves the right to verify the particulars furnished by the applicant independently.

After submission of the bid the agency can re-submit revised bid any number of times but before last time and date of submission of bid as notified.

While submitting the revised bid, agency can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) in case of item rate tender and / or revise the precentage in case of percentage rate tender, within the last time and date of submission of bid as notified.

Executive Engineer Mumbai - II,
CPWD, Mumbai-37.

CPWD-6

Government of India CPWD

Notice Inviting Tender for e-Tendering

1) The Executive Engineer, Mumbai - II, (Formerly EE, MCD-V), Kendriya Sadan, 2nd floor, Sector-7, CGS Colony, Antop HIll, Mumbai-37 (Telephone No. 9826076931, Email Id-mumeemcd5.cpwd@gov.in) on behalf of the President of India invites online Percentage rate from approved and eligible contractors of **CPWD - CIVIL/COMPOSITE** for the following work :-

NIT No.: – 57/EE/MUMBAI-II/2026-27

Name of work: **One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.**

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

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

Joint ventures / Consortium and special purpose vehicle are not accepted.

1.1 The work is estimated to cost **Rs. 18,45,813/-** This estimate, however, is given merely as a rough guide.

1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids.

For composite bid the bidders, indicating the percentage above/below the combined estimated cost put to bid. The eligibility of bidder will correspond to the combined estimated cost of different components put to bid.

2) Agreement shall be drawn with the successful tenderer on prescribed Form No. CPWD-7 which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidder shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.

3) The time allowed for carrying out the work will be **11 (Eleven) 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.

OR

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

*

(ii) ~~**The concept architectural and structural drawings for the work are available. (*)**~~

Or

~~**The architectural and structural drawings if any, shall be made available in phased manner, as per requirement of the same as per approved program of completion submitted by the contractor after award of work.**~~

5) The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to becomplied with and other necessary documents and Standard General Conditions of Contract 2023 for Maintenance Work can be seen from the website **www.etender.cpwd.gov.in** or **www.cpwd.gov.in** free of cost.

6) After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.

7) While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the components) but before last time and date of submission of tender as notified.

8) Earnest Money in the form of Treasury Challan or Demand Draft or Pay order or Banker`s Cheque or Deposit at Call Receipt or Fixed Deposit Receipt **(drawn in favour of Executive Engineer, MCD-V, CPWD, Mumbai)** shall be scanned and uploaded to the e-Tendering website within the period of bid submission. The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format **(FORM-A)** uploaded by tender inviting EE in the NIT.

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

A part of earnest money is acceptable in the form of bank guarantee also. In such case, **minimum** 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any Commercial bank having validity for six months or more after the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

Copy of Enlistment Order and other documents as specified in NIT 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 shall have to be submitted by the lowest bidder only within the period specified physically in the office of tender opening authority.**

Online bid documents submitted by intending bidders shall be opened only of those bidders, **whose original EMD deposited with any division office of CPWD** and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at 03:30 PM on 05/12/2026

9) **The bid submitted shall become invalid and e-Tender processing fee shall not be refunded if:**

i) The bidder is found ineligible.

ii) The bidders does not deposit original EMD with division office of any Executive Engineer, CPWD (The EMD document shall only be issued from the place in which the office of receiving division office is situated).

iii) The bidders does not upload all the documents as stipulated in the bid document **including the copy of receipt for deposition of original EMD.**

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 tenderer in the office of tender opening authority.

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

10. The contractor, whose bid is accepted, will be required to furnish performance guarantee **(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** within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any Commercial bank/Banker's cheque of any Commercial bank/ demand Draft of any Commercial bank/Pay order of any Commercial Bank of any Commercial bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Commercial Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited alongwith bid shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required tofurnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board and Program Chart (Time and Progress) within the period specified in Schedule F.

11. **The description of the work is as follows: One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.**

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.

12. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
13. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
14. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
15. The contractor shall not be permitted to bid for works in the CPWD Region Mumbai (Division in case of contractors of Horticulture / Nursery category) responsible foraward 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.
16. 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 tender or engagement in the contractor's service.

17. The bid for the works shall remain open for acceptance for a period of Thirty **(30) days** from the last date of receipt of bid in case of single bid system.

i) If any bidder withdraw his bid or makes any modifications in the terms and conditions of the bid which are not acceptable to the department during the validity of tender (including extended validity of tender) then the Government shall, without prejudice to any other right or remedy, be at liberty to suspend the bidder for one year as per Proforma of Earnest Money Deposit Declration irrespective of letter of acceptance for the work is issued or not.

ii) ~~If any bidder withdraw his bid or makes any modifications in the terms and conditions of the bid which are not acceptable to the department after expiry of 7 days after last date of submission of bid then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 100% of the said earnest money absolutely irrespective of letter of acceptance for the work is issued or not.~~

iii) In case of suspension of bidder as prescribed in Para i) above, the bidder shall not be eligible to bid for CPWD tenders from the date of issue of suspension order.

18. This notice inviting bid shall form a part of the contract document. The successful bidder /contractor, on acceptance of his bid by the Accepting Authority shall within 15days 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, particular specifications, special conditions, minutes of pre-bid meeting, schedule of quantities 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.

ExecutiveEngineer Mumbai - II,
CPWD, Mumbai-37.

Form-A

Receipt of deposition of original EMD

(Receipt No. _____ / date_____)

(NOTE : EMD drawn in favour of Executive Engineer, MCD-V, CPWD, Mumbai.)

Name of work:- One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.

1. NIT No. : **57/EE/MUMBAI-II/2026-27**

2. Estimated Cost : Rs. 18,45,813/-

3. Amount of Earnest Money Deposit : Rs. 36,916/-

Last date of submission of bid Up to 03.00 PM on: **05/12/2026**

(* To be filled by NIT approving authority / EE at the time of issue of NIT and uploaded alongwith NIT)

---

1) Name of contactor _____ #

2) From of EMD _____ #

3) Amount of Earnest Money Deposit _____ #

4) Date of submission of EMD _____ #

Signautre, Name and Designation of EMD
receving officer (EE/AE(P)/AE/AAO)
alognwith office stamp

To be filled by EMD receiving EE)

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 (here in after called "The Government") has invited bids under_____(NIT NUMBER)…….dared……. for……..…….(Name of work)…….. The Government has further agreed to accept irrevocable Bank Guarantee for Rs..... (Rs..... only) valid up to..... (Date)..... as Earnest Money Deposit from…….(Name and address of contractor)…….(here in after 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 (here in after called "The Government") has entered into an agreement bearing number with..... (Name and address of the contractor)…….. (Here in after called "the Contractor") for execution of work..... (Name of work) ……..... The Government has further agreed to accept an irrevocable Bank Guarantee for Rs..... (Rs..... only) valid up to..... (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..... (Name of the bank)…… (Here in after referred as "The Bank"), hereby undertake to pay to the Government an amount not exceeding Rs……. (Rs.....only) on demand by the Government within 10 days of the demand.
3. We..... (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..... (Rs.....only).
4. We..... (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..... (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..... (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 constitution of the bank or the Contractor.
8. We..... (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……. (Rs……only) 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..... Authorized signatory

Name and address 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.

**ln paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for Earnest Money or for performance guar antee/security deposit/mobilization advance, as the case may be.

NIT FORM CPWD- 7

GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT

STATE: MAHARASTRA **BRANCH : B & R**

Percentage Rate Tender and Contract for works

Tender for the work of:- **One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.**

(i) To be uploaded by 15:00 Hours on **05/12/2026** to on website:www.etender.cpwd.gov.in

(ii) To be opened in presence of tenderers who may be present at 15:30 hours on **05/12/2026** in the office of **The Executive Engineer, Mumbai - II, Central Public Works Department, Kendriya Sadan, 2nd floor, Sector-7, CGS Colony, Antop HIll, Mumbai-37.**

BID

I / We have read and examined the notice inviting bid, schedule - A, B, C, D, E & F, specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract for CPWD Works of 2020 for Construction with amendments up to the last date of submission of bids, clauses of contract, Special conditions, schedule of rates & other documents and Rules referred to in the conditions of contract and all other contents in the bid document for the work.

I/We hereby bid for the execution of the work specified for the President of India within the time specified in Schedule 'F' viz., user requirement, schedule of quantity and approved drawings 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 of 2020 for Construction with amendments up to the last date of submission of bids and with such materials as are provided for by, and in respect of accordance with, such conditions so far as applicable.

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

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

A copy of earnest money deposit receipt of prescribed amount deposited in the form of insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by a Commercial Bank, is scanned and uploaded. If I/We, fail furnish 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 bid 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** (as modified) of the bid 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-bidding process of the work.

I/we undertake and confirm that eligible similar work(s) has/have not been got executed through another agency on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding 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 Deposited/Performance Guarantee.

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

Dated:

Witness:

Signature of Contractor

Address: **Postal Address**

Occupation:

ACCEPTANCE

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

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

(a)
(b)
(c)

For & on behalf of President of India

Signature **……..……..**

Dated: **Designation** **……..**

PROFORMA OF SCHEDULES: A TO F

SCHEDULE 'A':
Schedule of quantity for quoting Rates : (Page No. 71-85)

SCHEDULE 'D'
Extra schedule for specific requirements /document for the work, if any. : NIL

SCHEDULE 'E'
Reference to General Conditions of contract : General Conditions of Contract 2023 for Maintenance work as amended / modified up to the last date of submission of Bid.

Name of work : **One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.**

Estimated cost of work	:	**Rs. 18,45,813/-**
Earnest money	:	**Rs. 36,916/-**(To be returned after receiving Performance Guarantee).
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 value.
Security Deposit	:	2.5% of tendered value

SCHEDULE 'F': (General Rules & Directions)

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

Definitions:

2(v) Engineer-in-charge (For Civil)	:	Executive Engineer, Mumbai-II, CPWD, Mumbai
2(viii) Accepting Authority	:	Executive Engineer, Mumbai-II, CPWD, Mumbai
2(x)Percentage on cost of materials and labour to cover all overheads and profits:		15%
2(xi) Standard Schedule of Rates	:	CPWD**, DSR 2023** with amendments upto the

date of submission of bids and Current Market Rate

2(xii) Department : Central Public Works Department.

9 (ii) Standard CPWD contract Form GCC-2023 for MAINTENANCE WORKS, CPWD Form-7 modified & corrected up to : Last date of submission of bid.

Clause 1

i) Time allowed for submission of performance Guarantee, program chart, (Time and Progress) and applicable labour licenses, registration with GST, EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance, in days. : 07 (Seven) days

ii) Maximum allowable extension with late fee @ 0.1% (Non refundable) per day of performance Guarantee amount beyond the period provided in i) above in days. : 3 days with late fee @ 0.1% per day

Clause 2

Authority for fixing Compensation under clause 2 : CE, MUMBAI-I, CPWD, MUMBAI

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start : 10 (Ten) days from Letter of Award or date of handing over of site whichever is later.

Milestones as per table given below

Table of Milestones

S. No.	Description of Milestone (Financial Progress)	Time Allowed in days from start of work	Amount to be withheld incase of non-achievement of milestone
	----------N.A. ----------		

Time allowed for execution of work : **11 (Eleven) Months**

Authority to decide:

i.	Authority to convey the decision of shifting of milestone and extension of time	: Chief Engineer, Mumbai-I, CPWD, Mumbai
ii.	Authority to decide rescheduling of milestone and extension of time	: Chief Engineer, Mumbai-I, CPWD, Mumbai
iii.	Shifting of date of start in case of delay in handing over of site	: Chief Engineer, Mumbai-I, CPWD, Mumbai

Proforma of Schedule : (Clause- V, Schedule of Handing Over of site)

Part	Portion of site	Description	Time period for handing over reckoned from the date of issue of letter of intent
Part A	Portion without any hindrance	Total site	Available
Part B	Portion with encumbrances		NA
Part C	Portion dependent on work of other agencies		NA

Clause 6 – Electronic Measurement Book (eMB)

Clause 7

Gross work to be done together with net Payment / adjustment of advances for material collected, If any, since the last such payment for being eligible to interim payment **: 1.68 Lakh**

Clause 7A

Whether Clause 7A shall be applicable : Yes, No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with GST, EPFO, ESIC and BOCW Welfare Board, what ever applicable as submitted by the Bidder to the Engineer-in- Charge.

Clause 10A

Testing equipment to be provided by the contractor at Field testing laboratory :

1. Nil
2. Nil

Clause 10B (ii)

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

Clause 10C : Not applicable

Component of labour expressed as percent of value of work

Clause 10CA: Not Applicable

Clause 10CC:

Schedule of component of other Materials, Labour, POL etc. for price escalation (Component of civil & electrical construction materials expressed as percent of total value of work). : Not Applicable

Clause 11

Specifications to be followed for execution of work : CPWD Specifications-2019 Vol. I & II with up to date correction slips.

Clause 12

Name Of Work: Maintenance Work.

(i) Up to 1.25 Times Of contract amount : EE MUMBAI-II, CPWD, Mumbai -37.

(ii) Authority to decide deviation1.25 to 1.5 times of tendered amount: : CE MUMBAI-I, CPWD, Mumbai-20.

Clause 12.2.& 12.3
Deviation Limit beyond which Clauses12.2 & 12.3 shall apply for building work:
Clause 12.5
(i) Deviation limit beyond which clauses 12.2. & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items) :
(ii) Deviation Limit for items in Earth Work Sub-Head of DSR or related Items : **Unlimited**

Clause 16

Competent Authority for deciding reduced rate. : CE MUMBAI-I, CPWD, Mumbai -20.

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site.

Description of Machinery	Quantity
Not applicable	

Clause 19 (C)

Authority to decide panelty for each default : EE, MUMBAI-II, CPWD, Mumbai -37.

Clause 19 (D)

Authority to decide panelty for each default : EE, MUMBAI-II, CPWD, Mumbai -37.

Clause 19 (G)

Authority to decide panelty for each default : EE, MUMBAI-II, CPWD, Mumbai -37.

Clause 19 (K)

Authority to decide panelty for each default : EE, MUMBAI-II, CPWD, Mumbai -37.

Clause 25

Conciliator	:	Special Director General (Region Mumbai), CPWD, Mumbai-20.
Arbitrator Appointing Authority	:	Chief Engineer, Mumbai-I, CPWD, Mumbai -20.
Place of arbitration	:	Mumbai.

(As per OM No. DG/CON/317 dated 28.06.2021)

Clause 32

The Requirement of Technical Representative(s) and Recovery Rates: Applicable as below:-

Sr. No.	Qualification	Number (Major + Minor Component)	Minimum Experience in years	Designation	Rate of which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32
1	Graduate Engineer Or Diploma Engineer	1+1	2 years or 5 years respectively	Project Planning / Quality & Billing Engineer	Rs. 15,000/- Per month per person

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

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

CLAUSE 36

If relative working in CPWD then the contractor not allowed to tender : Applicable

CLAUSE 38

i) (a)	Schedule / statement for determining theoretical quantity of cement & bitumen	On the basis of **Delhi schedule of Rates 2023** printed by CPWD with up to date correction slips and Current Market Rate.
ii)	Variations permissible on theoretical quantities	
a)	i.Cement for works with estimated cost put to tender not more than Rs. 25 lakh ii. Cement for works with estimated cost put to tender more than Rs. 25 lakh	3 % plus / minus. 2% plus / minus.
b)	Bitumen for all works.	2.5% plus only & Nil on minus side.
c)	Steel reinforcement and structural steel sections for each diameter section and category.	2% plus / minus.
d)	All other materials.	Nil.

GENERAL CONDITIONS

1. Except for the items, for which particular specifications are given or where it is specifically mentioned otherwise in the description of the items, the work shall generally be carried out in accordance with the "CPWD Specifications 2019 Vol.-I & II with upto date corrections slips Wherever CPWD Specifications are silent, the latest IS Codes/Specifications, NBC 2016 guidelines, MORTH specification or any other specification as approved by Engineer- in- charge shall be followed.

2. The order of precedence in case of any confusion/dispute will be as follows :

    a. Nomenclature of items given in the schedule of quantities in the tender.

    b. Particular Specifications

    c. Additional Conditions

    d. Special conditions

    e. Contract & Clauses as per Standard CPWD GCC 2023 for Maintenance works.

    f. CPWD Specifications as mentioned in clause 11 under schedule-F and MORT & H Specifications with upto-date correction slips.

    g. Relevant I.S. Codes or specification.

    h. Directions of Engineer-in-charge shall be applicable where none of the above is to be applied.

