



**Assistant Engineer-I under the Office of Executive
Engineer (Civil-I), CPWD, Dehradun**

**NOTICE INVITING e-TENDERS
NIT No.: 54/EE(C-I)/CPWD/ D.Dun/2026-27/AE-I**

Name of work: Construction of Parking Shed for old and new Guest House in Hathibarkala Estate, Survey of India, Dehradun. (SH: Sewer Line and Septic Tank.)

ESTIMATED COST : Rs. 5,64,407/-

EARNEST MONEY : Rs. 11,288/-

COMPLETION PERIOD : 01 Month

Certified that this N.I.T. Contains 54 Pages only.

**Assistant Engineer,
Dehradun Sub-Division - I
CPWD, Dehradun**

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NIT amounting to **Rs. 5,64,407/-** only is hereby approved. This NIT contains pages marked as **1 to 56**.

**Assistant Engineer
Dehradun Sub-Division - I
CPWD, Dehradun**

Corrections - Nil
Insertions - Nil
Omissions - Nil

A.E.-I

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING

The **Assistant Engineer-I, Dehradun**, Central Public Works Department, Dehradun on behalf of President of India invites online percentage rate bids from approved and eligible contractors of CPWD in appropriate class of **Buildings& Roads (erstwhile composite/Building/infrastructure) category** for the following work:

NIT No	54/EE(C-I)/CPWD/ D.Dun/2026-27/AE-I
Name of Work	Construction of Parking Shed for old and new Guest House in Hathibarkala Estate, Survey of India, Dehradun. (SH: Sewer Line and Septic Tank).
Location	Dehradun.
Estimated cost put to bid	Rs. 5,64,407/-
Earnest Money	Rs. 11,288/-
Stipulated Period of Completion of work	01 Month
Last date & time of submission of bid, original EMD, copy of receipt of deposition of original EMD and other documents as specified in the bid document	Up to 15:00 Hrs on 18.08.2026
Time and date of opening of Bid	15:30 Hrs on 18.08.2026

- The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- successful bidder shall be required to submit a (i) Performance Guarantee of 5% (Five percent) of the Tendered Value or Estimated Cost put to Tender (ECPT) (Whichever is higher). (ii) 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 (i) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount. The performance Guarantee shall be submitted as mentioned above within 7 days of issue of letter of intent. This period can be further extended by Engineer-in-Charge upto a maximum period of 3 days on the written request of the contractor and with late fee as defined in Schedule F.
- Information and Instructions for bidders posted on website shall form part of bid Documents.
- The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website <https://etender.cpwd.gov.in/> or www.cpwd.gov.in free of cost.
- But the bid can only be submitted after deposition of original EMD deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission and uploading the mandatory scanned documents such as **Insurance Surety Bonds, Account Payee Demand Draft or Banker's Cheque or Fixed Deposit Receipt or/ and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks** towards EMD in favor of **Executive Engineer, DCD-I, CPWD, Dehradun** as mentioned in NIT, receipt for deposition of Original EMD to division office of any Executive Engineer (including NIT issuing EE/AE), CPWD and other documents as specified.

Corrections - Nil
 Insertions - Nil
 Omissions - Nil

A.E.-I

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

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

However, if a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
12. List of Documents to be scanned and uploaded within the period of bid submission:
 - (i). Insurance Surety Bonds/ Account Payee Demand Draft / Fixed Deposit Receipt / Banker's Cheque and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks against EMD.
 - (ii). Copy of Receipt for deposition of original EMD to division office of any Executive Engineer, CPWD (including NIT issuing EE).
 - (iii). Enlistment order of the contractors of CPWD in appropriate class of Buildings & Roads (erstwhile composite/Building/infrastructure) category.
 - (iv). Copy of certificate for compulsory ERP training issued through LMS or ERP obtained by enlisted contractor either by him or his authorized representative.
 - (v). Letter Head indicating valid e-mail ID and Mobile No. of Firm.
 - (vi). GST registration certificate, if already obtained by the bidder.

If the bidder has not obtained GST registration as applicable, then he shall scan and 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 the date of receipt of award letter or before release of any Payment by CPWD, whichever is earlier, failing which I/we shall be responsible for any delay in payments which will be due towards me/us on account of the work executed and/or for any action taken by CPWD or GST department in this regard".

13. The EE/DDH of any divisions/projects of CPWD or any other officer designated by CPWD Directorate from time to time, are authorized to receive the EMDs and issue the receipt of deposition of original EMD in the prescribed format. These authorities should receive the original EMD for their tenders or tenders of any other division/projects.

Signature of the Sub-Divisional Officer, For
and on behalf of the President of India

Corrections - Nil
Insertions - Nil
Omissions - Nil

A.E.-I

Additional Instructions to the bidders For Submission of Tenders

Tender to be witnessed at specified page of tendered documents at the time of drawing agreement with the successful bidder.

- 1 The tender / tenders containing conditions contrary to those specified in this document shall be summarily rejected.
- 2 In schedules of quantities appended to the tender documents, the rates in terms of overall percentage above or below the total estimated amount put to tender must be filled both in figures and words on specified page of tender document.
- 3 The contractor/ agency shall quote the rate keeping in view that they have to give an undertaking before award of work that “they will install/ arrange field testing instruments and essential T&P/ technical representatives specified in the tender document/specification.
- 4 It will be mandatory to first refer any dispute related to execution of this work to the conciliator. Contractor or department can only seek arbitration if not satisfied with the decision of the conciliator. This should be read along with provisions of clause 25 of GCC 2023 for maintenance works duly amended & modified with corrections up to date of submission of tender.
- 5 All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor.
- 6 Registered contractors of CPWD should note that the various conditions incorporated in their enlistment is applicable in the present tender. Any default on their part during execution of the work will be referred to the registered authority for further action.
- 7 The rates quoted by the bidder should be inclusive of prevailing GST rates & no claims in this regard shall be admissible.
- 8 The tenderers may read the provisions of the General Conditions of Contract-2023 as described in the tender document thoroughly before quoting.
- 9 All items of paints incorporated in the schedule of quantity will be based on supply/apply basis. The agency has to supply the desired quantity & the same will be kept in custody of the department. Material will be issued to the agency by the JE-in-charge of the work as per requirement.