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

3. The agency shall construct suitable site office, laboratory & display room for samples to be used at work.

4. Agency shall make his own arrangement of water, electricity & generator to be used in work. Department will not provide the above facility.

5. Samples including brand / quality of materials and fittings to be used in the work shall be got approved from the technical sanctioning authority, well in advance of actual execution and shall be preserved till the completion of the work.

6. The cost of work shall be inclusive of pumping out or bailing out water if required for which no extra payment will be made. This will include water encountered from any source, such as rains, floods, and sub-soil water table being high due to any other cause whatsoever.

7. The work shall be executed and measured as per metric dimensions given in the Schedule of quantities, drawings etc. (F.P.S. units wherever indicated are for guidance only).

8. The following modifications to the above specifications shall however apply:

All stone aggregate and stone ballast shall be of hard stone variety to be obtained from source approved by the Engineer-in-charge.

Coarse sand should be obtained from source approved by the Engineer-in-charge. The coarse sand shall be screened before using, if required. The same shall be clean and sharp angular grit type. If the sand brought to site is dirty, it must be washed in clean water to bring the sand to the required specifications. Nothing extra shall be payable on this account.

Fine sand should be obtained from source approved by the Engineer-in-charge. The fine sand shall be screened, if required. The same shall be clean and sharp angular grit type. If the sand brought to site is dirty, it must be washed in clean water to bring the sand to the required specifications. Nothing extra shall be payable on this account.

The precast AAC blocks confirming to BIS 2185 part-III 1984 of approved size shall be used. The blocks shall be obtained from approved manufacturer by the Engineer-in-charge.

9. Unless otherwise specified in the schedule of quantities, the rates tendered by the contractor shall be inclusive of all cost & taxes and shall apply to all leads and lifts and nothing extra shall be payable on this account.

10. The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, material, tools and plants and other inputs involved in the execution of the item.

11. The foundation trenches shall be kept free from water while works below ground level are in progress.

12. 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.

13. 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, temporary barricading as per rules of local body all around the working sites, 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.

14. 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.

15. 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.

16. Any legal or financial implications resulting out of carriage of earth from outside or disposal of earth shall be sole responsibility of the contractor. Nothing extra shall be paid on this account.

17. The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors are minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the masonry work / partitions. The contractor shall ensure proper coordination of various disciplines viz. sanitary & water supply, electrical, fire-fighting and any other services.

18. All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested as per the design conditions submitted before covering.

19. Quality Assurance

19.1 The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted.

19.2 The contractor shall get the source of various raw materials namely aggregate, cement, sand, steel, water etc. to be used on the work, approved from the Engineer-in-Charge and trial mixes for controlled concrete shall be done using the approved materials. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost.

19.3 Similarly, the contractor shall submit brand/make of various materials to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it. Any change will have to be got approved from engineer in charge in advance.

19.4 The contractor shall submit shop drawings of staging and shuttering arrangement, stone cladding and other works including mock work as desired by Engineer-in-Charge for his approval before execution. The contractor shall also submit bar bending schedule for approval of Engineer-in-Charge before execution.

19.5 The contractor shall depute Quality Manager exclusively for enforcement of quality control. Such Quality Manager should be a qualified engineer with minimum 8 years of similar experience. For all staff to be deployed for quality assurance, the contractor may refer to clause 32 under schedule "F" attached.

19.6 All expenditure to be incurred for testing of all samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor. (As per DG/MAN/410 dated 22.10.2021). Testing of various materials to be used in the work and Design Mix shall be done by contractor through IIT Mumbai, VJTI Mumbai, NIT or any Govt. laboratory or approved testing labs by competent authority and allowed by Engineer-in-charge.

20. Safety Precautions:

Contractor shall within two weeks of award of work, submit to the Engineer-in- Charge for his approval, list of measures for maintaining safety of manpower deployed for construction and avoidance of accidents.

21. Scaffolding:

For facia work, outer finishing and other RCC works etc. double steel scaffolding having two sets of vertical supports with steel staircase for inspection of works by engineer in charge shall be used. The supports shall be sound and strong, tied together with horizontal piece over which scaffolding planks shall be fixed.

22. **SAMPLES FOR TESTING:-**

22.1 Samples of all materials required for testing is included in the cost of work.

22.2 If any load testing or special testing is to be done for any sample whose strength is doubtful, the cost of the same shall also be borne by the contractor.

22.3 In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications, higher of the two frequencies of testing shall be followed.

23. The contractor should submit for approval of Engineer-in-Charge, samples of the work to be performed under the specified items of work before actually commencing the mass execution of the work under the item.

24. Maintenance of Register of Tests

All the registers of tests carried out at construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to CPWD field staff.

All samples of materials including cement concrete cubes shall be taken jointly with contractor by JE and out of this at least 50% samples shall be taken in presence of AE in charge. If there is no JE, all samples of materials including cement concrete cubes shall be taken by AE jointly with contractor. All the necessary assistance shall be provided by the contractor. Cost of sampling & testing are to be borne by the contractor and he shall be responsible for safe custody of samples to be tested at site/ outside laboratory.

All the tests in field lab at construction site shall be carried out by the Engineering staff deployed by the contractor and shall be witnessed by the representative of Engineer in charge

All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by JE /AE /EE cum SM/SE cum ED.

Contractor shall be responsible for safe custody of all the test registers.

Submission of copy of all test registers and Material at site register along with each alternate Running Account Bill and Final Bill shall be mandatory. These registers should be duly checked by Assistant Engineer in division office and receipts of registers should also be acknowledged by Accounts Officer.

If all test registers are not submitted along with alternate R/A Bill & Final Bill, no payment will be released to the contractor.

25. Maintenance of Material at Site (MAS) Register-

All the MAS Registers including cement and Steel Registers which shall be issued to the contractor by Engineer-in-Charge, shall be maintained by Contractor at site and shall be open for inspection by the Department.

26. Some restrictions may be imposed by the district administration/client on the working and on movement of labour, materials etc in the campus. The contractor shall be bound to follow all such restrictions / instructions. Executive Engineer-in-charge of work will issue the identity cards to all persons authorized by him to do work / visit the work site and no claim whatsoever shall on this account will be entertained.

27. The contractor(s) shall inform/issue notices to the Municipality, police and other authorities that may be required as per law and obtain all requisite permission/ licenses for temporary obstructions, enclosures etc. Contractor(s) shall pay all fee, taxes and charges which may be levied on account of these operations in executing the contract. He shall make good any damage to the property whether public or private and shall supply and maintain lights either for illumination or for cautioning the public at night. The contractor(s) shall do the barricading enclosing the area as per direction of Engineer-in-charge, and nothing extra will be payable on this account.

28. The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit board, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to existing/new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work. In case of any accident of labours / contractual staff's the entire responsibility will rest on the part of the contractor and any compensation under such circumstances if becomes payable the same shall be entirely borne by the contractor and department shall have no role on this account.

29. The contractor(s) shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where roads, services and compound walls are to be constructed. The stacking shall take place as per stacking plan. However, if any change is required, the same shall be done with the approval of Engineer-in-Charge.

30. The contractor shall give performance test of the entire installation(s) as per the specifications & codes in the presence of the Engineer-in-charge or his authorized representative before the work is finally accepted and nothing extra what-so-ever shall be payable to the contractor for the test.

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

32. If the work is carried out in more than one shift or during night, no claim on this account shall be entertained. Normally contractor shall not allow executing the RCC, electrical and finishing work at night. Work at night shall, however, be allowed if the site conditions/circumstances so demand. However, if the work is carried out in more than one shift or at night, no claim on this account shall be entertained. The contractor has to take permission from the police authorities etc. if required in such situation the contractor shall make available to the department, proper means of communication such as Vehicle etc. at his own cost.

33. Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar service encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. In case the same are to be removed and diverted. The same shall be payable to the contractor. The contractor shall work out the cost and the same shall be approved by Engineer-in-Charge. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.

34. The contractor shall be responsible for the watch and ward / guard of the buildings safety, fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.

SAMPLE OF MATERIALS

35. BIS/ISI marked materials except otherwise specified shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/material. Wherever BIS/ISI marked materials are brought to the site of work, the contractor shall, if required, by the Engineer-in-Charge furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material / procured by the contractor for incorporation in the work satisfies the provisions of specifications/ BIS codes relevant to the material and / or the work done.

    For certain items, if frequency of tests not mentioned in the CPWD Specifications and then relevant IS code shall be followed and tests shall be carried out as per the frequency specified therein.

36. The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work. The contractor shall provide at his own cost suitable weighing and measuring arrangements at site for checking the weight / dimensions as may be necessary for execution of work. The sealed samples are to be handed over to the testing lab by contractor in the presence of Junior Engineer/Assistant Engineer-in-Charge of work.

37. Malba, rubbish & other waste materials shall be disposed off to recycling agents. No deduction on this account shall be made from the agency.

Additional Conditions

1.0 The tenderer shall acquaint himself with the proposed site of work, its approach roads, working space available etc. before quoting his rates and no claim on this account shall be entertained by the department.

2.0 The contractor(s) shall get him acquainted with nature and extent of the work and satisfy him about the availability of materials from kiln or approved quarries for collection and conveyance of materials required for construction.

3.0 The contractor(s) may study Architectural drawings which are available in the office of EE Mumbai-II, CPWD, 2nd floor, Kendriya Sadan building, Sector-7, CGS Colony, Antop Hill, Mumbai- 37 on all working days between 11:00 to 17:00 hrs.

4.0 The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost. No payment shall be made on this account.

5.0 Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.

6.0 The contractor shall take all necessary precautions to prevent any nuisance or in-convenience to the owners, tenants or occupiers of adjacent properties and to the public in general and to prevent any damage to such properties and any pollution of smoke, streams and water-ways. He shall make good at his cost and to the satisfaction of the Engineer-in-Charge, any damage to roads, paths, cross drainage works or public or private property whatsoever caused thereon by the contractor. All waste or superfluous materials shall be carried away by the contractor without any reservation entirely to the satisfaction of the Engineer-in-Charge.

7.0 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 building/adjacent properties.

8.0 The contractor shall be entirely and exclusively responsible for the horizontal, vertical and other alignment, the level and correctness of every part of the work and shall rectify effectively any errors or imperfections therein. Such rectifications shall be carried out by the contractor at his own cost to the instructions and satisfaction of the Engineer-in-Charge.

9.0 The rates quoted by the contractor are deemed to be inclusive of site clearance, setting out work, profile, establishment of reference bench mark, spot levels, construction of all safety and protection devices, barriers, earth embankments, preparatory works, alltesting of materials working during monsoon, working at all depths, height and locations etc. unless specified in the schedule of quantities.

10.0 Royalty at the prevailing rates wherever payable shall have to be paid by the contractor on the boulders, metal, shingle, sand and bajri etc. or any other material collected by him for the work direct to revenue authorities and nothing extra shall be paid by the department for the same.

11.0 The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipment shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.

12.0 The contractor shall get the water tested with regard to its suitability and conforming to the relevant IS Code. The contractor shall obtain written approval from the Engineer-in-Charge before he proceeds by using the same for execution of work. The water testing charges shall be borne by the contractor.

13.0 All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.

14.0 All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the nomeniclature of item, the same shall be used after getting the same approved from Engineer-in-Charge.Wherever brand / quality of material is not specified, the contractor shall submit the samples as per approved list of brand names given in the tender document / particular specifications for approval of technical sanctioning authority. For all other items, materials and fittings of ISI Marked shall be used with the approval of Engineer-in-Charge. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant specifications or IS codes and use the same only after getting the approval to avoid delay, contractor should submit samples as stated above well in advance so as to give timely orders for procurement. If any material, even though approved by Engineer-in-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.

15.0 The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material / work beyond set-out tolerance limit shall be summarily ejected by the Engineer-in-Charge & contractor shall be bound to replace /remove such sub-standard / defective work immediately.

16.0 For construction works which are likely to generate malba / rubbish the contractor shall dispose of malba, rubbish & other unserviceable materials and wastes to the notified specified Municipal dumping ground & disposed off to recycling agents only and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.

17.0 In the event of any restrictions being imposed by the Security agency, CPWD, Traffic or any other authority having jurisdiction in the area on the working or movement of labour/material, the contractor shall strictly follow such restrictions and nothing extra shall be payable to the contractor on this account. The loss of time on this account, if any, shall have to be made up by generating additional resources etc.

18.0 No payment shall be made for any damage caused by rain, snowfall, flood or any other natural calamity, whatsoever during the execution of the work. The contractor shall be fully responsible for any damage to the govt. property and work for which the payment has been advanced to him under the contract and he shall make good the same at his risk and cost. The contractor shall be fully responsible for safety and security of his material, T & P, Machinery brought to the site by him.

19.0 ELECTICAL SUPPLY

For execution of work if electrical supply is needed then The Constractor shall arrange temporary electrical supply connection from Electric supply agency such as TATA POWER/ADANI

POWER/BEST/ Electricity board etc. for electric consumption in the work. For his work If the contractor uses electricity available in the Building/Premises/Campus, a revovery @ 0.5% shall be made on gross bill amount from each bill. If no electricity is required, then no recovery will be made on this account.

20.0 AVAILABILITY OF SITE

In all works having nature of maintenance, renovation, up gradation etc., Contractor shall commence the work even If partial site is available without waiting for full availability of Site. Residential flats, office rooms etc. may be available in parts in phase wise manner for carrying out the work & no claim on this account shall be entertained by the department.

21.0 The contractor shall take immediate action to attend any complaint assigned to him through complaint register / site order book / verbal instructions/Through Mobile / from Engineer-in-charge / personnel complaints from occupants.

In all cases he shall attend the complaints in the specified duration as mentioned below:-

(a) No delay complaints-complaints of emergent nature such as plumbing or sewerage systems not working / blocked / overflow etc. are to be attended to within 24 hours,

(b) Minor complaints-complaints relating to the repair works of trades of mason and carpenter, general cleaning, reporting of complaints etc. are to be attended within 48hours.

(c) Major complaints- complaints other than no delay and minor complaints – within 15 day " soras decided by Engineer-in-charge. Failure to achieve shall attract action under clause-3 of the agreement.

In case of failure to meet these deadlines a compensation as per following Table

Nature of complaint	Period for attending complaint (Bench Mark)	Recovery per day
Emergency	24 Hours (For Civil)	Rs. 400/- (Per day) for each complaint marked as emergency by JE/AE
Periodic	48 Hours	Rs. 500 /- (Per day) for each complaint marked as periodic by JE/AE
Special repairs	15 Days	Rs. 800 /-(Per day) for each complaint marked as special repair by JE/AE

21.

The recovery will be levied from his bills for each default to attend the complaints assigned to him. The decision of Assistant Engineer-in-Charge regarding correctness of complaint shall be final and binding.

In case of receipt of feedback from allottee regarding his complaint through CPWD as "unsatisfactory" and the same being confirmed upon inspection by CPWD officials, compensation @ Rs. 500/- (Rs. Five hundred only) per such feedback will be levied. This levy

will be made after due verification of such feedback by Engineer-in-Charge and his decision in this regard shall be final.

22. A minimum number of masons, carpenters, fitters, sewer men, beldars to be deployed by the contractor shall be as per requirement of plinth area basis.

MODE OF MEASUREMENTS

The measurements shall be recorded and entered in computerized format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.

These measurements shall then be 100% checked by the Junior Engineer / Assistant Engineer. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerized measurement and submit to the department the corrected computerized measurement Books now in use, and with its pages machine numbered.

Executive Engineer shall test check these computerized measurement as per the existing instructions. This book shall be treated as a Computerized Measurement Book.

The Junior Engineer / Assistant Engineer and the Executive Engineer shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerized Measurement Book.

The Computerized Measurement Book shall be allotted a serial number as per the Register of Computerized Measurement Books.

PARTICULAR SPECIFICATIONS

1.0 General

1.1 Wherever any reference to any Indian Standard Specification occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued thereto or revisions thereof, if any, upto the date of receipt of tenders.

1.2 Unless otherwise specified in the schedule of quantities, the rates for all items of work shall be considered as inclusive of pumping out or bailing out water, if required for which no extra payment will be made. This will include water encountered from any source such as rains, floods, sub soil water table being high and/or due to any other cause whatsoever.

1.3 The work shall be executed and measured as per metric dimensions given in the Schedule of quantities, drawings etc. (FPS units wherever indicated are for guidance only).

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

2.1 All stone aggregate and stone ballast shall be of hard stone variety to be obtained from approved quarries at Chandivali / Navi Mumbai or any other source to be got approved by the Engineer-in-charge.