FORMAT FOR RECEIPT OF DEPOSITION OF ORIGINAL EMD

Receipt No.....#..... /date.....#.....	
1. Name of Work: Construction of Parking Shed for old and new Guest House in Hathibarkala Estate, Survey of India, Dehradun. (SH: Sewer Line and Septic Tank).	
2. NIT No.	: 54/EE(C-I)/CPWD/ D.Dun/2026-27/AE-I
3. Estimated Cost	: Rs. 5,64,407/-
4. Amount of Earnest Money Deposit	: Rs. 11,288/-
5. Last date and time of submission of Bid	: 18.08.2026 at 15:00 Hrs.
(* To be filled by NIT approving authority/EE at the time of issue of NIT)	
1. Name of Contractor :#..... 2. Form of EMD :#..... 3. Amount of Earnest Money Deposit#..... 4. Date of submission of EMD#	
Signature, Name and Designation of EMD receiving officer (EE/AE(P)/AE/AAO) with Officer stamp (# to be filled by EMD receiving EE or NIT issuing EE/AE as the case may be)	

Note:

- i) The Executive Engineer receiving EMD in original form shall examine the EMD deposited by the bidder and shall issue a receipt of deposition of earnest money to the agency in a given format uploaded by tender inviting EE. The receipt may be issued by the AE(P)/AE/AAO.
- ii) The Executive Engineer receiving original EMD shall also intimate tender inviting Executive Engineer about deposition of EMD by the agency by email/ fax/telephonically.
- iii) The original EMD receiving Executive Engineer shall release the EMD after verification from the e-tendering portal website (<https://etender.cpwd.gov.in/>) that the particular contractor is not L-1 tenderer and work is awarded.
- iv) The tender inviting Executive Engineer will call for original EMD of the L-1 tenderer from EMD receiving Executive Engineer immediately.
- v) EMD shall be drawn in favor of [Executive Engineer, DCD-I, CPWD, Dehradun.](#)

PART – A

NOTICE INVITING e-TENDER (CPWD-6), TENDER FORM (CPWD-7), SCHEDULES - A TO F AND STANDARD GCC FOR CPWD-2023 (MAINTENANCE WORK) AMENDED/ MODIFIED UP TO LAST DATE OF TENDER SUBMISSION

CPWD-6 FOR e-TENDERING

Percentage rate bids are invited on behalf of President of India from approved and eligible contractors of CPWD in appropriate class of Buildings & Roads (erstwhile composite/Building/infrastructure) category for the work of “*Construction of Parking Shed for old and new Guest House in Hathibarkala Estate, Survey of India, Dehradun. (SH: Sewer Line and Septic Tank)*”.

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

1.1. The work is estimated to cost **Rs. 5,64,407/-** This estimate, however, is given merely as a rough guide.

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

For composite bid, besides indicating the combined estimated cost put to bid, should clearly indicates the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.

2. The contractor, whose bid is accepted, will be required to furnish the successful bidder shall be required to submit a (i) Performance Guarantee of 5% (Five percent) of the Tendered Value or Estimated Cost put to Tender (ECPT) (Whichever is higher). (ii) 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 (i) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount. The performance Guarantee shall be submitted within the period as specified in Schedule F.

3. Agreement shall be drawn with the successful bidder on prescribed Form No. **CPWD 7** (or other Standard Form as mentioned) 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.

4. The time allowed for carrying out the work will be **01 Month** 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.

5. (i) **The site for the work is available with client.**

~~(ii).The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programme of completion submitted by the contractor after award of work.~~

6. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from website <https://etender.cpwd.gov.in/> or www.cpwd.gov.in free of cost.

Corrections - Nil
Insertions - Nil
Omissions - Nil

A.E.-I

7. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
8. 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 items) but before last time and date of submission of bid as notified.
9. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
10. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks (drawn in favor of **Executive Engineer, DCD-I, CPWD, Dehradun**) shall be scanned and uploaded to the e-tendering website within the period of bid submission. The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing EE/AE) shall issue a receipt of deposition of Earnest Money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

The 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 lacs, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any Commercial Bank having validity for six months or more from last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

The earnest money given by all the tenderers except the lowest tenderer shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. However, in case of two/ three bid system, earnest money deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation.

Copy of Enlistment Order and other documents as specified in the bid document shall be scanned and uploaded to the e-tendering website within the period of bid submission.

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

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

The bid submitted shall be opened at 03:30 PM on 18.08.2026

11. **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 deposit original EMD with division office of any Executive Engineer, CPWD.
- (iii) **The bidder does not upload scanned copies of all the documents (including GST registration OR Undertaking in lieu of GST registration) as stipulated in the bid documents.**
- (iv) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
- (v) If a tenderer quotes nil rates against each item-on-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.

2 The contractor, whose bid is accepted, will be required to furnish the successful bidder shall be required to submit a (i) Performance Guarantee of 5% (Five percent) of the Tendered Value or Estimated Cost put to Tender (ECPT) (Whichever is higher). (ii) 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 (i) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount. The performance Guarantee shall be submitted within the period as specified in Schedule F. This guarantee shall be in the form of Banker's Cheque of a Commercial Bank OR Account Payee Demand Draft of a Commercial Bank OR Fixed Deposit Receipt (FDR of a Commercial Bank or Insurance Surety Bonds OR Bank Guarantee of a Commercial Bank in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with tender shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labor licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. if applicable and also ensure the compliance of aforesaid provisions by the sub-contractors, if any engaged by the contractor for the said work and Programmed Chart (Time and Progress) within the period specified in Schedule F.

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

The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labor licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident fund code no. if applicable and also ensure the compliance of aforesaid provisions by the sub-contractors, if any engaged by the contractor for the said work and Programmed Chart (Time and Progress) within the period specified in Schedule F.

12. *Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other Services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and conditions and other factors having a bearing on the execution of the work.*
13. *Few particular specifications/general/special/ Conditions of NIT may have cost implications; therefore, bidders must visit the site and go through all conditions and BOQ items in detail before quoting rates.*
14. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
15. 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.

16. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
17. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazette 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.
18. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
19. The bids for the work shall remain open for acceptance for a period of **Thirty (30) days** from the date of opening of bids further.
 - (i) If any tenderer withdraws his tender or makes any modification in the terms and conditions of the tender which is not acceptable to the department, within 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 50% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - (ii) If any tenderer withdraws his tender or makes any modification in the terms and conditions of the tender which is not acceptable to the department, after expiry of 7 days after last date of submission of bid, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - (iii) In case of forfeiture of earnest money in prescribed in para (i) and (ii) above the bidder shall not be allowed to participate in the rebidding process of the same work.
20. 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 12 Months from the stipulated date of start of the work, sign the contract consisting of:
 - (i) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates

quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.