2.2 Coarse sand should be obtained from Vaitarana River or any other source to be got approved by the Engineer-in-charge and screened as required.The same shall be clean and sharp angular grit type. If the sand brought to site is dirty it must be washed in clean water.

3.0 SHUTTERING / FORM WORK:-

3.1 The work shall be done in accordance with CPWD Specifications - 2019 Vol. I &Vol. II with upto date correction slips.

3.2 Steel shuttering as approved by the Engineer-in-Charge shall be used by the contractor. Minimum size of shuttering plates shall be 600mm x 900mm except for the case when closing pieces required completing the shuttering panels. Dented, broken, cracked, twisted or rusted shuttering plates shall not be allowed to be used on the work.

3.3 The shuttering plates shall be cleaned properly with electrically driven sanders to remove any cement slurry or cement mortar or rust. Proper shuttering oil or de-bonding compound shall be applied on the surface of the shutter plates in the requisite quantity before assembly of steel reinforcement.

3.4 The joint filler shall be resilient closed cell expanded polyethene and non- tainting as manufactured by Supreme Industries Ltd. or equivalent manufacturer.

3.5 Providing joint filler of required thickness in position to substrate using either double sided foam adhesive tape or neoprene synthetic rubber adhesive. When forming expansion joint with the Board in in-situ concrete, joint sealing slots can be readily formed in the following matter-

Before installing, simply cut off a strip of the required depth. Then install the filler flush with the finished surface.

Prior to sealing, the top strip can then be pulled easily from the joint to provide an uncontaminated sealing slot ready for preparation and sealing.

4.0 REINFORCEMENT:-

4.1 The reinforcement shall be done as per CPWD Specifications - 2019 - Vol.I & Vol. II with upto date correction slips.

4.2 The reinforcement of RCC work includes all operations including straightening, cutting, bending and **binding with annealed steel wire** and placing in position at all the floors with all leads and lift complete.

4.3 To avoid displacement of bars in any direction and to ensure proper cover, only factory made round type/rectangular cover blocks shall be used by the contractor. Nothing extra shall be payable on this account.

5.0 FLOORING & DADO

5.1 The work in general shall be carried out as per the CPWD Specifications, as per the architectural drawings and as per the direction of Engineer-in-Charg

5.2 The Engineer-in-Charge or his representative may, if required, visit the source of supply of the various stones to assess the quality as well as availability of the material in the required quantities. The Department shall bear the cost of such visits of the officers of the Department.

5.3 Based on the samples approved by the Engineer-in-Charge for various flooring and dado / cladding materials as specified hereinafter, the contractor shall prepare mock up(s) at site of work as specified under relevant flooring and dado / cladding items, for approval of quality of workmanship and material specified. If the quality of the workmanship and the material is as per the required standards and approved by the Engineer-in- Charge, the mock up shall be allowed as part of the work and measured for payment. Otherwise, it shall be dismantled by the contractor as directed by the Engineer-in-Charge and taken away from the site of the work at his own cost. The mock up(s) so made shall be kept till completion of respective works for reference. Nothing extra shall be payable on this account.

5.4 The stones / tiles shall be transported to site well packed in boxes or otherwise. These shall be handled carefully to prevent any damage. The various types of stones and tiles, procured shall be free of any surface defect or any edge damage. The damaged stones and tiles shall not be allowed to be used in the work. So, the contactor shall procure additional quantity of the stone and tiles to cover such contingencies. However, nothing extra shall be payable on this account.

5.5 For the enclosures with circular or curved profile, only the actual area of the flooring shall be measured for payment and nothing extra shall be payable for labour, material, wastages and any other incidental charges.

5.6 For the skirting in the enclosures with curvilinear profiles, the tiles / stones shall be cut to the required size and the shape to match the profile and/ or the joints as per the architectural drawings. Similarly, the skirting shall be fixed in a manner as to flush or project from the finished face of the wall as per the architectural drawings and as directed by the Engineer-in-charge. Any chasing of the C.C masonry blocks required for such fixing is deemed to be included in the cost of masonry. Nothing extra shall be payable on this account.

5.7 For flooring work, the joints between the different types of flooring shall be located as per the architectural drawings. Also, the Contractor shall maintain the uniform level of the finished flooring of the different types unless specifically mentioned on the architectural drawings. Nothing extra shall be payable on these accounts.

5.8 All the flooring works specified under this sub -head shall be adequately protected by a layer of plaster of paris which shall be laid over a 400 micron PVC film. The protective layer shall be maintained throughout the execution of works and removed just before handing over of the site for which nothing extra shall be payable.

5.9 At the time of handing over, flooring & dado / cladding shall be free of any scratches, stains etc. The flooring & dado / cladding shall be properly cleaned before handing over. However, abrasive cleaners shall not be used to clean the marks and other scratches.

Granite / Italian Marble stone work

5.10 The Contractor shall procure and submit the samples of different types of stones, for the approval of the Engineer-in-charge prior to the execution of the item.

5.11 The entire supply for each type of stone slab shall be procured from one location (in one quarry), and supplied preferably, in one lot to keep variations to the minimum. The Contractor shall also segregate and sort the slabs according to colour, shade, texture and size of grains etc. to keep variation(s) in stones used at any one location to the minimum. Any slab with variation in the colour, shade, texture and size of grains etc., not acceptable to the Engineer - in-Charge, shall not be used in the work and shall be removed and replaced by the Contractor. Nothing extra shall be payable on these accounts. Also no claim of any kind shall be entertained from the Contractor on this account.

5.12 Stone slabs shall be pre polished (mirror polished) or given any other surface treatment as per the Architectural drawings and as directed by the Engineer-in-Charge.

5.13 Machine polishing and cutting to required size shall be done with water (as lubricant) only. Sawing shall also be done preferably with water as lubricant but as a special case, the Engineer-in -Charge may permit, at his discretion, oil or kerosene as lubricant subject to all kerosene or oil in the body and surface of tiles slabs being thoroughly dried in ovens. Tiles / slabs with stains or patches due to the use of oil or otherwise, either before or after installation, shall be rejected and shall be replaced by the Contractor at his own cost. Nothing extra shall be payable on this account.

5.14 The stone work may be required to be carried out in patterns, design and / or in combination with stones of different colour and shade with or without borders and in combination of different stone slabs / tiles for which nothing extra shall be payable. The stones shall be provided in sizes and shapes as per the architectural drawings and wastages and incidental costs, if any, shall be deemed to be covered in the cost of the relevant items. Nothing extra shall be payable on this account.

5.15 For the flooring portions curved in plan or for in-lay work, the stone slabs (at the edge) shall be cut to the required profile and shape as per the architectural drawings. Nothing extra shall be payable on this account.

5.16 The stone slabs used for providing and fixing in the sills, soffits and jambs of doors, windows, ventilators and similar locations shall be in single piece unless otherwise directed by the Engineer-in-Charge. Wherever stone slab other than in single piece is allowed to be fixed, the joints shall be provided as per the architectural drawings and as per the directions of the Engineer -in-Charge. In the cabin areas, the joints in sills shall preferably be provided in line with the partition wall. Depending on the number of joints, as far as possible, the stone slabs shall be procured and fixed in slabs of equal lengths as per the architectural drawings and as directed by Engineer-in-Charge.

Vitrified and ceramic tiles work

5.17 The contractor shall procure and submit the samples of approved make, shade and thickness of different types of vitrified and ceramic tiles, for the approval of the Engineer-in-charge prior to the execution of the item.

5.18 The mock up (one each) shall be prepared for flooring and dado, for vitrified tiles etc.

5.19 The entire supply for each type of tiles shall be procured from one manufacturer / authorized dealer, preferably, in one lot to keep variations to the minimum.

5.20 The tiling work may be required to be carried out in patterns, design and / or in combination with tiles of different colour and shade and in combination of different stone slabs / tiles for which nothing extra shall be payable. The tiles shall be provided as per the architectural drawings.

5.21 For the flooring portions curved in plan, the tiles (at the edge) shall be cut to the required profile and shape as per the architectural drawings. Nothing extra shall be payable on this account.

5.22 The Contractor shall obtain and submit to the Department the manufacturer's test certificate for compliance of various parameters for the material as per the manufacturer's specifications, with each lot of material received at site.

5.23 The flooring and dado / cladding should be set out such that the perimeter/ corner tiles are in excess of half a tile so that the edge panels on both the sides are of equal sizes, as far as possible. The tiles shall be cut to required size and shape in a workman like manner but with all precautions, as per the manufacturer's specifications.

5.24 For dado / cladding / skirting work, the tiles shall be chamfered at the meeting edges on the corners in a manner that butt edges are not visible. It shall be ensured that the edges shall be ground / filed to chamfer the edges so that the glazing layer at the edges of the tiles is not chipped off otherwise the work shall be rejected and redone by the Contractor at his own cost.

5.25 The proper gradient shall be given to flooring for toilets, verandah, kitchen, court yard, etc. as per the directions of Engineer-in-Charge. For this there may be extra thickness of dry mortar below the tiles/stone slabs. These gradients should be insured in the shuttering itself. Nothing extra shall be paid on this account.

6.0 SANITARY INSTALLATIONS/ WATER SUPPLY/ DRAINAGE

6.1 The work in general shall be carried out as per CPWD Specifications- 2019 Vol.-I & Vol.-II with upto date correction slips. Rate shall include all materials, labour and all the operations mentioned in the respective item unless and otherwise specifically mentioned.

6.2 The contractor shall be responsible for the protection of the sanitary and water supply fittings and other fittings and fixtures against pilferage and breakage during the period of installation and thereafter until the building is handed over.

6.3 The contractor shall ensure that senior and experienced plumbers are assigned exclusively for this work. Such plumber(s) should have valid license from the local authorities. The project management shall be done through modern technique. For quality control &monitoring of workmanship, contractor shall assign at least one engineer who would be exclusively responsible for ensuring strict quality control, adherence to specifications and ensuring top class workmanship for the installation.

6.4 The contractor shall obtain all permits/ licenses and pay for any and all fees required for the inspection, approval and commissioning of their installation without additional cost to the departm

6.5 The contractor shall examine all architectural, structural, plumbing, electrical and other services drawings and check the as-built works before starting the work, report to the Engineer-in-Charge any discrepancies and obtain clarification. Any changes found essential to coordinate installation of his work with other services and trades, shall be made with prior approval of the Engineer In-Charge without additional cost to the department.

6.6 Samples of all materials like valves, pipes and fittings etc. shall be submitted to the Engineer In-Charge prior to procurement for approval and retention by Engineer-in-Charge and shall be kept in their site office for reference and verification till the completion of the Project. Wherever directed a mockup or sample installation shall be carried out for approval before proceeding for further installation without any extra cost.

6.7 All materials and equipment shall conform to the relevant Indian Standards and shall be of the approved make and design. Makes shall be in conformity with list of approved manufacturers as per schedule of quantity & approved list and samples.

6.8 Balancing of all water systems and all tests as called for the CPWD Specifications shall be carried out by the contractor through a specialist group, in accordance with the

Specifications and Standards. The installation shall be tested and shall be commissioned only after approval by the Engineer In-Charge. All tests shall be carried out in the presence of the representatives of the Engineer In-Charge and without additional cost to the department.

6.9 Porcelain sanitary ware shall be glazed vitreous china of first quality free from warps, cracks and glazing defects and shall conform to relevant BIS codes. Colour of sanitary ware, shall be specified or as selected by the Engineer-in-Charge. All sanitarywares & / or sanitary faucets shall be of any of approved brand. Nothing extra shall be payable on this account.

6.10 The chasing, cutting and making holes in the masonry and / or cement concrete and / or RCC works shall be done carefully without causing any damage to the structure. As far as possible, mechanical cutters & core cutting machines shall be used in a workman like manner, for concealing the pipelines and fittings. The chases / holes, so made, shall be made good with the cement mortar of mix 1: 3 (1cement: 3 fine sand) after testing of the pipe lines for leakage. The cost of cutting cores in RCC, cutting holes in masonry & making good the same shall be inclusive in the respective item of water supply / sanitary lines. Nothing extra shall be payable on this account.

6.11 All vertical Sanitary & water supply pipes shall be fixed to galvanized M.S supporting frame with "U" shaped G.I bolts, threaded at both ends, as specified, with GI nuts, GI washers, GI cleats etc. as approved by the Engineer-in-charge. Supporting frame shall be fixed with approved anchor fasteners / plumbing nails as directed by the Engineer-in-charge. In all cases, pipelines shall be fixed, minimum 50 mm away from the finished wall face and shall not be fixed directly to the walls. The cost of providing and fixing GI supporting frame, "U" bolts, GI nuts, GI washer, anchor fastener etc., for clamping the pipes to the supporting frame shall be paid for separately under relevant item.

6.12 Water supply pipes on the terrace shall be fixed to the walls with GI clamps or by supporting on masonry / plain cement concrete piers cast on slabs as approved by the Engineer-in-charge. The cost for providing and fixing G.I. clamps & Plain cement concrete piers etc. shall be included in the cost of water supply pipes.

6.13 Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should confirm to bye-laws and specifications of the local Body / Corporation where CPWD Specifications are not available. The work of water supply, internal sanitary installation and drainage etc. shall be carried out as per local Municipal Corporation or such local body bye-laws. The contractor shall get the materials (fixtures/fittings) tested by the local body/Corporation authorities wherever required at his own cost and after completion of work shall produce necessary completion certificates from such authorities.

7.0 False Ceilings

7.1 The work in general shall be carried out as per the CPWD specifications, as per the manufacturer's specifications, as per architectural drawings and as per directions of Engineer-in-Charge.

7.2 Various false ceiling shall be done in different levels in linear and curvilinear pattern in plan and elevation and in combination with other types of false ceiling as specified in brief specifications & as per the architectural drawings.

7.3 The tiles and the suspension system shall be as specified in the item nomenclature. The contractor shall procure and submit the samples of tiles and grid system of approved make, for the approval of the Engineer-in-charge prior to execution of the item.

7.4 The Contractor shall prepare the mock-up at site for approval of material and quality of workmanship by the Engineer-in-Charge. Only after the approval of Mock-up, the Contractor shall start the mass work. If the quality of the workmanship and the material is as per the required standards and approved by the Engineer-in- Charge, the mock up shall be allowed as part of the work and measured for payment. Otherwise, it shall be dismantled by the contractor as directed by the Engineer-in-Charge and taken away from the site of the work

at his own cost. The mock up(s) so made shall be kept till completion of respective works for reference.

7.5 Once the material and mock up are approved, the entire material (tiles as well as grid system) shall be procured from the approved manufacturer or its authorized dealer.

7.6 The installation shall be got done through an experienced installer, executing similar works.

7.7 The material shall be transported to site well packed. The ceiling material procured shall be free of any surface defect, edge damage and any other such defects. The contractor shall ensure careful handling and storage and prevent any rough handling, rolling of cartons or dropping cartons to prevent any edge damage or breakage. The defective / damaged material shall not be allowed to be used in the work. So, the contactor shall procure additional quantity of material to cover such contingencies. However, nothing extra shall be payable on this account.

7.8 Adequate care shall be taken before installation as well as afterwards till completion of the work. It shall be protected from rains, excessive humidity, chemical fumes, vibrations, dust etc. Any tile with edge damaged or crack etc. shall not be allowed to be used in the work and shall be replaced by the contractor at his own cost. Similarly, adequate care shall be taken by the contractor while placing or removing and handling the tiles so as not to cause any damage. The ceiling shall be cleaned as per manufacturer's specifications. Abrasive cleaners shall not be used to clean the marks.

7.9 The Contractor shall obtain and submit to the Department the manufacturer's test certificate / report for compliance of the material to the relevant standards along with each lot of material supplied for the work.

7.10 The suspension system for various types of false ceiling shall be as per manufacturer's specifications. The false ceiling tiles shall be fixed on to coordinated suspension ceiling system with supporting grids system that fully integrates with the ceiling tiles as per manufacturer's specifications. It shall be ensured that the suspension system shall be suitable to take all designed dead, imposed and all incidentals loads efficiently and shall not sag. The true line and levels for false ceiling work shall be maintained.

7.11 The luminaries, air grills / diffusers, signages etc. shall be as far as possible independently supported to avoid any over loading of the ceiling system which may result in excessive deflection or twisting of grids. Any strengthening of grid system by providing additional hangers, fasteners, runners, cross tees etc. or providing additional bracing may be carried out as required for any specific locations or for specific purpose for which nothing extra shall be payable.

Various false ceiling systems shall include cost of all inputs of labour, materials, wastage if any, T&P, scaffolding, staging or any other temporary enabling structure / services etc. and all other incidental charges including making necessary cut outs for A.C diffusers, Light fittings, grills, Fire detection, alarm, sprinklers devices and fittings etc. No deduction in the area shall be made for openings nor anything extra shall be payable for making the openings. Also nothing extra shall be payable on account of any wastage in materials. Also nothing extra shall be payable on account of any strengthening of the supporting suspension system for the false ceiling, around the openings in the false ceiling by using additional hangers, fasteners, runners, cross tees, cross channels, etc.

PARTICULAR SPECIFICATIONS FOR REPAIR WORK

1. Adequate care should be taken by the contractor while dismantling, chiseling, demolishing work, drilling etc. that impact/vibrations are minimum for considerations of structural safety and also for inconvenience caused to the users of the building. Perimeter of unsound concrete area shall be marked by making shallow cut on cover concrete with cutter machine to reduce the impact of chiseling. Rates shall cover cost of all inputs of material, labour, T&P etc. involved all the operations in the work.

2. Dismantling and repair work of any type like plaster, flooring, concrete, RCC, Brick work, GI/CI pipes, water proofing etc. shall be for all heights and all levels unless specifically mentioned in the item and no claim for extra cost shall be entertained on this account.

3. Sequence of strengthening work shall be as under:

   i. Strengthening of beams of first floor and columns from top of grade beams / foundations up to middle of second floor.

   ii. Strengthening of beams of second floor and column from middle of second floor to middle of third floor.

   iii. Strengthening of beams of third floor and columns from middle of third floor to middle of the fourth floor.

   iv. Strengthening of beams of fourth floor and terrace beams and columns from middle of the fourth floor and so on up to terrace level.

   Gunited repaired structural members shall be allowed to attain at least 7 days strength before any load is transferred to that member.

4. For removal of all type of loose / delaminated / damaged / weak cement plaster from the surface of masonry or concrete, a cut normal to the surface all along the boundaries, in regular shape shall be made not to exceed plaster thickness. Then plaster shall be removed completely to expose the parent masonry or concrete surface so as not to have any traces of such plaster left. For brick work, the joins have be properly raked and cleaned as per CPWD specifications. The plaster should be dismantled without causing any damage to brick work.

5. **CHIPPING / DISMANTLING OF UNSOUND / WEAK CONCRETE & PREPARATION OF SUBSTRATE:**

5.1 The perimeter of unsound / weak concrete / delaminated layer of guniting shall be saw cut to a minimum depth of 12 mm in square/rectangular shape at normal (orthogonal) to the surface of member. Then concrete shall be removed by chipping with standard power driven percussion type or pneumatic chisel of standard make from the demarked area including tapering all edges, making square shoulders of cavities etc. complete (after properly supporting the member with false works). The chipping shall be done in regular shape, with sides parallel or normal to the direction of the reinforcement and minimum 50mm beyond the perimeter of the spall for single spall, the repair area should have a minimum width of 100 mm in direction. If a number of spalls are closely located to each other, these should be included in a single area marked for repair.

5.1.1 Exposing of rusted/corroded reinforcement:

Reinforcing bar must be further exposed if the remaining concrete is debonded from the reinforcing bar. Chipping around the reinforcing bar shall be continued to completely expose it, if more than half of reinforcing bar perimeter has been exposed. Concrete shall be removed from all around reinforcement including from behind the reinforcing bars to give an average 25 mm (but not less than 15 mm clear air gap) by using standard power driven percussion type or pneumatic chisel of standard make.

5.2 Adequate care is to be taken not to cut the reinforcement steel and a cover meter could be used to estimate the depth of cover, for which nothing extra shall be paid.

5.3 Chipping should be done up to the required depth as decided by the Engineer-in-Charge to reach sound concrete substrate to a near uniform depth for the repair areas.

5.4 Dimensions of area chipped off for RCC slabs, beams, columns etc. shall be measured in centimeters after the chipping / dismantling operation is completed. The area of the chipped / exposed RCC surface shall be measured in sq. m. correct to second place of decimal.

5.4 For the RCC members to be completely dismantled, pre-measurement of the dimensions of RCC member to be dismantled shall be recorded before taking up the dismantling operation and volume of concrete dismantled shall be worked out in cubic meters correct to second place of decimal.

5.6 Removal of concrete should begin at the interior of the repair areas and progress towards the boundaries. All edges and cavities shall be square shouldered.

6 CUTTING OF EXISTING REINFORCEMENT

6.1 The existing reinforcement bars to be cut shall be identified and approved for cutting by the Engineer-in-Charge.

6.2 The reinforcement shall be carefully cut with electrical cutter machine to minimize excessive vibrations or damaging the structure and the recovered reinforcement should be straightened, cleaned of concrete by wire brush scrapped and stacked properly with in a lead of 50 meters as directed by the Engineer-in-Charge.

7 CLEANING OF EXISTING REINFORCEMENT

7.1 Before re-casting / jacketing of members or repairs to members with polymer modified mortar, the reinforcement has to be cleaned properly, as specified.

7.2 At first rust shall be removed from the surface of the reinforcement manually using chisels, wire brush, emery paper etc. as directed by Engineer-in-Charge at no extra cost, till the steel surface is cleaned off loose rust.

7.3 Then sulphate and chloride free chemical rust remover, as approved by the Engineer-in-Charge shall be applied with paint brush over the reinforcement surface thoroughly along the full length of rusted reinforcement. After 24 hours of its application the surface shall be cleaned with wire brush to remove all loose particles.

7.4 Rates shall include cost of all materials, labour, T & P etc. involved in all the operations.

8 ADDITIONAL REINFORCEMENT BARS:-

For introducing additional reinforcement bars for new structural connections or supplementing additional steel area to the existing RCC member, the cross sectional area (diameter and no. of bars) and length required shall be approved by the Engineer-in-Charge. Also the depth of embedment of reinforcement bar shall be approved by the Engineer-in-Charge. The holes of specified diameter and depth have to be bored with diamond or hammer drill machine in RCC. Diameter of the hole shall be 4mm larger than dia of dowel bar. The bored hole in dry state, shall be cleaned with round brush and by blowing air through a tube inserted in the hole and connected to hand operated blower. Depth of holes shall be checked by the field staff by inserting rod marked with standard length.

Then, epoxy shall be injected from foil pack with help of epoxy dispenser and epoxy cartridge holder and disposable PVC mixing nozzle inserted inside the drilled hole to fill it from bottom/end of hole and slowly withdrawing the pipe while injecting epoxy till mouth of hole to ensure no air void is left inside the hole. Then dowel bar shall be inserted by pressing and turning till end of the hole is reached and shall be allowed to remain undisturbed for minimum 24 hours for epoxy to be air cured.

Rates shall include cost of all inputs of material, labour and T&P etc. involved in all the operational except the cost of reinforcement.

8.1 WELDING ADDITIONAL REINFORCEMENT:

In case cross sectional area of an individual bar of RCC slab has been reduced by 20% or more, then additional reinforcement shall be welded with existing bar to ensure continuity of the reinforcement of equal strength of original bar as illustrated in the sketch. If any existing reinforcement bar is found displaced/loosened, same hall be secured at its design location.

9 SHEAR KEYS :-

Shear keys shall also be provided in similar manner as illustrated in para 8.0 above. The shear key bars cut and bent to the required shape shall be embedded in parent concrete to a minimum depth of 50 mm or longer as specified in the item. Rates shall include cost of all materials, labour and T & P etc. involved in all the operations.

10 CLEANING OF EXPOSED RCC / CONCRETE SURFACE, INSERTING NIPPLES AND INJECTION GROUTING: -

10.1 The final chipped off concrete surface and exposed reinforcement, if any of the affected structural member should be cleaned off all loose and foreign materials by free air blast and then with water and allow it to dry.

10.2 For the honey combed portion of the concrete or cracked concrete, drill holes at least 18 mm in diameter and depth up to 60 mm or behalf the member thickness whichever is less, at the required spacing, as directed by the Engineer-in-Charge.

10.3 For cracked surface open up cracks by making V notch or groove of size 12mm x 12 mm as directed by the Engineer-in-Charge.

10.4 Remove coarse debris and dust in opened up cracks and drilled holes by blowing air with hand operated blow out pump. Concrete surface required to be grouted shall be free from all loose and unsound material. The prepared surface should be clear of dust which could obstruct tree flow or grout material and also impede its bonding with concrete surface. Saturate the concrete in vicinity of crack / honey combed concrete surfacewith water (but without excess water) only if the cementations / polymer admixed grout to be injected.

10.5 Insert 12 mm diameter specified injection nipples in holes drilled along cracked lines or in honey combed area of concrete and fix them by sealing on its sides with or polymer modified mortar, as directed by the Engineer-in-Charge.

10.6 Seal the crack or the honey combed surface between the nipples by means of epoxy mortar or polymer modified mortar, as approved by the Engineer-in-Charge. The polymer used shall be of approved grade and polymer modified mortar shall be applied as per specifications mentioned separately for polymer modified mortar. The polymer modified mortar shall be moist cured for 3 days and allowed to gain strength before actual grouting commences.

10.7 To inject grout in nipples, the cementious grout shall be prepared from cement (OPC- 43 grade), sand (sharp, washed well graded generally conforming to zone IV of IS: 383) and water conforming of IS: 456 mixed in specified proportions as directed by the Engineer-in-Charge.

10.8 The emulsified acrylic polymer shall be as specified and shall conform to manufacturer's specification. The physical and mechanical properties of polymers shall conform to manufacturer's specification. One test shall be carried out mandatorily for every lot of acrylic polymer supplied at site, before use in the work.

10.9 The grouting equipment shall be capable of supplying mixing, stirring and pumping grout to the satisfaction of Engineer-in-Charge. It shall have capacity to inject grout at a pressure up to 7 kg / sq. cm measured at grout connections. It shall be capable cement ratio ranging from 0.5 to 1.0.

10.10 Wherever epoxy is to be used the surface of the concrete shall be dried with air blast, before grouting or applying epoxy.

10.11 The cementious grout in proportion as directed by the Engineer-in-Charge shall be prepared. It should be lump free of creamy consistency, thoroughly blended and shall be continuously stirred to keep the cement particles in suspension to retain uniform consistency in grout is injected.

10.12. In case of vertical cracks the injection shall be started at the lowest nipple and continued until the injected grout begins to flow out at the next higher nipple. The first nipple shall then be closed and injection continued from second until grout flows out at the third and so on. The process shall be repeated until the whole surface is treated. As soon as the system is cured, the nipples shall be suitably cut.

10.13 In case of honey combed concrete, each grout hole shall be grouted individually. The sequence of injection shall be as per the directions of the Engineer –in-Charge.

10.14 The measurement of grout material shall be on the basis of only the weight of cement consumed in kg.

10.15 Pre measurements of the quantities of such grouting materials brought at site and balance quantities remaining at the end of grouting application shall be recorded separately which will determine the quantity of grout material actually injected. Adequate care is to be taken by the contractor as not to waste the grout. The quantity which can be consumed immediately within the prescribed time only shall be prepared in batches.

10.16 The quantity of grout material wasted, discarded, hardened shall not qualify for payment and shall be recorded for deduction at the end of each operation.

11 BOND COAT

11.1 Bond coat is required to be applied for adhesion of applied repair concrete or mortar to the parent concrete. For this, the surface should be thoroughly cleaned by brushes and by blowing air from hand operated pump. The surface shall then be saturated with water minimum 1 hour before application of bond coat and allow surface to attain saturated surface dry condition (SSD).

11.2 PREPARATION OF BOND COAT:

The components of bond coat shall be weigh batched and mixed in specific proportions as indicated in the item. Area of chipped concrete surface shall be assessed roughly. Accordingly required quantity of acrylic polymer for bond coat shall be taken in a plastic bucket/mini drum then proportional quantity of OPC cement by weight (as per manufacturer's specifications) shall be blended slowly under continuous stirring with low speed (500 – 800 rpm) electric stirrer for minimum 2 minutes till a homogenous and lump free slurry is formed. In no case bond coat slurry shall be prepared without electric stirrer at site.

11.3 The specified bond coat shall be applied by stiff nylon bristle brush. The bond coat shall be worked well onto the concrete surface of the parent concrete including reinforcement surface ensuring that no pinholes are left. The polymer modified bonding cement slurry shall be applied to a thickness not more than 2mm. Bond coat shall be allowed to reach tacky condition before applying polymer modified mortar or pouring concrete jacket. (Area of exposed RCC unit shall be measured in sqm correct to two decimal places for the purpose of payment).

11.4 Prefabricated shuttering shall then be erected immediately. Fresh concrete / mortar shall be placed / applied while the bond coat is still tacky and well within pot-life / setting period. If adhesive cures to the extent of loosing its tack or has set before concrete / mortar is placed / applied, the same shall be removed or slightly abraded and another coat of adhesive / bond coat shall have to be applied by the contractor at his own cost.

11.5 Freshly placed concrete shall be thoroughly consolidated to ensure full bonding of the fresh concrete with the parent concrete. If there is a failure of bond of fresh concrete/ plaster with parent concrete surface and it sounds hollow on tapping, the repair work shall be dismantled and redone by the contractor at his own cost and to the entire satisfaction of the Engineer-in-Charge. CPWD specifications for manufacture and placing and curing of concrete shall, in general, be followed unless specified otherwise.

12 ADDITIONAL REINFORCEMENT FOR GUNITING / JACKETING WORK :

12.1 The existing reinforcement bars in the R.C.C. member to be guinited shall be cleaned properly to remove all scales and rust by wire brushing and by rubbing with sand paper, sandblasting wherever possible etc. complete as directed by the Engineer-in-Charge.

12.2 The additional reinforcement shall be provided to hold gunited material/ concrete in position and shall be so fixed that it is creased in succeeding layer.

12.3 The additional reinforcement, if required, as per the directions of the Engineer-in-Charge, shall be placed in position including cutting, straightening, binding and fixing in position by fixing into the existing concrete by fastening to shear keys and should be secured rigidly so that it does not belly out or get displaced during guniting, jacketing work. The mesh reinforcement shall be fixed in a manner so that it is firmly held at least 12mm away from the parent concrete as well as final finished surface. Also clear spacing between the reinforcement bars shall not be less than 50mm.

12.4 Additional reinforcement if required shall be tied with required lap using G. I. binding wire or welded to the parent reinforcement and also to the shear keys is directed by the Engineer-in-Charge.

11.5 Additional vertical reinforcement shall be anchored to the base of the column by drilling hole of diameter 4 mm larger than the dia of reinforcement bar for a depth of 12 times the dia of the bar and secured it in the hole with epoxy as per standard procedure described in Para No. - 8

13 ANTI CORROSIVE TREATMENT:

After cleaning off rust from reinforcement bar, coat of passivating slurry shall be applied on surface of reinforcement bar. Length of reinforcement bar to be treated with passivating coat shall be assessed roughly in advance. Accordingly required quantity of anticorrosive polymer shall be taken in a plastic bucket/mini drum and specified proportion of OPC cement by weight (as per manufacturer's specifications) shall be blended slowly under continuous stirring with electric stirrer for minimum 2 minutes till a homogenous and lump free slurry of creamy thick consistency is formed. One /Two coats of passivating slurry (as per manufacturer specifications) shall be applied on reinforcing bar by stiff nylon bristle brush ensuring no pinholes are left. In case application of two coats, the second coat shall be applied minimum six hours after application of 1st coat, The passivating coat shall be allowed to set for minimum 24 hours before operating next item. In no case passivating slurry shall be prepared without electric stirrer.

14 JACKETING BY CEMENT CONCRETE

14.1 All care for casting, curing etc. shall be taken as per CPWD specifications (Ingredients of concrete have to be tested before use. Requisite number of test specimens shall be casted and tested).

14.2 Concrete for jacketing shall be prepared strictly in drum mixture machine (electric/diesel operated) 80% of gauging water for particular batch shall be poured in the mixer drum. Measured quantity of super plasticizer shall be mixed with remaining 10% part of gauging water and then it shall be added to the pre-wetted concrete mixed.Then dry aggregate and cement in specified proportion in sequence shall be added in the mixer drum as per CPWD specifications. Balance water should be added in such a manner to produce homogenous high slum flowing yet very cohesive concrete without bleeding and segregation.