(ii) Standard **CPWD Form-7** or other Standard CPWD Form as mentioned.

21. The intending bidders are required to update their profile in CPWD e- tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile / uploading tender can be resolved through the concerned Executive Engineer (e- mail Id *eedcd1cpwd@yahoo.co.in) or ERP help line no. 18001803286 or e-mail - cpwd.support@techmahindra.com. The e- tendering bidders are also advised not to wait to raise any issue till the last date of submission of bid in their own interest.

**Signature of the Sub-Divisional Officer,
For and on behalf of the President of India**

CPWD-7**GOVERNMENT OF INDIA****CENTRAL PUBLIC WORKS DEPARTMENT**

STATE: Uttarakhand
ZONE: Dehradun

BRANCH: B & R
DIVISION: EE (C)-1, Dehradun

PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Tender for the work of “Construction of Parking Shed for old and new Guest House in Hathibarkala Estate, Survey of India, Dehradun. (SH: Sewer Line and Septic Tank).”.

- (i) To be uploaded by **15:00 Hrs. on 18.08.2026** on website: <https://etender.cpwd.gov.in/> or www.cpwd.gov.in
- (ii) To be opened in the presence of tenderers who may be present at **15:30 Hrs. on 18.08.2026** in the office of the **Executive Engineer (C)-I, Dehradun, CPWD, Dehradun.**

TENDER

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

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule „F“ viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions & in clause 11 of the Conditions of Contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

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

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

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

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

Corrections - Nil
 Insertions - Nil
 Omissions - Nil

A.E.-I

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 tendering in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

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

Dated:

Signature of Contractor

Postal Address:

Witness:

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.....(Rupee.).

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

- (a)
- (b)
- (c)

(For & on behalf of President of India)

Dated:

Signature.....

Designation.....

PROFORMA OF SCHEDULES: A TO F**SCHEDULE “A”**

Schedule of quantities: (for Civil Works: As per sheets attached)

SCHEDULE “D”

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

SCHEDULE “E”**Reference to General Conditions of Contract:** General Conditions of Contract-2023 (Maintenance works) as amended / modified up to the last date of submission of Tenders.**Name of Work:** “ Construction of Parking Shed for old and new Guest House in Hathibarkala Estate, Survey of India, Dehradun. (SH: Sewer Line and Septic Tank)”.**Estimated cost of work:** Rs. 5,64,407/-

(i)	Earnest Money	Rs. 11,288/- (to be returned after receiving Performance Guarantee)
(ii)	Performance Guarantee	(i) Performance Guarantee of 5% (Five percent) of the Tendered Value or Estimated Cost put to Tender (ECPT) (Whichever is higher). (ii) Where the tendered amount is less than eighty percent (80%) of the Estimated Cost Put to Tender (ECPT).
(iii)	Security Deposit	2.50% of tendered value

SCHEDULE 'F'**General Rules & Directions:**Officer inviting Tender: **Assistant Engineer-I, CPWD, Dehradun. Definitions:**

2(vi)	Engineer-in-Charge	Assistant Engineer-I, CPWD, Dehradun
2(viii)	Accepting Authority	Assistant Engineer-I, CPWD, Dehradun
2(x)	Percentage on cost of materials and Labour cover all to overheads and profits	15%
	Standard Schedule of Rates	Delhi Schedule of Rates 2023 (x) Correction factor 0.973 + Cost Index 8.00% with up-to-date
2(xi)	Department	correction slips.
9(ii)	Standard CPWD Contract Form:	GCC 2023 (Maintenance works), CPWD Form 7 as modified & corrected up-to the last date of submission of tenders

Corrections - Nil
 Insertions - Nil
 Omissions - Nil

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Clause-1:

(i)	Time allowed for submission of Performance Guarantee, programmed chart (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance.	05 (Five) days
(ii)	Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above	02 (Two) days

Clause-2:

(i)	Authority for fixing compensation under clause 2	Chief Engineer-Dehradun, CPWD, Dehradun or his successor thereof
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Clause-5:

(i)	Number of days from the date of issue of letter of acceptance for reckoning date of start	7 (Seven) days
(ii)	Time allowed for completion of work	1 Month

Clause-6:

Mode of measurement	CMB/CPWD ERP Portal
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Note: Time allowed for execution of work: 01 Month

Authority to decide:

(i)	Extension of time	Assistant Engineer-I, CPWD, Dehradun
(ii)	Rescheduling of mile stones	Executive Engineer (C) -1, Dehradun, CPWD, Dehradun or his successor thereof
(iii)	Shifting of date of start in case of delay in handing over of site	Assistant Engineer-I, CPWD, Dehradun

Schedule of handing over of Site:

Part	Portion of site	Description	Time period for handing over reckoned from date of issue of letter of intent
Part A	Portion without any hindrance	Full Site available with client	5 days
Part B	Portions with encumbrances	NA	NA
Part C	Portion dependent on work of other agencies	NA	NA

Note: Schedule of handing over of site is related to achievement of milestones as described above. In case of non-achievement of schedule activities, the working agency will be solely responsible.

Clause-7:

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment	Rs. 1.50 Lakh
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Clause-7A:

Whether clause 7A shall be applicable	Yes
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Clause-10B (i): Applicable

Clause-10C: Not Applicable

Component of labour expressed as percent of value of work	N/A
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Clause-11:

Specifications to be followed for execution of work:	
Civil work	CPWD Specifications 2019 Vol. 1 and Vol. 2 with UpToDate correction slips (Hereinafter called CPWD specifications).

Type of work: Maintenance work

“The completion cost shall, in no case, exceed 1.5 times to the contract amount.

Contractor will devise a system to keep a watch on quantum of work taken up vis-a-vis balance items required to complete defined scope of work and will give the alerts to Engineer-in-Charge before taking up extra item(s), deviation(s) so that completion cost does not exceed above limit. Work executed beyond above limit will neither be recorded nor be paid. Engineer-in-Charge will verify and confirm the alerts before assigning deviation(s) and / or extra item(s) to the contractor. If additional work(s) is required to complete defined scope of work beyond above limit then Engineer-in Charge may take up such work(s) separately. The contractor will not have any claim(s) whatsoever on this account”.

Clause 12.3	Deviation Limit beyond which clauses 12.3 shall apply for building work and maintenance work.	No Limit (All deviated quantities shall be paid at agreement rates)
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Clause-16:

Competent Authority for deciding reduced rates:	
Civil work	Chief Engineer-Dehradun, CPWD, Dehradun or his successor thereof

Clause-18: All the required equipment, T&P and machinery shall be arranged by the contractor.