Before pouring concrete in the shuttering mould other repair items i.e. rust removal from reinforcement, anti corrosive treatment, providing additional reinforcement and shear key etc. shall be completed in advance. Only bond coat shall be applied five minutes before pouring concrete. Concrete shall be poured in the shuttering mould when bond coat reach tacky condition. There shall be no gap between shuttering and existing concrete surface. Thermocol sheet may be used to plug small irregular gaps.

14.3 While doing jacketing with cement concrete it should be ensured that dropping height of cement concrete should not be more than 60 cm.

14.4 Testing: One mandatory test for every 2.5 cum of concrete or part thereof shall be conducted. The test result should conform to the following strength parameter.

i) Minimum compressive strength : 40 N/mm2 in 28 days

ii) Minimum flexural strength : 4.42 N/mm2 in 28 days

15 Particular Specification for Premixed readymixed cement mortar

Premixed readymixed cement mortar as per list of approved make is to be used in place of traditional cement-sand mortar for plastering as per following procedure:

a) Surface Preparation: The surface needs to be cleaned and made free from grease,dustand loose particles to ensure proper binding. The surface need to be pre-wetted with clean water before plastering.

b) Process of mixing:

i. Required quantity of dry mix shall be taken in a mortar mixing tray.

ii. Measured quantity of potable water shall be added to dry mix as per manufacturer's specification. Correct ratio of water and dry mix is essential for better result.

iii. The mortar shall be mixed well for 5 to 10 minutes to achieve homogenous and cohesive mix. (Use of mechanical mixer / electrical stirrer is recommended for better results)

iv. The prepared mix shall remain undisturbed for 5 minutes to dissolve polymer additive in mortar and shall be mixed once again without adding any water just before use.

c) Method of Application

i. Pre wetting of surface is required before applying plaster.

ii. The mixture should be applied within one hour of preparation of mix. This will ensure that the thin layer can be applied without cracking problems and proper cement hydration.

iii. If the concrete surface is smooth and dense, it is recommended to apply a bond coat of acrylic polymer of any approved make.

iv. Readymade mortar shall be applied manually using trowel and care should be taken that it does not expose to direct sunlight, wind and rain during its application.

d) Curing - Curing shall be started after 24 hours of plastering in normal weather condition. After the plaster is completely dried, curing shall be done 2 to 3 times for 2 to 3 days. In abnormally dry weather conditions, curing for 5-7 days is required.

16 Particular specification for water proofing treatment in sunken portion of WC and Bathroom etc.

These conditions are applicable in addition to the conditions given in the CPWD specification for the item.

Preparation of substrate – Spall concrete portion, voids, weak pocket of the sunken slab shall be repaired with polymer modified mortar to a depth of minimum 10 mm followed by curing. Peripherial area of pipe through the brick /RCC wall shall be sealed with cement mortar admixed with water proofing compound.

a) The water proofing chemical shall be weighed and mixed in a specific proportion as per manufacturer's specification.

b) Only required quantity of water proofing chemical shall be taken in a container. Slurry shall be prepared by slowly adding OPC cement to liquid Water Proofing chemical under continuous stirring with a helical paddle attached to a low speed (500-800 rpm) mixer for 3 minutes till lump free smooth homogeneous slurry is formed.The slurry shall be stirred at the interval of 10 minutes to prevent settlement of cement during execution. Slurry shall be applied with paint brush on the concrete surface.

c) After application of first coat the second cost must be applied in the perpendicular direction of the first coat.

c) The freshly treated surface shall be cured with damp hessian cloth.

SPECIAL CONDITIONS

1.0 The contractor will have to work according to the programme of work, decided by the Engineer-in-charge for which purpose the contractor should submit a tentative program of the work within one month from the date of start of the work. The contractor shall also construct a sample unit, complete in all respects within time specified by the Engineer-in-charge and this sample unit shall be got approved from the Engineer-in-charge before mass construction is taken up. No extra claim whatsoever beyond the payment due at agreement rates will be entertained from the Contractor on this account.

2.0 The contractor shall take instructions from the Engineer in charge for stacking of materials in any place. No excavated earth or building material shall be stacked on are as where other buildings, roads, services or compound walls are to be constructed.

3.0 The work shall be carried out in accordance with the Architectural drawings and structural drawings. The structural and architectural drawings shall have to be properly correlated before executing the work. In case of any difference noticed between architectural and structural drawings, final decision, in writing, of the Engineer-in-charge shall be obtained by the contractor. In case of any discrepancy in the item given in the schedule of quantities appended with the tender and architectural drawings related to the relevant items, the former shall prevail unless and otherwise given in writing by the Engineer in charge. Samples shall be prepared before starting particular items of work for prior approval of the Engineer in charge and nothing extra shall be payable on this account.

4.0 All the material to be used on works shall bear ISI certification mark unless otherwise the make is specified in the item or special conditions appended with this tender document. In case ISI mark materials or the materials mentioned in the tender documents are not available, as per opinion of Engineer-in-charge, which shall be final and binding, the material to be used shall conform to CPWD specifications applicable in this tender or IS Code. In such cases Engineer-in-charge shall satisfy himself about the quality of such materials and give his approval in writing. Only articles classified as first quality by the manufacturers shall be used unless otherwise specified. All material not having ISI mark shall be tested as per relevant ISI specification. The Engineer in charge may relax the condition regarding testing if the quantity of the materials required for the work is small. In all cases of use of ISI marked materials proper proof of procurement of materials from authentic manufacturers shall be provided by the contractor to the entire satisfaction of Engineer in charge.

5.0 All materials equivalent to the one specified should be got approved by the Engineer- in- Charge before using the said materials in the work.

6.0 The contractor shall comply with the provision of any Government acts which relateto the work and to the regulations and laws of any local authorities. The contractor shall give all notices required by the said acts, laws etc. and pay all fees payable to such authorities and allow for those contingencies, cost of restorations etc. and all other fees payable to the local authorities.

7.0 The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by the rules and regulations and pay all fees and charges which he may be liable.

8.0 The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.

9.0 BRIEF WORDING OF ITEMS:

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

A) P/L for: Providing and Laying

B) P/F for: Providing and Fixing.

C) C.C. for: Cement Concrete.

D) C.M. for: Cement Mortar.

9.2 In case of extra/substituted items of work for which brief wording is not provided in the agreement, the full nomenclature of the item shall be reproduced in the measurement books and bill forms of running bills.

9.3 The full nomenclature of the items shall be adopted in preparing abstract of final bill in the measurement books and also in the forms for final bills.

10.0. CONDITIONS FOR CEMENT:-

10.1 The contractor shall procure Ordinary Portland Cement (OPC) [conforming to IS: 8112] /Portland Pozzolana Cement (PPC) [conforming to IS: 1489 (Part-I)], as required in the work, from reputed manufacturers of grey cement as mentioned in List of Approved Make or from any other reputed cement Manufacturer. Chief Engineer / CPM / ADG / SDG may change the brand of cement depending upon availability in local market but confirming to grade mentioned in NIT and only with the ISI mark, if warranted. The name of the manufacturers should be finalized after taking into consideration the availability and cost factor.

10.2 Supply of cement shall be taken in 50 Kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.

10.3 Use of PPC (Portland Pozzolana Cement) shall be used in RCC structures in accordance with the circular issued by the Directorate General of Works vide No.CDO/SE(RR)/Fly Ash (Main)/102 dt.09.04.2009. The use of PPC shall be regulated as per the conditions stipulated in the circular dt.09.04.2009.

10.4 The mechanical properties such as modulus of elasticity, tensile strength, creep and shrinkage of flyash mixed concrete or concrete using flyash blended cements (PPCs) are not likely to be significantly different and their values are to be taken same as those used for concrete made with OPC.

10.5 To control higher rate of carbonation in early ages of concrete both in flyash admixed as well as PPC based concrete, water/binder ratio shall be kept as low as possible, which shall be closely monitored during concrete manufacture.

10.6. If necessitated due to low water/binder ratio, required workability shall be achieved by use of chloride free chemical admixtures conforming to IS:9103. The compatibility of chemical admixtures and super plasticizers with each set OPC, fly ash and /or PPC received from different sources shall be ensured by trails.

10.7 In environment subjected to aggressive chloride or sulphate attack in particular, use of flyash admixed or PPC based concrete is recommended. In case, where structural concrete is exposed to excessive magnesium Sulphate, flyash substitution /content shall be limited to 18% by weight. Special type of cement with low C3A content may also be alternatively used. Durability criteria like minimum binder content and maximum water/binder ratio also need to be given due consideration is such environment.

10.8 Wet curing period shall be enhanced to a minimum of 10 days or its equivalent. In hot & arid regions, the minimum curing period shall be 14 days or its equivalent.

10.9 Subject to General Guidelines detailed out as above, PPC manufactured conforming to IS: 1489 (Part-I) shall be treated at par with OPC for manufacture of Design Mix Concrete for structural use in RCC.

10.10 Till the time, BIS makes it mandatory to print the %age of flyash on each bag of cement, the certificate from the PPC manufacturer indicating the same shall be insisted upon before allowing use of such cements in works.

11.11 While using PPC for structural concrete work, no further admixing of flyash shall be permitted.

11.12 The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-in-charge.The cement godown of the capacity to store a minimum of 2000 bags of cement or as decided by the NIT approving authority, in case less than100MT cement is required for the work, shall be constructed by the contractor at the site of work for which no extra payment shall be made. For small maintenance works, NIT approving authority shall decide the requirement of the storage / godown.

11.13 The contractor shall be responsible for the watch and ward and safety of the cement godown.The contractor shall facilitate the inspection of the cement godown by the Engineer-in-charge at any time.

11.14 The cement shall be got tested by Engineer-in-charge and shall be used on work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laboratories. The cost of

tests shall be borne by the contractor / Department in the manner indicated below; (a) By the contractor, if the results show that the cement does not confirm to relevant BIS codes. (b) By the department, if the results show that the cement confirms to relevant BIS Codes.

11.15 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditions therein. In case Cement consumption is less than theoretical consumption including permissible variation, work is to be rejected & in case of excess consumption, no adjustment need to be made.

11.16 Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-charge.

11.17 Damaged cement shall be removed from site immediately by the contractor on receipt of notice in writing from the Engineer-in-charge. If he does not do so within three days of receipt of such notice, the Engineer-in-charge shall get it removed at the cost of the contractor.

11.18 Cement should be kept in godowns under double locks and keys and its consumption account invariably maintained, whether the cement is supplied departmentally or arranged by the contractor. A register should be maintained at the site of each work costing above Rs.20,000.00. This register should contain the columns as shown in Appendix-30. (CPWD Works Manual 2019, SOP No. 3/14).

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

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

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

12.0 CONDITIONS FOR STEEL

I) Only ISI marked TMT Bars of various grades shall be procured from Steel manufacturer as per the following guidelines:

The Special Director General (Project Region / Region) / ADG (Project Region / Region) of respective region shall approve the steel manufacturers subject to the guidelines for eligibility criteria and other technical parameters given below.

II) Credentials for eligibility criteria & other technical parameters for steel manufacturers:

a) The manufacturer should meet the following eligibility criteria:

The Steel manufacturer should have following documentary evidence:

i) Certificate of incorporation

ii) Memorandum of articles of Association

iii) Credit rating of the company from CARE/CRISIL/ICRA (the grading should not be C/D grade for minimum last 3 years)

The Steel manufacturer must have following licenses and certificates:

i) ISI certificate for billets (IS 2830:2012)

ii) ISI certificate for TMT Bars IS 1786:2008 (Amendment-1 November 2012)

The Steel manufacturer should also preferably have the following licenses:

i) ISO 9001:2015

ii) ISO 14001:2015

iii) OHSAS 18001:2007

The steel manufacturer should be using iron ore as the basic raw material. The entire gamut of iron and steel production is owned by the same company or its subsidiary company (ies) and the iron making capacity is sufficiently matching the steel making capacity, adopting any of the refining technologies for manufacturing steel & TMT Bars as given under are eligible:

i) BF-BOF route ii) COREX-BOF Route iii) DRI-EAF Route (Each Electric Arc Furnace should be 100 MT or more)

Billets produced must be ISI marked (IS 2830:2012)

Steel produced must be ISI marked (IS 2830:2012)

The steel manufacturer should have the following in house testing facilities (NABL Accredited):

i) Computerized Universal Testing Machine.

ii) Spectrometer

iii) Bend Re-bend facility as per IS: 1786:2008 (Amendmnt-1November 2012)

iv) Raw material laboratory: Arrangement for testing Carbon, Sulphur & Phosphorous etc.

v) Other testing facilities as specified in IS: 1786:2008 & IS: 2830:2012

SDGs / ADGs are also authorized to approve particular steel manufacturer on suo motto in case they are satisfied with the eligibility criteria and other technical parameters of that manufacturer.

(III) The steel reinforcement bars shall be brought at site in bulk supply of 10 MT or more or as decided by the Engineer in charge. The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent distortion & corrosion & nothing extra shall be paid on his account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting & checking.

(IV) The contractor shall procure & use corrosion protected Epoxy Coated steel reinforcement bars only if mentioned in agreement item. Epoxy coating steel bars shall confirm to ASTM-A 775 M / 77M-93 which sets allowable limit as follows:

i) Coating thickness should be in the range of 130 – 300 micron.

ii) Bending of coated bar around a standard mandrel should not lead to formation of crack in epoxy coating.

iii) No. of pinholes defects should not be more than 6 per meter.

iv) Damaged area on the bar should not exceed more than 2%.

Exopy coated reinforcement bar shall reduce the bonding between concrete & steel. To get proper bonding between concrete & steel, development length of steel bar should increased by 20% to 50% as per ACI code (ACI Committee 318 1988).

(V) 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. Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time of written orders from the Engineer-in-Charge to do so.

(VI) 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 at frequency not less than that specified below:

SIZE OF BAR	FOR CONSIGNMENT BELOW 100 MT	FOR CONSIGNMENT ABOVE 100 MT
Under 10 mm dia, bar	One sample for each 25 MT or part there of	One sample for each 40 MT or part there of
10 mm to 16 mm dia. Bar	One sample for each 35 MT or part there of	One sample for each 45 MT or part there of
Over 16 mm dia. Bar	One sample for each 45 MT or part there of	One sample for each 50 MT or part there of

(VII) 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.

(VIII) The actual issue and consumption of steel on work shall be regulated and properaccounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditionslaid therein. In case the consumption is less than theoretical consumption including permissible variations, recovery at the rate soprescribed shall be made. In case of excess consumption no adjustment need to be made.

(IX) The Steel brought to site and remaining unused shall not be removed fromsite without the written permission of Engineer-in-Charge.

The following procedure should be followed in case of removal of rejected/sub-standard materials from the site of work.

Whenever any material brought by the contractor to the site of work is rejected, entry thereof should invariably be made in the site order book under the signature of the AE/AEE giving approximate quantity of such materials.

As soon as the material is removed, a certificate to that effect may be recorded by the AE/AEE against the original entry, giving the date of removal a mode of removal i.e. whether by truck, carts or by manual labour. If removal is by truck, the registration number of the truck should be recorded.

When it is not possible for the AE/AEE to be present at the site of work at the timeof actual removal of the rejected/sub-standard materials from the site the required certificate should be recorded by the Junior Engineer and the AE/AEE should countersign the certificate recorded by the Junior Engineer.

13.0 Water proofing treatment

13.1 Work shall be executed as per CPWD Specifications, 2019 Vol I & II with upto date correction slips.

13.2 The contractor shall associate himself with the specialized firm, to be approved by the Chief Engineer Mumbai – I, CPWD, Mumbai.

13.3. **GUARANTEE FOR WATER PROOFING TREATMENT**

10(Ten) years guarantee in prescribed proforma attached must be given by the contractor for the water proofing treatment. In addition 10% (ten percent) of the cost of these items would be retained as guarantee to watch the performance of the work executed. However, half of this amount (withheld) would be released after two monsoon seasons after the date of completion of the work, if the performance, of the waterproofing work, is satisfactory. The remaining withheld amount can be released after completion of five monsoon seasons after the date of completion of work, if the performance of the waterproofing work is satisfactory. If any defect is noticed during the guarantee period, it should be rectified by the contractor within seven days and, if not attended to, the same shall be got done by other agency at the risk and cost of the contractor. In any case the guaranteeing firms during the guarantee period should inspect and examine the treatment once in every year and make good any defect observed. However, the security deposit can be released in full, if bank guarantee of equivalent amount for 3(Three) years is produced and deposited with the department.

14.0 VARIATION IN CONSUMPTION OF MATERIALS

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

i. The pig lead for caulking of joints of SCI pipes shall be issued as per theoretical consumption for SCI pipes of size 100mm, 75mm, 50mm at 0.98 kg., 0.88 kg, 0.77 kg per joint respectively.

ii. Over and above the theoretical quantities of lead as worked out a variation of 5% shall be allowed for wastage etc. Any difference between the actual consumption of pig lead and theoretical consumption worked out on the above basis including the authorised variation shall be recovered at the rate mentioned under schedule "F". Where the pig lead is arranged by the contractor, variation of 5% will be allowed. In case variation is on the higher side 5% will be allowed. In case the variation is on the lower side, the quantity of the pig lead less used shall be recovered from the contractor at market rate to be determined by the Engineer-in-charge whose decision in the matter will be final and binding.

15.0 Materials obtained from dismantle:

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

16.0 Materials brought by the contractor.

16.1 The contractors shall have to deposit the approved paints of required color and shade as per actual requirements of the work to be done, with the Engineer-in- Charge at his departmental stores at the site of work.

The paint will be issued to the contractor from time to time according to his requirements for the work in the same manner as the issue of materials stipulated to be issued departmentally.

Similar procedure shall be followed for water proofing compound.

The day-to-day receipt and issue quantity account of water proofing compound, paints etc. shall be maintained by the Junior Engineer and signed daily by the contractor or his authorised agent.

Empty containers should not be removed without the written permission of the Engineer-in-charge.

SPECIAL CONDITIONS FOR (REPAIR WORK)

SCAFFOLDING SYSTEM:

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

2.0 FALSE WORK:

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

False work shall be strong enough to withstand all the dead and live loads and forces / impacts caused by dismantling, chipping, ramming, vibration of concrete and other incidental loads imposed over it including that of working platform, workers and personnel etc. during and after repair work. It shall be made sufficiently rigid by using adequate ties and braces etc. De-shuttering and removal of false work should be done after the lapse of specified time and re-propping done, if required, after de - shuttering, as approved by the Engineer-in-Charge.

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

(a) The columns to be repaired shall be supported for full height of the building, to relieve its axial load through its adjoining intersecting beams and / or slabs etc. all floor levels. This shall be done even if only one storey length out of many stories lengths of the same column has been identified for structural repairs. The loads relieved are required to be transferred directly through props and supports on to the building foundation system or to the firm ground. Under no circumstances, the column load above this storey should be transferred by transfer through adjoining upper or lower intersecting beams alone.

(b) The beams to be repaired shall be relieved of stresses and strains by suitably supporting the RCC slabs, which are contributing load to that beam. To avoid over stressing of any existing flexural members receiving the transferred load of the distressed beam, the steel props and supports shall be taken and continued to the firm ground. For upper stories the steel props shall be taken at least two stories below or as directed by the Engineer-in-Charge.

(c) The RCC slabs to be repaired shall be relieved from stresses by prop and support and simultaneously care to be taken to avoid its collapse during the repair process. However, supports should preferably be, not farther than 1.2 m x 1.2m. To avoid over stressing of existing flexural members receiving load of the distressed RCC slab, the steel props and supports provided shall be taken and continued to the firm ground or at least two slabs below or as directed by the Engineer-in-Charge.

3.0 All warning boards and displays, such as REPAIR WORK IN PROGRESS, KEEP AWAY FROM BUILDING, NO PARKING etc. along with sufficient supervisory staff on ground shall be provided by the contractor, wherever required. Nothing extra shall be payable on this account.

4.0 Since the work is to be carried out in the occupied buildings, proper sequencing as regards dismantling of sanitary pipes, GI pipes, toilets etc. shall be done so as to cause minimum in-convenience to the occupants besides taking care of the constraint of keeping the system functional during repairs by making temporary arrangements, as required. Nothing extra shall be payable on this account.

5.0 The area of dismantling / guiniting / re-plastering / repairing as per relevant items etc. given in the tender may have to be got done in patches, at different heights / levels also for which nothing extra shall be payable.

6.0 Lifting of materials such as cement, sand, wooden planks etc. through the building lifts is prohibited. No mixing or off loading etc. of mortar / cement concrete etc. over the open terrace / flooring shall be permitted. Arrangements as deemed it shall be made by the contractor for mixing/ lifting/off loading all materials etc. at no extra cost.

7.0 PRODUCT DELIVERY STORAGE AND HANDLING :-

7.1 The contractor shall construct storage space for chemicals and other materials to ensure that the storage conditions are as recommended by the manufactures.

7.2 All the materials shall be procured and delivered in sealed containers with labels equable and intact.

7.3 All the chemicals (polymers, rusticides, epoxy water proofing compound etc) shall be procured in convenient packs, say 20 litres (Kgs.) capacity packing only or as approved by the Engineer-in-Charge and not in bigger capacity containers, say 200 liter (Kgs.) drums.

7.4 All required material shall be got approved, procured and deposited with the departmental supervisory staff. The material will kept in joint custody of the contractor and the department. The watch and ward of such material shall however, remain to be the responsibility of the contractor and no claim, whatsoever, on this account shall be entertained. Different containers of each chemical shall be serially numbered on packing and also consumed in that order. Day to day account of receipt, issue and balance will be regulated by the department and proper account shall be maintained at site of work in the prescribed from as per standard practice.

7.5 All the chemicals shall be procured by the contractor directly from the manufacturer or their authorized dealers and copies of challans / cash memos towards the quantity of various chemicals procured shall be made available by the contractor to the department and the same shall be kept in record. The name of manufacturers, manufacturer's product identification, manufacturer's mixing instructions, warning for handling and toxicity and date of manufacturing and shelf life shall be clearly and legibly mentioned on the labels of the each container.

7.6 The contractor shall submit for the chemicals procured, manufacturer's and /or authorized dealer's certificate regarding supplying and verifying conformance to the material specification, as specified.

7.7 All filled containers shall be handled in safe manner and in a way to avoid breaking container seals.

7.8 Empty containers of the chemicals should not be removed from site till the completion of work and shall be removed only with the written approval of the Engineer-in-Charge.

7.9 All arrangement for measuring, dosing and mixing of material / chemicals at site has to be made by the contractor. Nothing extra shall be payable on this account.

7.10 Contractor shall suitably advise his site Engineer and all the workers as regard safe handling of chemicals. Necessary protective and safety equipments in form of hand gloves, goggles etc. shall be provided by the contractor at no extra cost and also used at site.

7.11 All incidental charges of any kind including cartage, storage and wastage and safe custody of material etc. shall be borne by the contractor and no claim, whatsoever, shall entertained on this account.

LIST OF SPECIALISED ITEMS:

Water proofing treatment work.

Stainless steel railing

Plumbing work.

Any other item decided by Engineer-in-charge

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 SOP No. 4/7 of CPWD Works Manual-2019 as early as possible and within one month of award of work to Engineer-in-Charge for approval of competent authority.

Specialized Agencies for works shall be approved by the competent authority. The contractor shall quote the rates after careful study of contract conditions, specifications, drawings & schedule of quantities.

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.

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.

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

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

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

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

Provided that the guaranter will not be responsible for leakage caused by earthquakes or structural defects or misuse of roof or alterations and for such purpose :

a) misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof,

b) alteration shall mean construction of an additional storey or a part or construction adjoining to existing roof, where by water-proofing treatment is removed in parts :

c) the decision of the Engineer-in-Charge with regard to cause of leakage shall be final.

During this period of guarantee the guaranter shall make good all defects and in case of any defects being found, render the building water proof to the satisfaction of Engineer-in-Charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-Charge calling upon him to rectify the defects, failing which the work shall be got done by the Department by some other contractor at the GUARANTER'S cost and risk. The decision of the Engineer-in-Charge as to the cost, payable by the Guaranter shall be final and binding.

That if Guaranter 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 GUARANTER in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and/or cost incurred by the Government, the decision of the Engineer-in-Charge will be final and binding of the parties.

An amount equivalent to 10 % of waterproofing items will be deducted as from Bills as security and the same will be refunded after five years from the date of completion of work.

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

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

_____

_____

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

_____

_____

GUARANTEE TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OF DEFECTS AFTER COMPLETION for ~~(Finishing walls with Single component white emulsion basecoat for exterior coating comprising of high quality emulsion polymer of Dr. Fixit Raincoat or equivalent)~~

The agreement made this …*..day of …*…Two thousand Fifteen and ……*…….between (hereinafter called the GUARANTOR of the one part) and the PRESIDENT OF INDIA (hereinafter called the GOVERNEMNT of the other part).

WHEREAS THIS agreement is supplementary to contract (herein after called the contract) dated ……and made between the GUARANTOR OF THE ONE PART and the GOVERNMENT OF THE OTHER PART, whereby the contractor interalia, undertook to render the work in the said contract aesthetically durable as well as of sound material and workmanship.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain aesthetically durable and guaranteed against faulty material and workmanship and finishing for five years from the date of completion of work. NOW THE GUARANTOR hereby guarantees that work executed by him will remain aesthetically durable and guaranteed against faulty material and workmanship for a minimum life of five years to be reckoned from the date of completion of work.

The decision of the Engineer-in-Charge with regard to the cause of defect as well as its magnitude shall be final. During this period of guarantee the guarantor shall make good all defects to the satisfaction of the Engineer-in-Charge at his cost and commence the work for such rectification within seven days from the date of issue of notice from the Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the GUARANTOR's cost and risk. The decision of the Engineer-in-Charge as to the cost, payable by the GUARANTOR shall be final and binding.

That if the GUARANTOR fails to make good all the defects OR commits breach there under then the GUARANTOR will indemnify the principal and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and / or cost incurred by the GOVERNAMENT 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 OBLIGATOR THE DAY, MONTH, AND YEAR FIRST ABOVE WRITTEN.

Signed, sealed and delivered by OBLIGATOR in presence of:

1.

2.

Signed for and on behalf of THE PRESIDENT OF INDIA BY ----------in the presence of:

1.

2.

GUARANTEE FOR ~~**Finishing walls with Single component white emulsion basecoat for exterior coating comprising of high quality emulsion polymer of Dr. Fixit Raincoat or equivalent**~~

The work of painting to both external and internal shall stand a guarantee for a minimum period of 5 (five) years as per enclosed guarantee bond against durability color and shade as decided by the Engineer in Charge. Elastomeric painting on external surface shall be water/damp proof and shall stand guarantee for a period of 5(five) years as per the enclosed guarantee bond. On notification of any such defect by the Engineer in Charge the Contractor shall immediately supply necessary materials / labour etc. and rectify all the defects notified by the Engineer in Charge to perform this guarantee at no additional cost and ensure that the defects are fully rectified. **5 (five) percent of the amount of concerned / related items of work (I.No …)**shall be with held on this account, which shall be refunded on expiry of the guarantee period if no defects are observed in the said period or if the defects have been rectified in pursuant to the agreement to the entire satisfaction of Engineer in Charge.

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

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

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

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

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

Provided that the guarantor will not be responsible for damage caused due to earthquake or misuse of buildings or alteration and for such purpose. The decision of the Engineer-in-Charge with regard to cause of damage shall be final and binding.
During this period of guarantee the guarantor shall make good all defects to the satisfaction of the Engineer-in-Charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the GUARANTOR's cost and risk. The decision of the Engineer-in-Charge as to the cost, payable by the GUARANTOR shall be final and binding.

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

An amount equivalent to 2 % of **item No. … & item No. …….** will be deducted as from Bills as security and the samewill be refunded after five years from the date of completion of work.

IN WITNESS WHEREOF THESE PRESENTS HAVE BEEN EXECUTED BY THE OBLIGATOR THE DAY, MONTH, AND YEAR FIRST ABOVE WRITTEN.

Signed, sealed and delivered by OBLIGATOR in presence of:

1.

2.

Signed for and on behalf of THE PRESIDENT OF INDIA BY ----------in the presence of:

1.

2.

PREFERRED MAKE LIST (CIVIL)

Note:

1. The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material or engaging any of the specialized agencies. The Contractor shall make a detailed submittal with catalogues and highlighted proposed specifications, as well as full details of the works proposed to be executed by the specialized agency, as specified.

2. Wherever applicable, the Engineer-in-charge may approve any material equivalent to that specified in the tender subject to proof being offered by the Contractor for equivalence to his satisfaction.

3. Unless otherwise specified, the brand / make of the material as specified in the particular specifications and in the list of approved materials attached in the tender, shall only be used in the work.

1	AAC Blocks	Birla Aerocon, Ultratech, Siporex, Ecolite, Go Green
2	Acoustic Insulation	U P Twiga, Lloyd Insulation, Saint Gobain, Knauf, Anutone
3	Adhesive For AAC Block	Ultratech, Ardex Ferrous Endura, Sika, Pidilite.
4	Adhesive For Tiles (Is: 15477 : 2004)	Sika, Pidilite, Cico, Fosrock, Homesure, Alccotech
5	Adhesive For Glass, metal and ceramics bonding	Sika, Pidilite, Astral (Bondtite) , Cico, Fosrock
6	Anchor / Ss Stone Cladding Clamps / Dash Fasteners	Hilti, Fischer, Anchor, Cannon. Bosch
7	Aluminum Door / Window Fittings	Classic, Define, Bhoruka, Jyothi, Sigma, Ebco.
8	Aluminium Composite Panel	Aludecor, Eurobond, Alstrong, Alucobond, Alstone
9	Aluminium Extrusion Sections	Jindal, Hindalco, Indal (Use Of Domal/Superior/Heavier Sections Only. Engineer-In-Charge May Relax This Condition As Per Work Requirement).
10	All Types Of Silicone	Dow Corning, Basf, GE, Wacker, Astral(Resibond]
11	Anodizing	Lakshmi Anodisers, Aura Architectural Coatings, Alufin, Bhoruka
12	Automatic Sliding Door Operating System	Dorma, Ozone, Cosyst Devices or Equivalent
13	Backer Rod	Supreme Industries, Norton, Bow, Aastha
14	Bamboo Wood Flooring	EPITOME, ESES Bio Wealth Pvt Ltd.
15	Carpet Tiles & Rolls	Welspun Group, Roya, SMJ, Shaw
16	Calcium Silicate False Ceiling Tiles	Hilux, Aerolite, Diomond, Anutone, Armstrong, Saint Gobain Gyproc, Hunter Douglas
17	Centifugally Cast (Spun) Iron Pipes And Fittings [IS:3989:2009]	Neco, SKF, Kapilansh, Rpmf
18	Centifugally Cast Iron Hubless Pipes Pipes And Fittings [IS:15905:2011]	Neco, SKF, Kapilansh, Rpmf
19	Centifugally Cast Iron socket and spigot spun pressure pipes and Fittings [IS:1536:2023]	Neco, SKF, KDUPl, Rpmf

20	Cast Iron & Ductile Iron Manhole Covers, Frames & Gratings [IS:1726:1991& BS EN 124]	Neco, SKF, Kapilansh, Rpmf
21	Cement	ACC, Ultra Tech, J. P. Cement, Vikram, Shree Cement, Birla Shakati, Dalmia Cement, Cement Corporation of India
22	Cement Primer	Nerolac, Berger, BP White Of Berger, Decoprime Wt Of Asian Paints, White Primer Of Ici Dulux
23	Ceramic Tiles, Pressed Ceramic Tiles (IS: 15622:2017)	RAK, Kajaria, H & R Johnson, Somany, Nitco, Orient Bell, Vitero
24	Concrete Blocks (Is: 2572 : 2005)	Conwood, Gurjari, Hindustan, Lok Group, Sai Block, Ved Pmc Ltd
25	Composite / Italian Marble	Nitco, Classic Marble, Euro, Asian
26	Sand Stone, Lime Stone , Granite [IS: 3622:1977, IS 3204: 1978 and IS 14223: 2023	Classic Marble, Euro, Asian, Stone Shippers
27	CPVC Pipes & Fittings	Astral, Birla Hil, Supreme, Finolex, Prince, AKG, Sudhakar, Jain Plumbing, Kisan,Vigor
28	CP Brass Water Supply Faucets (Fittings) Superior Range	Jaquar, Kohler, Roca, Marc, Grohe
29	CP Brass Water Supply Faucets (Fittings) Normal Range	Hindware, Jaquar, Parryware Prima(ISI Marked), Cera, Ess-Ess, Marc, Kohler, Roca
30	Copper alloy single taps, Combination tap assemblies. Stop valves and single lever mixers for water services [Varieties Covered: Copper alloy fancy single tap-Bib Cock, Pillar Cock, Single Stop valve, Concealed stop valve, all of size 15 mm), -IS 8931:2021	Jaquar, Ess-Ess, Marc, Astral, Coronet, Topsan, (ISI mark only)
31	Crystalline Water Proofing Compound (Is : 2645 : 2003)	Fosroc Crystalline, Dr. Fixit Crystalline, Sika Crystalline, Asian Paints Crystalline Quart, BASF, Cico, Ardex Endura
32	D I Pipes & Fittings	Electrosteel, Jindal, Tata Ductura, Sripipes (Lenco)
33	Door Stopper / Indicator Bolt / Push Plate	Dorma, KICH, Hafele, Magnum
34	Epdm Gaskets	Amee Rubber Industries Pvt. Ltd. , Bohra Rubber, Anand Nvh, Roop Polymer, Osaka.
35	Epoxy Flooring	Asian Paints, Fosroc, Bostik, Ardex, Pidilite
36	False Ceilings & Sections	Aerolite, Anutone, Knauf, USG Boral, Hunter Douglas, Saint Gobain, Diamond
37	Fire Retardant Paint	Jotun, Promat, Dulux, Akzonobel, Asian Paints
38	Fire Smoke Seal	Hilti, Promate Fire, Atroflame, Raven
39	Fire Rated Hardware	Dorma, Ingersolrand, Dorset, Backers Fs, Geze, Bhawani Fire, ASES
40	Fire Rated Glass	Saintgobain, Promate Fire, Schott, Pilkinton, Bhawani Fire