Clause-19	Penalty for each default as mentioned in relevant clause of GCC
Clause-19 C	EE, in charge..... Authority to decide penalty for each default.
Clause-19 D	EE, in charge..... Authority to decide penalty for each default.
Clause-19 G	EE, in charge..... Authority to decide penalty for each default.
	EE, in charge..... Authority to decide penalty for each default.
Clause-19 K	EE, in charge..... Authority to decide penalty for each default.

Clause-25:

i	Conciliator:	ADG Chandigarh Region.
ii	Arbitrator appointing authority:	Chief Engineer-Dehradun
iii	Place of Arbitration:	Dehradun.

Clause-38:

Applicable as given below:

i) (a)	Schedule/statement for determining theoretical quantity of cement & bitumen based on Delhi Schedule of Rates	Delhi Schedule of Rates 2023 with amendments up to the date of submission of bid.
ii)	Variations permissible on theoretical quantities:	
(a)	Cement	
	For works with estimated cost put to tender not more than Rs. 25 Lakh.	3% Plus/Minus
	For works with estimated cost put to tender more than Rs. 25 Lakh.	2% Plus/Minus
(b)	Bitumen for all works.	2.5% Plus only and 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

STANDARD GENERAL CONDITIONS OF CONTRACT

1. General Conditions of Contract (GCC 2023-Maintenance work) for CPWD Works which is available at M/s Jain Book Agency, 4574/15, 2nd Floor, Padam Chand Marg, Darya Ganj, New Delhi-110002 as CPWD publication shall be deemed to be part of the Tender document.
2. The Standard GCC is amended from time to time through issue of OM's under series DG/CON which are available on CPWD official website at <http://www.cpwd.gov.in/Documents/OfficialCirculars/DGCON> and onwards issued up to last date of tender submission shall also be deemed to be part of tender document.

On non-judicial stamp paper of minimum Rs. 100

(Guarantee offered by Bank to CPWD in connection with the execution of contracts)

Form of Bank Guarantee for Earnest Money Deposit /performance Guarantee/Security

Deposit/Mobilization Advance

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

OR**

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

2. We, (indicate the name of the bank)(Herein after referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs..... (Rupeesonly) on demand by the Government within 10 days of the demand.
3. We,.....(indicate the name of the Bank) do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees..... only)
4. We, (indicate the name of the Bank), further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending before any court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the contractor shall have no claim against us for making such payment.
5. We, (indicate the name of the Bank)..... further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor or by any such

Corrections - Nil
Insertions - Nil
Omissions - Nil

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matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

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

Date.....

Witnesses:

1- Signature.....

Name and address

Authorized signatory

Name

Designation

Staff code no.

Bank seal

2- Signature.....

Name and address

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

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

PART – B

GENERAL/SPECIAL CONDITIONS, PARTICULAR SPECIFICATIONS AND SCHEDULE OF QUANTITIES FOR MAJOR COMPONENT OF WORK.

GENERAL CONDITIONS

1. Several documents forming the tender are to be taken as mutually complementary to one another.
2. 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) for civil works with upto date correction slips (hereinafter to be collectively referred to as „CPWD Specifications”). Wherever CPWD Specifications are silent, then the latest BIS Codes/Specifications, National Building Code 2016, MoRTH specification or any other specification shall be followed.
3. The order of preference in case of any discrepancy as indicated in condition No. 8.1 under “Conditions of Contract” given in standard CPWD Contract form may be read as the following:
 - (i) **Nomenclature of items as per Schedule of Quantities**
 - (ii) **General, Special Conditions and Particular Specifications as provided forming part of tender document.**
 - (iii) **CPWD Specifications with up-to-date Correction slips**
 - (iv) **Architectural/Structural drawings**
 - (v) **Indian Standard Specifications of BIS**
 - (vi) **National Building Code - 2016**
 - (vii) **Manufacturer’s specifications.**
 - (viii) **Sound Engineering Practices**
 - (ix) **Decision of Engineer-in-charge**
4. The proposed work is a prestigious project and quality of work is of paramount importance. Contractor shall have to engage well experienced skilled labour and deploy modern T&P and other equipment to execute the work. Many items like stone masonry & stone cladding work, stone flooring, flooring work, wood work, precast RCC coffers, polysulphide / silicone sealant & other specialized works will specifically require engagement of skilled workers having experience particularly in execution of such items.
5. 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.
6. The contractor(s) shall get himself acquainted with nature and extent of the work and satisfy himself about the availability of materials from kiln or approved quarries for collection and conveyance of materials required for construction.
7. 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 and the quoted rates shall be deemed to be inclusive of all such activities.
8. ***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 leviable 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 at his own cost. Nothing, whatsoever, extra shall be admissible on this account over and above the tendered rates.

9. For construction works which are likely to generate malba / rubbish, the contractor shall reuse it at site as directed by the Engineer-in-charge or hand over to recycling agents or dispose of at his own cost to the notified/specified Municipal dumping ground. ***No deduction on this account shall be made from the agency as well as no extra payment will be made to agency if it is disposed at pre-defined location within the campus / Municipal dumping ground.***
10. The contractor shall take all necessary precautions to prevent any nuisance or inconvenience 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.
11. 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.
12. The works shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time by the Engineer-in-Charge or as mentioned in detailed program chart submitted by the contractor after award of work. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available thereof is complete and unambiguous. The discrepancy, if any shall be brought to the notice of the Engineer-in-Charge before execution of the work. The contractor alone shall be responsible for any loss or damage executing by the commencement of work on the basis of any erroneous and or incomplete information.
13. Other specialized agencies will also simultaneously execute and install the works of sub-station / generating sets, air-conditioning, lifts, etc. for the work and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings trench etc. as may be required for such related works for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall also be fixed at time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
14. The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose of the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
15. Some restrictions may be imposed by the security agencies /client on the working and on movement of labour, materials etc in the campus/site and may require to issue identity cards to all persons authorized by contractor to do work / visit the work site. ***The contractor shall be bound to follow all such restrictions / instructions and no claim whatsoever shall on this account will be entertained.***

The loss of time on this account, if any, shall have to be made up by generating additional resources etc. at no extra cost.