41	Flush Door Shutters (Wooden) (IS : 2202 : 1983)	Jain Doors, Kenwood, Anchor, Kutty, Greenply, National, Jayna, Samrat, Mayurply, Duroply, Century, Kalpataru, Ramaply, Airolam, REDMOND, Vibrant Door Craft , Archidply (Note: Only Isi Marked Flush Doors Shutters To Be Used)
42	Float Glass Mirror	Modiguard, Saint Gobain, Asahi, Sisecam (old brand - Hng)
43	Float Glass [IS 14900:2018]	Saint Gobain, Asahi Glass, Emirates Glass, Guardian Glass, Sisecam (old brand -Hng) , Pilkinton Glass
44	FRD Frame& Shutters	Kenwood, Anchor, Kutty, Bhawani Fire.
45	Furniture (Readymade)	Godrej, Durian, Nilkamal, Featherlite, Adarsh
46	Fire doors and Assembly [Varieties of doors: Fire Rated Metal , Fire rated Hinged Wooden doors and Glazed door [IS : 3614 : 2021]	Jain Doors, Godrej, Navair, Promat, Bhawani Fire, Supreme metwood, REDMOND, Pacific, Vibrant Door Craft
47	Galvanization	Jenco Group, Sadhana Engineering Corporation Of Steelite Engineering Ltd.
48	G.I.Pipes And Fittings	Sail, Zenith, Tata, Jindal(Hissar), Prakash Surya
49	Glass Mosaic Tiles	Bisazza, Italia, Coral, Mridul, Birla, Jk Cement, Pavitpalladio
50	Glass Processor (For Safety Glass Etc.)	Saint Gobain, Asahi Glass, Emirates Glass, Guardian Glass (Sunguard), Sejal, Glasstech, Fuso, Fg, Gsc, Nsd, Schott.
51	Glass Door Hardware	Dorma, Kich, Hefele, Ozone, Geze, Dorset,
52	Glass Fiber Strand	Saint Gobain, Nippon Electric Glass Co. Ltd, Sterlite
53	Grouts	Ardex Endura, Ferrous Crete, Myk Arment, Basf, Fosrock, Pidilite, Saint Gobain
54	Gypsum Board / Glass Reinforced Gypsum Tile For False Ceiling	Saint Gobain Gyproc India, Usg Boral Board, Armstorng, Diamond
55	HDPE Pipes [Water Suplly-IS: 4984: 2016, Sewerage and Industrial Chemicals-IS: 14333:2022]	Reliance, Jainpipes, Oriplast, Supreme, Sy-Aron, Sudhakar, Jain Plumbing, Kisan
56	High Density (HDF), Prelaminated Board	Pergo, Greenply, Alstone, Ecoste, Echon, Archidpanel
57	Hydraulic Door Closer, Floor Spring	Hardwyn, Dorma, Godrej, Everite, Dorset, Hafele, Hetich, Kich
58	Hydrophobic Coating	Dupont, Dow Corning, Evercrete, Aquamix
59	Hot Press Moulded Thermosetting Glass Fibre Reinforced Polyester Resin (Grp) Sectional (Smc Tank) Water Storage Tanks: Capacity Range:-1000 L To 1200000 L (Is 14399 (Part-1 &Part-2):1996	Sovisy, Sintex, Amitex, Neerco

60	Intumescent Strips	Promat, Pemko, Intumex, Astroflame
61	Laminates (IS 2046:1995)	Formica, Merino, Greenlam, Century, Archidlam, Kitply, Samrat, Sunmica, Decolam, Asislam, Airolam,
62	Low Relaxation Prestressing Strands	Tata , Usha Martin, Dp Wires
63	Locks & Latches	Godrej, Dorset, Hefele, Yale, Link
64	Masking Tape	3M, Sun, Wonder Tape, Roop Polymer
65	Metal False Ceiling	Armstrong, Hunter Douglas, Royal Kraft, Interarch, Mcra
66	Metallic / Steel Fire Door	Shakti, Promat Navair, Fire, Godrej, Kenwood, Bhavani Fire., ASES
67	Melamine Polish	1. Asian Paints: Melamine Gold 2. Pidilite Industries: Wudfin 3. Dulux; Timbertone
68	HDPE Membrane Water Proofing System For Basement	Basf, Ferrous Crete, Shalimar, Pidilite, Ardex Endura, Myk Arments, Asian Paints
69	Micro Concrete	Asian Paints, Fosroc, Sika
70	NP2 Class, R.C.C. Pipes	Jain Spun Pipe, K. K. Spun Pipe, The Indian Hume Pipe Co. Ltd., Patel Hume Pipes
71	Rotational Moulded PVC water Tanks (IS : 12701:1996)	Sintex, Plasto, Lotus, Astral , Sudhakar (ISI Marked)
72	Paver Blocks / Tactile Tile	Vyara, Super, Johnson
73	PVC / WPC Kitchen Cabinets & Cupboards	Rajshree, Alstone, Ecoste
74	Prelaminated Particle Board Exterior Grade	Gvk Novapan, Marino, Kitply, Tesa, Ecoboard, Archidply, Century, Greenlam, Action Tesa, Greenlam.
75	Pre Mixed Cement Sand Mortar	Pure, Walplast, Ultratech, Asian Paints, Acc
76	Acrylic Smooth Exterior Paint	1. Apex Suprema Of Asian Paint 2. Weathercoat Glow Of Berger 3. Dulux Professional Weathershield Prima E-900 Of Dulux 4. Excel Super Of Nerolac
77	Premium Acrylic Smooth Exterior Paint	1. Apex Ultima Suprema Of Asian Paint 2. Wc Longlife Flexo Of Berger 3. Dulux Professional Weathershield Prima E-1000 Of Dulux 4. Xl Total Of Nerolac, Weather Coat All Guard Of Berger
78	Acrylic Emulsion Interior Paint	1. Apcolite Suprema Of Asian Paint 2. Bison Emulsion Of Berger 3. Dulux Promise Smart Choice Of Dulux 4. Nerolac Beauty Of Nerolac

79	Premium Acrylic Emulsion Interior Paint	1. Apcolite Suprema Premium Of Asian Paint 2. Rangoli Tot Care Of Berger 3. Dulux Professional Interior A-900 Of Dulux 4. Nerolac Beauty Gold Premium Of Nerolac
80	Epoxy Primer	1. Protectomastic Rpl Of Berger 2. Interseal 670Hs Of Dulux 3. Neromastic 400 Of Nerolac
81	Epoxy Paint	1. Epoxy 2 Pk Finish Of Asian Paint 2.Epilux 155 Enamel Of Berger 3. Interthane 990 Of Dulux 4. Neropoxy 5055 Finish Of Nerolac
82	Aliphatic Pu Paint	1. Bergerthane Pu Finish Of Berger 2. Interthane 990 Of Dulux 3. Nerothane Pu Emamel Of Nerolac
83	Steel Primer Red Oxide Zinc Chromate	1. Truecare High Perfomance Of Asian Paint 2. Bp Pro- Zinc Yellow Of Berger 3. Dulux Red Oxide Metal Primer Of Dulux 4. Red Oxide Primer Of Nerolac
84	Synthetic Enamel Paint	1. Apcolite Premium Gloss Enamel Of Asian Paint 2. Luxol Hi Gloss Of Berger 3. Dulux Professional Premium Enamel Of Dulux 4. Nerolac Guddy Synthatic Enemal (Nse) Of Nerolac
85	Polycorbonate Sheet	Lexan, MG Polyplast, GE Silicons, Polygal India, DPI Daylighting, Coxwell, Palram
86	PPR Pipes	Sfmc, Prince, Kpt Pipes, Supreme
87	Plasticizer, Admixture, Super Plasticizer, Curing Compounds.	Sika, Fosroc, Basf, Sunanda Chemicals Lts, Rofe / Dr. Fixit (Pidlite Industries), Cico, Ardex Endura (Balendura), Asian Paints
88	PVC Door Frames And Shutters	Rajshri, Plastiwood, Sintex, Accura, Duroplast, Kaka
89	PVC Flooring	LG Hausys, Armstrong, Gerflor, Responsive Industries
90	PVDF Coating	Aura Architectural Coatings, M. J. Coaters Pvt. Ltd., S P Architectural Coatings Pvt Ltd., Ameco
91	Oriented Unplasticized Polyvinyl Chloride (PVC-O) Pipes for Water Supply [IS: 16647:2017]	Kisan, bhartiwaters, ChemFab Alkalies, Ocean Water Tech
92	Ready Made Gypsum Plaster	Ferrous Crete, Ultratech, Gyproc
93	Ready Mix Concrete	Skyway, A.C.C., Ultra Tech, Lafarge,RMC Ready Mix , Godrej, Aparna
94	Reinforcement Steel (Tmt Fe 500D) (Crs Steel)	Sail, Tata Steel, Rinl, Jindal Steel & Power Ltd.(Jsol), Jsw Steel Ltd.
95	Reflective Soft Coated / Low E Glass	Saint Gobain, Asahi Glass, Emirates Glass, Guardian Glass, Glaverbel
96	Rolling Shutters & Grills	Standard, Swastik, Shubdhwar

97	Rock Wool/ Glass Wool	Vetrotex Industries Pvt. Ltd., Up Twiga, Rock Wool India Ltd. Dow Coring, Lloyd Insulation
98	S. F. R. C. Covers	K. K. Spun Pipe, Jain Spun Pipe, S. S. Industries, Pragati
99	Spider Patch Fitting, For Curtain Glazing	Dorma, Hafele, Kich, Ozone, Saint Gobain (Model: Sevax)
100	Structural Steel, MS ERW Pipes & Tubes (IS: 1239-Part-I-2004, Is: 4923-2017, IS: 1161-2014, IS: 3601-2006, Is: 9295-1983, Is: 3589-2001, Is 277-2018]	Tata Steel, Sail, Rinl, JTL, Jindal, Mpl Steel Pipes, APL Apollo
101	S.S Butt Hinges (IS : 12817:2020)	Prayag, Ozone, Dorma, Kich, Hafele,
102	Stainless Steel Screws	Kundan, Alloy Ltd., Gkw, Nettlefold, Atul Fastener.
103	S.S Bolts, Washers, Nuts	Kundan, Pooja, Atul Hilti
104	S. S. Handles, S.S Tower bolt, S.S Sliding door bolt (IS: 15833:2009, IS 15834: 2020)	Dorma, Kich, Hafele, Dorset,
105	S.S Friction Hinges	Hetich, Hafele, Ebco, Roto
106	Stainless Steel Pipes For Railing	Made From Salem Steel, Jindal Or Sail Sheet.
107	S S Press Fit Pipes & Fittings	J - Press Or Equivalent
108	Sanitary Wares	Kohler, Roca, Cera, Hindware, Parryware, Astral
109	S. S. Sink (IS : 13983:1994)	Neelkanth, Nirali, Navkar, Jindal, Futura, Cera, Diamond, Hindware, Joyna, AMC
110	SWR Pipes & Fittings	Birla Hil, AKG, Supreme, Astral, Finolex, Prince, Sudhakar, Jain Plumbing, Kisan, Vigor
111	Structural Wall Plastic Pipes & Fittings for Non-Pr. Drainage and Sewerage	Supreme, Astral, Finolex, Prince, Jain Plumbing
112	Thermal Insulation Treatment	Pidilite, Basf, Rock India
113	Textured Exterier Paint	Asian Paints, Spectrum Paints, Heritage, Ici Dulux, Nerolac, Berger Ultratech Paints
114	Timber Door, Window and Ventilator Frame.	Deccan Doors, REDMOND, Mahavir Wood Industries, Shreeji Woodcraft Pvt. Ltd.
115	Toilet Modular Cubicals	Merino By Besco , Matrix Cubicle System, Jaguar
116	UPVC Pipes And Fittings	Supreme, Astral, Flow Guard, Finolex, Prince, Birla Hil, AKG, Sudhakar, Jain Plumbing, Kisan, Vigor
117	UPVC-U Screen And Casing Pipes For Bore/Tubewell [Is 12818: 2010]	Supreme, Astral, Flow Guard, Finolex, Prince, AKG
118	UPVC Pipes For Use Of Underground Drainage & Sewerage Systems [IS 15328: 2003]	Supreme, Astral, Flow Guard, Finolex, Prince, AKG, Sudhakar, Kisan
119	uPVC Doors, Door Frames And Windows [IS 17953:2023]	Duroplast, LG India, Aluplast, Profile India, Rehau, Okotech, Fenasta, Wintech, Sudhakar, Yashpoly
120	Valves	Zoloto, Leader, Kirloskar, Arco, Gm, Audco,
121	Veneers	Anchorply, Archid, Kitply, Green Ply, Century, Marino, Mayur Ply, Duroply, Durian. Nipponply.

122	Vitrified Tiles	Agl, Rak, Kajaria, H & R Johnson, Somany, Nitco, Orient Bell, Ambani Tiles.
123	White Cement	J.K., Birla
124	Water Proof, Commercial & Fire Retardent Plywood, Veneered Decorative Plywood, and Block Boards [IS 1328:1996, IS 303 :1989, IS: 710:2010, IS: 1659:2004, IS : 4990:2024, IS 5509;2021)	Anchor, Archidply, Kitply, Green Ply, Century, Mayurply, Jayna, Samrat, Duroply, Regency, Kalpataru, Nipponply , Ramaply, Airolam, Durian,
125	Wooden Adhesive	Pidilite, 3M, Dunlop
126	Wooden Flooring	Welspun, Action Tesa, Armstrong, Durafloor, Pergo, Greenlam
127	Wood Plastic Composite (Wpc) Flooring	Ego, Ebaco, Hem Interior (Wpc Deck)
128	Wood Primer	Ici Dulux, Asiam Paints (Wood Primer-White / Pink), Berger Paints, Nerolac.
129	White Cement Based Putty	Mr. Putty, Birla Wall Care, J K White, Asian, Berger, Ardex Endura
130	Waterproofing Compound	Pidilite: Lw +, Asian Paints: Smart Care Vitalia, Fosroc: Complast 421, Sika: Sikacim, Struco Excel, Cico, Myk Arment, Basf India Ltd., Astral (Trubuild)
131	Waterproofing For Toilets & Wet Areas	Fosroc: Brush Bond, Cico: Tapecrete, Dr. Fixit; Pidifine 2K, Sika: Nito Bond, Asian Paints: Damp Block 2K, Sunanda, Perma, Basf, Ardex Endura.
132	Work Chairs (IS 17631:2022)	Adarsh, GeeKen, Wipro
133	Zincalume/Galvalume/Metalume Profile Sheet	Tata Blue Scope, Pennar, Cril, Colorshine Signature , (Color Roof India Ltd).