- 16. 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, all testing of materials, working during monsoon, working at all depths, height and locations etc. unless specified in the schedule of quantities.**
- 17. Royalty at the prevailing rates wherever payable shall have to be paid by the contractor on the boulders, metal, shingle, sand, local earth/soil 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.**
- 18. 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. The contractor shall deploy adequate resources e.g. manpower, labour, T&P, Plant & Equipment etc. as per actual requirement of work. No damages/compensation shall be payable on account of idle manpower, labour, T&P, Plant and Equipment and loss of profit etc. for whatsoever reason.**
- 20. The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, material, tools and plants and other inputs including all heights/depths, leads and carriages involved in the execution of the item.**
- 21. The contractor (s) shall quote all-inclusive rates including all applicable taxes against the items in the schedule of quantities and nothing extra shall be payable for any of the conditions and specifications mentioned in the tender documents unless specifically specified otherwise.**
- 22. Unless otherwise specified in the schedule of quantities, the rates tendered by the contractor shall be inclusive of all costs & taxes and shall apply to all leads, lifts, depth and height and nothing extra shall be payable on this account.**
- 23. 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.**
- 24. For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). Normally contractors shall not be allowed to execute the RCC, electrical and finishing work at night. Work at night shall, however, be allowed if the site conditions/circumstances so demand. 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 labours and other staff engaged directly or indirectly on the work according to the provisions of the labour Act and other statutory bodies regulations and the agreement entered upon by the contractor with them.**
- 25. The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where however phased delivery of work is contemplated these provisions shall apply separately to each phase.**
- 26. 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.**

Corrections - Nil
 Insertions - Nil
 Omissions - Nil

A.E.-I

27. 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 other buildings, 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.
28. **The Contractor shall bear all incidental charges for all type of cartage/carriage upto execution site, storage and safe custody of materials issued by department/arranged by the contractor.**
29. ***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.***
30. No chase cutting/dismantling of plaster/RCC/CC shall be allowed, so contractor has to execute the electrical work accordingly. 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 brick work. The contractor shall ensure proper coordination of various disciplines viz. sanitary & water supply, electrical, fire-fighting and any other services.
31. ***In case of local Municipal regulations / restrictions by client /non-availability space at site if huts for labours are not allowed to be erected at the site of work, the contractor shall be required to provide such accommodation at suitable place at his own cost and nothing extra shall be paid on this account.***
32. ***Any cement slurry added over base surface for continuation of concreting for better bond is deemed to have been built in the items and nothing extra shall be payable and no extra cement considered in consumption on this account.***
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.***

35. SETTING OUT

- 35.1. Contractor shall provide permanent bench marks and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings and direction of Engineering-in-Charge.
- 35.2. The contractor shall establish, maintain and assume responsibility for grades, lines, levels and bench marks. He shall report any errors or inconsistencies regarding grades, lines, levels,

dimensions to the Engineer-in-Charge before commencing work. Commencement of work shall be regarded as the contractor's acceptance of such grades, lines, levels and dimensions and no claim shall be entertained at a later date for any errors found.

- 35.3. ***If at any time, any error in this respect shall appear during the progress of the work, the contractor shall, at his own expense rectify such error if so, required to the satisfaction of the Engineer-in-Charge. Nothing extra shall be payable on this account.***
- 35.4. The approval by the Engineer-in-Charge of the setting out by the contractor shall not relieve the contractor of any of his responsibilities.
- 35.5. 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.

36. SAFETY PRECAUTIONS

- 36.1. ***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.***
- 36.2. ***The contractor(s) shall erect the barricading of Precoated galvanized iron profile sheet with proper structural support of 6.00-meter height enclosing the full area of constructions as per direction of Engineer-in-charge, and nothing extra will be payable on this account.***
- 36.3. *Entry to the site shall be controlled for proper security of man and materials and to avoid accidents.*
- 36.4. Necessary personal protective and safety equipment's such as helmet, safety shoes & harness, gloves etc. shall be provided to the all-site Engineers, Supervisory staff, labour and technical staff of the contractor by the Contractor at his own cost and to be used at site.
- 36.5. The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards, day and night speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all 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.
- 36.6. 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.
- 36.7. It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 36.8. Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machinery's and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.
- 36.9. 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.

Corrections - Nil
 Insertions - Nil
 Omissions - Nil

A.E.-I

36.10. The contractor shall have to work in pandemic / epidemic conditions such as COVID 19 for which he has to make safety arrangement / measures for the workers / staff and for the premises meant for them, as per guidelines issued by Government and directions issued by Engineer-in-charge from time to time and nothing extra shall be paid on this account.

37. QUALITY ASSURANCE

- 37.1. The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge.
- 37.2. 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.
- 37.3. 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 adv
- 37.4. The contractor shall depute Quality Engineer exclusively for enforcement of quality control. For other staff to be deployed for quality assurance, the contractor may refer to clause 32 under schedule "F".
- 37.5. The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance programmed within two weeks of the award of work. The quality assurance programmed should include method statement for various items of work to be executed along with check lists to enforce quality control.
- 37.6. Wherever work is specified to be done through specialized agencies, their names shall be got approved well in advance from Engineer in charge. Failure to do so shall not justify delay in execution of work. It is suggested that immediately after award of work, contractor should negotiate with concerned specialist agencies and send their names for approval to Engineer in charge within 10 days of issue of letter of award of work
- 37.7. 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.
- 37.8. Samples of various materials required for testing shall be provided free of charges by the contractor.**
- 37.9. Testing charges to be borne by contractor. All expenditure to be incurred for testing of samples e.g. packaging, sealing transportation, loading, unloading etc. including testing charges shall be borne by the contractor.**

37.10. The contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case, he or his authorized representative is not present or does not associate him, the results or such tests and consequences thereon shall be binding on the contractor.

37.11. 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.

37.12. 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.

37.13. Maintenance of Site Registers:

- (i) *All the registers of tests to be carried out at Construction Site or in outside laboratories is maintained by the contractor which is issued to the contractor by Engineer-in-charge*
- (ii) All the Site Registers including Tests registers for tests to be carried out at construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to CPWD field staff.
- (iii) The various registers to be issued to the contractor are:
 - Materials at site account register.
 - Cement register.
 - Master test registers.
 - Cube test register.
 - Paint & chemical register
 - Drawing register.
- (iv) 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.
- (v) 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.***
- (vi) All the tests in field lab at construction site shall be carried out by the Engineering staff deployed by the contractor and shall be 100% witnessed by JE and 50% of tests shall be witnessed by AE –in-Charge. At least 10% of the tests are to be witnessed by the Executive Engineer.
- (vii) Submission of copy of all test registers, material at site register along with each alternate running account bill and final bill shall be mandatory. These registers should be duly checked by division office.