LIST OF SPECILIZED AGENCIES

1	WATERPROOFING WORK	A. A. NAYAK Constructions Pvt. Ltd., NINA Concrete Systems Pvt. Ltd., LIKPROOF INDIA PVT. LTD., MODERN WATERPROOFING CO, INDIA WATERPROOFING CO., OVERSEAS WATERPROOFING CORPORATION, KAVLE'S PRESSURE CONCRETE PVT. LTD., ALL INDIA WATERPROOFING COMPANY, YADAV BROTHERS ENTERPRISES
2	PLUMBING SANITARY WORKS	SHREE KHODIYAR SANITATION, D. S. GUPTA, UJJWAL ENTERPRISES, CANTER, JK INFRA,

SCHEDULE OF QUANTITIES

Name of work:- One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.					
Sr.No	**Description of Items**	**Unit**	**Qty**	**Rate**	**Amount**
1	Disposal of lime, moorum, building rubbish/malba, debries/ similar unserviceable,dismantled or waste materials by mechanical transport, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge for lead upto 20 km for all lifts beyond 50 m initial lead etc all complete as per the direction of Engineer-in-charge.	Cum	20.00	585.38	11707.60
2	Providing and fixing 18mm 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 20mm 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 to edges to give high gloss finish etc. complete at all levels.				
2.1	Granite stone slab colour black, Cherry/Ruby red				
2.1.1	Area of slab upto 0.50 sqm	Sqm	4.45	6215.46	27658.80
2.1.2	Area of slab over 0.50 sqm	Sqm	3.50	5897.19	20640.17
3	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.	Each	2.00	1123.68	2247.36

4	Providing and fixing Ist quality rectified 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.	Sqm	10.00	1455.78	14557.80
5	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
5.1	sal wood	Cum	0.030	133781.62	4013.45
6	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
6.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	1.70	2747.10	4670.07
6.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	3.35	2493.87	8354.46
7	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 :				
7.1	250x16 mm	Each	6.00	299.21	1795.26
8	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 :				
8.1	250x10 mm	each	3.00	132.21	396.63
8.2	150x10 mm	each	10.00	94.78	947.80

9	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	125 mm	Each	10.00	76.06	760.60
9.2	100 mm	Each	10.00	68.37	683.70
10	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
10.1	Single rubber stopper	Each	10.00	45.47	454.70
11	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing.				
11.1	30 mm thick plain PVC door shutters.	Sqm	6.50	3654.47	23754.06

12	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.				
12.1	1.0 mm thick	sqm	8.00	1030.23	8241.84
13	Providing and fixing fly proof stainless steel grade 304 wire gauge in aluminium door,Sliding window Shutter, ventilator and partitions with Snap beading etc using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm etc. all complete as per the direction of Engineer-in-charge.(Cost of aluminium Snap beading shall be paid separately)				
13.1	S.S Wire gauge with av width of 1.4 mm in both direction with wire of dia 0.50 mm	Sqm	2.00	1256.07	2512.14
14	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except 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 pigments etc., complete.	Sqm	16.00	1652.63	26442.08
15	Providing and laying vitrified floor tiles in diferent sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.				
15.1	Size of Tile 600x600 mm	sqm	33.00	1783.58	58858.14

16	Providing and laying Vitrified tiles in diferent sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.				
16.1	Size of Tile 600x600 mm	Sqm	4.00	1863.49	7453.96
17	Distempering with 1st quality acrylic distemper, 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.				
17.1	Old work (one or more coats)	Sqm	900.00	71.99	64791.00
17.2	Old work (Two or more coats)	Sqm	2650.00	128.25	339862.50
18	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.	sqm	1750.00	179.17	313547.50
19	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
19.1	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre.	Sqm	1750.00	84.90	148575.00
20	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	Sqm	1750.00	22.68	39690.00
21	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
21.1	One or more coats on old work	Sqm	75.00	118.03	8852.25
22	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
22.1	With cement mortar 1:4 (1 cement : 4 fine sand)	Sqm	100.00	628.49	62849.00

23	Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:- (i) Tank shall be emptied of water by pumping & bottom shall be cleaned of slit and other deposits. (ii) Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water. (iv) The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface. (v) Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.	Sqm	350.00	97.42	34097.00
24	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in- Charge.	Each	5.00	153.97	769.85
25	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineerin-Charge.				
25.1	Internal Work- Exposed on wall	Metre	10.00	3.73	37.30
26	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
26.1	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	Cum	2.00	1726.34	3452.68
27	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
27.1	Of area 3 sq. metres and below	Each	8.00	421.60	3372.80
28	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
28.1	For thickness of tiles 10 mm to 25 mm	Sqm	63.00	84.27	5309.01
29	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.	Each	3.00	128.65	385.95

30	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 :				
30.1	W.C. pan with ISI marked white solid plastic seat and lid	Each	5.00	7480.76	37403.80
31	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:				
31.2	White Vitreous China Flat back wash basin size 450x 300 mm with single 15mm C.P. brass pillar tap	Each	3.00	1737.82	5213.46
32	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required				
32.1	Kitchen sink without drain board				
32.1.1	610x460 mm bowl depth 200 mm	Each	1.00	4447.66	4447.66
33	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.	each	3.00	1846.15	5538.45
34	Providing and fixing S.C.I.Nahani 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 :				
34.1	100 mm inlet and 75 mm outlet				
34.1.1	Sand cast iron S&S as per IS - 3989	Each	5.00	1122.36	5611.80
35	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				
35.1	20 mm nominal outer dia Pipes	Metre	5.00	384.63	1923.15

36	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c 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.				
36.1	20 mm nominal outer dia Pipes	Metre	15.00	617.24	9258.60
37	Cutting holes up to 30x30 cm in walls including making good the same:				
37.1	With common burnt clay F.P.S. (non modular) bricks	Each	5.00	478.54	2392.70
38	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 / paneling, 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) :				
38.1	For fixed portion				
38.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Kg	22.00	568.39	12504.58
38.2	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).				

38.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Kg	22.00	687.28	15120.16
38.3	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):				
38.3.1	With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	Sqm	3.75	1351.13	5066.74
39	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.	Sqm	30.00	606.33	18189.90
40	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				
40.1	25 mm average thickness	Sqm	100.00	145.53	14553.00
41	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-In-charge complete in all respect.				

41.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	Sqm	100.00	162.12	16212.00
42	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 75mm size cube crushing strength at the end of 28 days to be not less than 30 N/Sqmm2).				
42.1	25 mm average thickness in 2 layers.	Sqm	100.00	674.36	67436.00
43	Supply of material at site of approved quality & brand etc complete as per direction of Engineer-in-Charge.				
43.1	C.P. Brass angle valve 15 mm	Each	10.00	571.77	5717.70
43.2	Anodised Aluminium Tower Bolt (barrel Type)150x 10 mm	Each	15.00	48.22	723.30
43.3	Anodised Aluminium handles 100 mm with plate 150 x 32 mm	Each	15.00	43.63	654.45
43.4	C.P. Brass bib cock 15 mm dia	Each	10.00	498.29	4982.90
43.5	C.P Brass stop cock 15 mm dia	Each	5.00	498.29	2491.45
43.6	Flexible (coil shaped) PVC waste pipe for sink and wash basin 32mm dia with length not less than 700 mm i/c PVC waste fittings	Each	10.00	56.26	562.60
43.7	Flexible (coil shaped) PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	Each	10.00	53.96	539.60
43.8	White plastic seat (solid) with lid C.P. brass hinges and rubber buffers	Each	15.00	682.00	10230.00
43.9	Flushing Cistern P.V.C. 10 litre capacity (low level) (White) (with fittings accessories and flush pipe)	Each	15.00	938.03	14070.45
43.10	SS Sliding door bolt of size 200x16mm	Each	8.00	188.29	1506.32
43.11	SS tower bolt (plate type) of size 200x10 mm	Each	5.00	141.22	706.10

43.12	SS handle 125mm	Each	10.00	105.63	1056.30
43.13	C.P brass long body bib cock 15mm	Each	10.00	801.40	8014.00
43.14	Shower rose C.P. brass for 15 to 20 mm inlet 100 mm dia	Each	5.00	182.55	912.75
43.15	Anodised Aluminium tower bolt (barrel type) 250x10 mm	Each	5.00	77.50	387.50
43.16	Anodised Aluminium hanging type door stopper	Each	5.00	31.00	155.00
43.17	Rectangular type with openable circular lid 150 mm size 18 mm high with 100 mm dia (110 gm)	Each	5.00	195.18	975.90
43.18	125 mm grating with waste hole	Each	5.00	40.18	200.90
43.19	Stainless steel butt hinges 100x58x1.9 mm IS : 12817 marked	Each	5.00	51.67	258.35
43.20	Stainless steel butt hinges 75x47x1.8 mm IS : 12817 marked	Each	5.00	33.87	169.35
Non Schedule items					
44	Maintenance and upkeep of all internal and external assets of Residential Quarters at Building No-15 (A, B & C Wings) of Income Tax at Powai, Mumbai. for civil related complaint like Plumber, Carpenter, Sewerman & Mason, fitter/ welder etc. On daily basis as well as emergent complaint like plumbing, sewerage etc. or as arise on site as per detail of quarters given by the client department through SMS, Whats App, Phone, E-mail or mention in complaint register shall be attended daily on all working days including all labour, sundry material and cleaning of PVC O/H Tank & underground sump to upkeep all internal & external assets as per following operations. All complaint as per client satisfaction & as per direction of Engineer-in-charge.				
44.1	Maintenance of sewerage, drainage system and desilting of gully traps etc. within the campus like opening/cleaning of chocked sewer pipes drains, storm water drains, manholes, gully traps, water closet etc. at all floors & vertical stacks of sewer pipes & rain water pipes of all sizes to keep sewerage & draining system functional complete to the entire satisfaction and as per the direction of Engineer-in-charge.				

44.2	Maintenance & repair of damaged doors, windows etc. like Alumininum, steel, wood, PVC at all floors & level and fixing/ replacement of necessary fittings wherever required to keep them in proper functional condition including all labour & sundry material to entire satisfaction and as per direction of Engineer -in-charge.				
44.3	Maintenance and repair of plumbing system for the entire campus including stopping leakages or repair of over flow of water from PVC/RCC over head tanks, loft tanks, cisterns etc. To keep the entire supply system/grid, valves, cocks efficient & operational/ functional at all time to the entire satisfaction and as per direction of Engineer -in-charge. To keep the entire water supply system efficient and functional. ii) Maintenance and operation of water supply grid and valves including unfiltered water line in the entire campus to keep the water supply system efficient and operational at all times i/c removing leakage breakage etc from the time complete to the entire satisfaction and as per direction of the Engineer-in-charge.				
44.4	Maintenance and repair of internal and external plaster, flooring, masonry work, pointing, leakages from roof, floor toillet/ bathroom etc. including fixing of W.C. Pan, gully trap, floor traps, pipe etc. and restoration of existing finishing in the affected area to the entire satisfaction and as per direction Engineer-in-charge.				
44.5	Maintenance and repair of MS structures to windows , steel doors, gate , railing etc by Welding with electric plant including transportation of electric welding plant at site to weld broken grills, hinges, doors, windows, gates, railing and any other steel work of dwelling units, parks, boundary walls complete as per direction of Engineer-in charge. (Nothing extra shall be paid against Sundry Materials required for repairing like welding rod, MS material required for minor repair etc Howver MS material reuired for major repair will be paid separetly				

44.6	Maintenance and cleaning chajjas, roofs, terrace, expansion joints etc, and removing of cobwebs, beehives vegetation including disposal of silt, vegetation, uprooting of small plant/ tree , malba, etc. within the campus complete to the entire satisfaction and as per the direction of Engineer-in charge.				
44.7	Maintenance and upkeep of all internal and external assets including all required incidental materials like screws, rawl plug, M-seal, taplon tape, washers, cutting wheel, checknut, polishing wheel, spindle, mirror screws, welding, adhesive, fevicol, grout, white cement, consumable,crack sealing compound etc., labour, crack filling of external walls with the help of robe , T&P As required for the execution of above job all complete as per direction of the Engineer-in-charge and no claim on any account shall be entertained .				
44.8	Agency has to attend complain through Complain register/email/ or through telephone and Maintain Attendence register of workers, Paint register,Tank cleaning register, Mas supply register, New door/window register (All stationeries Required for Maintaining Records will be supplied by contractor)	Months	11.00	26174.86	287923.46
45	Cleaning the reinforcement of total rust to give it totally rust free finish steel surface by manual methods using wire brushes chiseling , sand papering etc.and by sand blasting whereever possible including providing and applying a coat of alkaline chemical rust remover rusticide of M/s Sunanda speciality coating pvt. ltd. or equivalent brand as approved by Engineer-in-Charge applying @ 0.054 litre per Sqm. of exposed concrete surface with help of painting brush and then cleaning the surface of reinforcement after 24 Hours of its application by removing loose particle from reinforcement with wire brush and throughly washing with water and allowing it to dry ,complete as per the direction of engineer-in-charge . (For the purpose of payment area of the face of the RCC member where reinforcement is exposed shall be measured)	Sqm	100.00	50.50	5050.00

46	Providing and fixing Powder coated Aluminium adjustable louver with locking arrangement of approved quality and brand fixed with necessary screws, etc. complete as Per directed by Engineer -in - charge.	per pair per Meter	1.20	714.35	857.22
47	Providing and fixing frosted glass louvers 100 mm wide & 3 mm thick in grooves in clerestory windows frames excluding the cost of frames/ aluminium louver as per the direction of Engineer- in- charge.	Sqm	0.40	550.15	220.06
48	Providing and fixing C.P brass two way bib cock Model No. CQT-23041 of Jaquar Clarion series or ESS ESS Croma series C-203 G or equivalent make with all necessary fittings etc., complete as per direction of Engineer-in-charge.				
48.1	15 mm nominal bore.	Each	10.00	1252.70	12527.00
49	Providing and fixing Concealed Handel-Cum-Latch Lock to sliding windows including cutting the handle section to required profile & fixing with necessary screws etc complete as directed by the Engineer-in-Charge.	Each	6.00	201.75	1210.50
50	Providing & Fixing Hand Shower (Health Faucet) (Abs Body) With 8Mm Dia, 1.0 Meter Long Spirochrome Flex Tube & Wall Hook, (Sin of Jaquar Model No.ALD-CHR-587 or equivalent make with all necessary fittings etc., complete as per direction of Engineer-in-charge.	each	10.00	1202.95	12029.50
51	Providing and fixing CP brass wall mixer with provision for overhead shower with required size bend on upper side, connecting legs & wall flanges, Model No. CQT - 23273UPR of Jaquar Clarion series or Model No. C-216D of ESS ESS Croma series or Model No. F570020 of Hindware Aspiro series or equivalent make with all necessary fittings etc. complete as per direction of Engineer in charge.				
51.1	15 mm nominal bore	Each	5.00	5631.40	28157.00
52	Providing and fixing machine cut machine polished Cuddapah stone slab for horizontal shelves, cooking platform, window sills, soap racks etc., fixed with cement mortar 1:3 (1 Cement : 3 coarse sand) including the cost of making necessary grooves in the walls & making good the same after fixing the slabs all complete as directed by the Engineer-in-charge.				
52.1	20 to 25 mm thick cuddapah stone	Sqm	4.00	1002.00	4008.00

53	Providing and laying in position cement concrete of specified grade in sunken portion in all floors & levels excluding the cost of centering and shuttering -				
53.1	1:5:10 (1 cement : 5 coarse sand : 10 graded brick aggregate 40 mm nominal size)	Cum	2.00	6883.35	13766.70
54	Deduct for not prepration at surface for Distempering/ acrylic emulsion/ putty work on the surface prepared by applying white cement based putty.	Per Sqm	1750.00	-23.10	-40425.00
55	Credit given to contractor for taking away dismnatled unserviceable materials recevied for work.				
55.1	Reinforcement bars, GI pipes, barbed wire, CI or SCI pipes, MS tanks, CI flushing cistern, M.S. grill, M.S fittings etc M.S Section, TMT Bars	Kg	10.00	-27.32	-273.20
55.2	Brass Items	per kg	2.00	-396.20	-792.40
55.3	Aluminium section	Kg	25.00	-150.00	-3750.00
55.4	PVC Flushing cistern	each	5.00	-25.00	-125.00
55.5	Door / window shutter (Scrap wood)	Kg	100.00	-15.00	-1500.00
				Total	**1845813.00**

PERCENTAGE _____% (Above / below) (* Strike off whichever is not applicable)

IN WORDS _____

Executive Engineer
Mumbai-II, CPWD, Mumbai – 37.

NIT No. 57/EE/MUMBAI-II/2026-27

Name of Work: One time civil repair works in Building No-15 (A, B & C Wings) of Income Tax Residential Building at Powai, Mumbai. dg. 2026-27.

PRICE BID

Name of the Contractor					
Sr. No.	**Name of component**	**Estimated Cost**	**Percentage above or below the estimated cost**	**% in Figures**	**Total Cost**
1	**Civil Works**	**Rs. 18,45,813/-**			
	GRAND TOTAL				