37.14. Removal of Rejected / Sub-standard Materials:

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

- a) 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.
- b) 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.

38. LAND FOR TEMPORARY USE

The land for labour camps, laboratory, storage& batching Plants Hall be arranged by the contractor. The lease/rent charges shall be borne by the contractor. The Engineer-in-Charge shall extend necessary help and issue necessary recommendations etc. to the concerned clients / department for temporary allotment of land during construction period if land is available with them. In such cases, the contractor shall vacate the land after completion of work in same condition as was at the time of allotment.

Note 1: The General conditions detailed above are in addition to additional /special conditions as specified elsewhere in tender document.

Note 2: Nothing extra shall be paid on the account of these General conditions.

SPECIAL CONDITIONS

1. SPECIAL CONDITIONS FOR CEMENT:

1.1 The contractor shall procure Portland Pozzolana Cement (PPC) conforming to IS: 1489 (Part-1) / 43 grade ordinary Portland Cement (OPC) conforming to IS: 269 as required in the work from reputed manufacturers of cement as mentioned in “List showing preferred brands / Manufacturers / Makes” or from any other reputed cement manufacture having a production capacity not less than 1 million Ton per annum as approved by CE, CPWD, Dehradun or his successor. The cement of approved make as aforesaid in 50 kg. bags bearing manufacturer’s name and ISI marking, along with manufacturers test certificate for each lot shall be procured by the contractor. ***However, if the contractor uses higher grade of cement or uses OPC only nothing extra shall be paid. The use of PPC shall be regulated as per the following conditions.***

- a) IS:456-2000 Code of Practice for Plain and Reinforced Concrete (as amended up to date) shall be followed in regard to Concrete Mix Portion and its production as under:
- (i) The concrete mix design shall be done as “Design Mix Concrete” as prescribed in clause-9 of IS 456 mentioned above.

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

- b) 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.
- c) 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 production.

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

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

Corrections - Nil
Insertions - Nil
Omissions - Nil

A.E.-I

- h) While using PPC for structural concrete work, no further admixing of flyash shall be permitted
- 1.2 Supply of cement shall be made 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 the relevant BIS codes. In case the test results indicate that the cement arranged by the contractor does not confirm to the relevant BIS code 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.
 - 1.3 The cement shall be brought at site in bulk supply of approximately **50 tonnes** or as decided by the Engineer-in-Charge.
 - 1.4 The cement godown of the capacity to store a minimum of **2000 bags** of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.
 - 1.5 Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the key of the other lock shall remain with the contractor. 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.
 - 1.6 The cement shall be got tested by the Engineer-in-Charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to test laboratories. ***The cost of tests shall be borne by the contractor:***
 - 1.7. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10A 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 laid therein. In case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate show prescribed shall be made after ensuring structural soundness and stability on the basis of testing. In case of excess consumption, no adjustment needs to made.
 - 1.8. The cement brought to site and the cement remaining unused after completion of the work shall not be removed from site without the written permission of the Engineer-in-Charge.
 - 1.9. The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-Charge. If he does not do show within three days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the contractor.
 - 1.10. Cement bags shall be stored in separate godowns to be constructed by the contractor at his own cost as per sketch (which is only indicative and actual size will depend on the site requirements) given in CPWD specifications with weather proof roofs and walls. Each godown shall be provided with a single shutter door with two locks. The key of one lock shall remain with Engineer-in-charge or his authorized representative and that of the other lock with the authorized agent of the contractor at the site of work so that the cement is issued from the godown according to the daily requirements with the knowledge of both parties and proper account for the same is maintained in the standard proforma.
 - 1.11. ***Separate cement registers showing the receipt of the OPC and PPC shall be maintained at site. The contractor shall construct separate godowns for storage of OPC & PPC at site and nothing extra on this account shall be payable.***

- 1.12. In order to have an effective control over the issue of cement, the following drill should be observed:
- (i) The cement godown(s) should be properly and effectively double locked, keys of one of the locks remaining with the department and that of the other with the contractor.
 - (ii) The pages of the Cement Register should be as per Annexure-30 of CPWD Works Manual for SOP-2019, machine numbered and each page initialed by the Executive Engineer.
 - (iii) Periodical checking of cement godown: The cement godown and the Cement Register should be checked by the Assistant Engineer/Executive Engineer in-charge of the work as per following schedule:
 - a) At least weekly or fortnightly, respectively, in case of works at the headquarters of the Assistant Engineer/Executive Engineer.
 - b) Whenever they visit the site of work in case of works that are located outside the Sub-Divisional/Divisional headquarters.
- 1.13. The contractor shall submit original vouchers from the manufacturer for the total quantity of cement supplied under each consignment to be used in the work.

2 SPECIAL CONDITIONS FOR STEEL REINFORCEMENT BARS:

- 2.1 For reinforced cement concrete or pre-stressed concrete works, the reinforcement bars shall consist of the following grades conforming to IS1786: 2008 (Indian Standard specification for high strength deformed steel bars and wires for concrete reinforcement): Fe 415, Fe 415D, DE 415S, Fe500D, De 500S and Fe 550D.
- 2.2 The contractor shall obtain manufactures certificate stating the process of manufacture, chemical composition and test sheet giving result of each mechanical test applicable to the material purchased and submit it to the Engineer-in-charge. Each test certificate shall indicate the number of the cast to which it applies, corresponding to the number or identification mark to be found on the material.
- 2.3 The Engineer-in-Charge shall get each consigning tested for both chemical composition and physical properties (including bend and re-bend test) as specified in IS:1786 from NABL accredited laboratory or any Government laboratory.
- 2.4 Reinforcement bar is one of the most important building materials. Its quality directly affects the life span, resistance to earthquake and durability of the structure. In order to ensure consistent quality of rebars, the NIT approving authority may prescribe reputed brands like SAIL, RINL, Tata, JSW, JSPL in the list of preferred makes. Only corrosion resistant steel rebars shall be used. 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.
- 2.5 Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.

- 2.6 The steel reinforcement bars shall be brought to the site in bulk supply of **50 tonnes** or as decided by the Engineer-in-charge.
- 2.7. ***The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.***
- 2.8. 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 tonnes	For consignment above 100 tonnes
Under 10mm dia. bars	One sample for each 25 tonnes or part thereof	One sample for each 40 tonnes or part thereof
10mm to 16mm dia bars	One sample for each 35 tonnes or part thereof	One sample for each 45 tonnes or part thereof
Over 16mm dia bars	One sample for each 45 tonnes or part thereof	One sample for each 50 tonnes or part thereof

- 2.9. The contractor shall supply free of charge the steel required for testing including transportation to testing laboratories. ***The cost of tests shall be borne by the contractor.***
- 2.10. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10A of the contract. The theoretical consumption of steel shall be worked out as procedure prescribed in clause 38 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption, no adjustment need to be made.
- 2.11. Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.
- 2.12. Steel bars brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
- 2.13. In case the contractor brings surplus quantity of steel the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in-Charge.
- 2.14. Reinforcement including authorized spacer bars and overlaps shall be measured in length of different diameters, as actually (not more than as specified in the drawing) used in the work, nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
- 2.15. The standard sectional weights referred to as in Table 5.4 under para 5.3.4 in CPWD Specifications for works 2019 Vol. 1 will be considered for conversion of length of various sizes of MS bars, Tor steel bars and TMT bars into standard weight.

- 2.16. Records of actual sectional weight shall also be kept dia-wise & lot-wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as derived actual weight.
- 2.17. ***If the derived weight as in para 2.16 above is lesser than the standard weight as in para 2.15 above, the derived actual weight shall be taken for payment. If the derived actual weight is found more than the standard weight then the standard weight as para 2.15 above shall be taken for payment. In such case nothing extra shall be paid for the difference between the derived actual weight and the standard weight.***
- 2.18. Mixing of different type of steel/different grades of steel shall not be allowed in the same structural members as main reinforcement to satisfy clause 26.1 of IS:456.
- 2.19. Tolerances on Nominal Mass (individual sample) shall be as per table 5.4A of CPWD Specification-2019, Vol-I.
- 2.20. The contractor shall submit original vouchers from the manufacturer for the total quantity of steel supplied under each consignment to be used in the work.

PARTICULAR SPECIFICATIONS

1.0 EARTH WORK

- 1.1 The work shall be done in accordance with CPWD Specifications - 2019 - Vol.I & Vol. II and National Building Code 2016 with up-to-date correction slips.
- 1.2 The contractor shall make at his own cost all necessary arrangements for maintaining water level, in the area where works are under execution low enough so as not to cause any harm to the works or problems in carrying out with the execution and 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 shall be made. This will include water coming from any source, such as rains, accumulated rain water, floods, leakages from sewer and water mains, subsoil water table being high or due to any other cause whatsoever. The contractor shall make necessary provision of pumping, dredging, and bailing out water coming from all above sources and excavation and other works shall be kept free of water by providing suitable system approved by the Engineer-in-charge.
- 1.3 All the major excavation shall be carried out by mechanical excavator. No extra payment shall be made for that.
- 1.4 Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machinery's and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.
- 1.5 *The Jungle clearance and clearance of grass are not payable separately for any type of Earth Work in excavation and Preparation of sub-grade.*

2.0 CONCRETE WORK

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

3.0 RCC/CC WORK (DESIGN MIX CONCRETE)

- 3.1 The work shall be done in accordance with CPWD Specifications - 2019 - Vol.I & Vol. II with up-to-date correction slips.
- 3.2 The contractor shall engage one of the IIT/NIT/Reputed Govt. Engineering Institutions/Approved Laboratories as directed by the Engineer-in-charge at his own expenses for designing the concrete mix in accordance with relevant IS Codes and to conduct laboratory test to ensure the target strength and workability criteria for a given grade of concrete.
- 3.3 In case of change of source or characteristic properties of the ingredients used in the concrete mix during the work, a revised laboratory mix design report conducted at laboratory established at site shall be submitted by the contractor as per the direction of the Engineer-in-Charge.
- 3.4 All cost of mix designing and testing connected therewith including charges payable to the laboratory shall be borne by the Contractor including redesigning of the concrete mix wherever required and directed by Engineer-in-Charge.

3.5 APPROVAL OF DESIGN MIX:

The mix design for a specified grade of concrete shall be done for a target mean compressive strength

$$T_{ck} = F_{ck} + 1.65s$$

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

s = Standard deviation which depends on degree of quality control.

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

GRADE OF CONCRETE	STANDARD DEVIATION(S)
M-25	4.0
M-30	5.0
M-35	5.0
M-40	5.0

- (a) The average strength of each test sets is not less than the specified target means compressive strength (T_{ck}).
- (b) The strength of any specimen cube is not less than 0.85 T_{ck} .
- (c) The concrete mix is required degree of workability and acceptance concrete finish.

Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement

5.0 BRICK WORK

- 5.1 Unless otherwise specified FPS Bricks shall be used in all items of brick work. The classification of bricks brought by the contractor shall strictly conform to CPWD Specifications – 2019 Vol-I & II with up to date correction slips or as specified. The work shall also include for leaving chases
/ Notches for dowels / cramps for all kinds of cladding to come over brick work.

6.0 STONE / MARBLE /GRANITE WORK (OTHER THAN MASONARY)

- 6.1 The execution of stones work shall be in general as per CPWD Specifications - 2019 - Vol.I & Vol. II with upto date correction slips.
- 6.2 **All holes, rebates, recesses etc. for providing fixing and inserts shall be predrilled and precut and worked using precision machine tools. Nothing extra on this account shall be payable.**
- 6.3 **SAMPLES FOR STONE WORK:** Samples of each item of stone work either individually or in combination shall be prepared for approval of Engineer-in-Charge before commencement of work.
- 6.4 Sequence of execution for cladding work shall be suggested by the contractor for approval of Engineer-in-Charge.

7.0 SCAFFOLDING

- 7.1 Double steel scaffolding having two sets of vertical supports shall be provided. The supports shall be sound and strong, tied together with horizontal pieces over which scaffolding planks shall be fixed.

8.0 WOOD WORK

- 8.1 The wood work in general shall be carried out as per CPWD Specifications - 2019 Vol.I& II with upto date correction slips.
- 8.2 The samples of species of timber to be used shall be got approved and deposited by the contractor with the EE before commencement of the work. The contractor shall produce cash vouchers and certificates from kiln seasoning or/and chemical treatment plants about the timber section to be used on the work having been kiln seasoned or/and chemically treated by them.
- 8.3 All fittings and fixtures shall be got approved from the Engineer-in Charge before procurement well in advance and the approved samples shall be kept at site till completion of the work.
- 8.4 Glazing for toilets shall be of translucent type.
- 8.5 The shape and size of beading shall be as per drawings. The joints of beading shall be mitred.

9.0 STEEL WORK

- 9.1 Work shall be carried out as per CPWD Specifications - 2019 - Vol.I& Vol. II with upto date correction slips.
- 9.2 The rate of T- angle iron frame shall include the following.
- (a) M.S. sill/tie of 10mm dia bar welded to T-iron frames to keep the frames vertical in correct position. The sill / tie shall be embedded in floor concrete. No tie is necessary for window frames.
 - (b) Each T – iron frame for doors shall have 4 Nos. M.S. lugs 15x3mm, 10 cm long welded to each vertical member of the frame.
 - (c) M.S. flat 6 x 25mm, 100mm long having threaded holes (No. of flats shall correspond to the no. of butt hinges to be fixed to door / window shutters) shall be welded at appropriate places at the back of the T-iron frames for fixing the required butt hinges to the frame with machine screws.
- 9.3 All welded structural steel work shall be tested for quality of weld as laid down in IS:822-1970 before actual erection if required.

10.0 FLOORING

- 10.1 All work in general shall be carried out as per CPWD Specifications- 2019 - Vol.I& Vol. II with up to date correction slips.
- 10.2 ***Whenever flooring is to be done in patterns tiles/ stone, the contractor shall get samples of each pattern laid and approved by the Engineer-in-Charge before final laying of such flooring for which nothing extra shall be paid.***
- 10.3 ***Different stones/ tiles used in pattern flooring as per the approved architectural drawings and nothing extra for laying pattern flooring shall be paid. No additional wastage if any shall be accounted for any extra payment.***

Corrections - Nil
 Insertions - Nil
 Omissions - Nil

- 10.4 ***The proper gradient shall be given to flooring for toilets, varandah, 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 for this as this is included in the tendered cost.***
- 10.5 ***The rate of items of flooring is inclusive of providing sunken flooring in bathrooms, kitchen etc. and nothing extra on this account is admissible.***
- 10.6 ***POP protection layer shall be laid on all finished floors for protection from damage during execution of other items of work in that area which shall be removed and cleaned just before handing over of the premises for which nothing extra shall be paid.***
- 10.7 The samples of flooring, dado & skirting as per approved pattern shall be prepared & got approved from the Engineer-in-charge before execution of work.
- 10.8 Ceramic Tiles/Vitrified Tiles Work/ Granite stone flooring
- 10.8.1 Work shall be carried out as per CPWD Specifications- 2019 Vol I & II with up-to-date correction slips and as per manufactures specifications.
- 10.8.2 ***Rates shall be inclusive of all operations including labour, material, T&P, scaffolding etc. complete. Nothing extra shall be payable on any account.***
- 10.8.3 ***Single piece granite stone slab shall be provided in treads (with 15 mm pre-moulded nosing) and single piece polished granite of approved shade shall be used for risers. Nothing extra shall be payable on any account***
- 11.0 **STAINLESS STEEL RAILING/HANDRAILS:**
- 11.1 GENERAL: The contractor shall apply all materials, labour, tools, ladders, scaffolding and other equipment necessary for the completion and protection of all stainless-steel work.
- 11.2 MATERIAL: All stainless-steel pipes and plates shall conform to AISI 304 grade and the relevant clauses associated with this grade of steel to be followed.
- 11.3 SURFACE FINISH: Surface finish of all the stainless-steel materials will be in 240 grit satin finish / matt finish.
- 11.4 ACCESSORIES: The S.S. railing to be fixed to staircase and all other location shall be modular and of design and make as approval by the Engineer-in-charge and as per list of approved makes. Fixing will be done by stainless steel expansion bolts of approved size and make as per Engineer-in-charge and welding if required to be done at any isolated place, to be done by using organ welding rods and the surface being duly finished and cleaned by K2 passivation, which is nitric acid plus fluoric acid solution treatment by which the chances of corrosion will be eliminated and any burn out makes on the metal will also be eliminated.
- 11.5 Fixing will be done by stainless steel expansion bolts of approved size and make as per Engineer-in-charge and welding to be done by using organ welding rods and the surface being duly finished and cleaned by K2 passivation, which is nitric acid plus fluoric acid solution treatment by which the chances of corrosion will be eliminated and any burn out makes on the metal will also be eliminated.
- 11.6 COATING MASS: All stainless-steel material will have to be coated by a solution of Inox to avoid finger in prints and avoidance of settlement of environment / atmospheric dust.

12.0 FALSE CEILING WORKS:

The luminaries, air grills / diffusers, signage's 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.***

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 Engineer-in-charge in writing, for water proofing treatment for basement/lower ground floor, underground tank and on roofs.
- 13.3 The finished surface after water proofing treatment for roof slab shall have smooth slope with minimum gradient of 1 in 80.
- 13.4 Before commencement of treatment on roof surface, it shall be ensured that the outlet drain pipes/ spouts have been fixed and the spout opening have been eased and rounded off properly for easy flow of water.
- 13.5 The surface where the water proofing is to be done shall be thoroughly cleaned with wire brushes. All loose scales mortar splashes etc. shall be removed and dusted off. The surface shall be treated with neat cement slurry admixed with proprietary water proof compound to penetrate into crevices and fill up all the pores in the surface.
- 13.6 Curing of water proofing treatment shall be done for a minimum period of two weeks by flooding the water by making compartments etc.

14.0 GUARANTEE

14.1 Water Proofing Work

The work shall carry **Ten Years guarantee** to be reckoned from the date of completion of the entire work under the contract against faulty workmanship, finishing, unsound materials, efficiency of water proofing treatment and other related problems.

Ten Years Guarantee bond in prescribed Performa attached herewith as **Annexure-I** shall be submitted by the contractor which shall also be signed by both the specialized agency and the

contractor to meet their liability / liabilities under the guarantee bond. However, the sole responsibility about efficiency of water proofing treatment shall rest with the main contractor.

10% (Ten percent) of the tender amount of whole water proofing work shall be retained as security deposit and the amount so withheld would be released after ten years from the date of completion of the entire work under the contract, if the performance of the work done is found satisfactory. If any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of receipt of intimation of defects in the work. If the defects pointed out are not attended to within the specified period, the same will be got done from another agency at the risk and cost of contractor.

However, the security deposit deducted may be released in full against bank guarantee of equivalent amount in favor of Engineer in charge, if so decided by the Engineer in charge.

The Security deposit against this item of work shall be in addition to the security deposit mentioned elsewhere in contract form.

14.2 **Precoated Double ribbed trapezoidal Galvalume steel profile sheets Work**

The work shall carry **Ten Years warrantee (to be obtained from the manufacturers and certified by the agency)** to be reckoned from the date of completion of the entire work under the contract against faulty workmanship, finishing, unsound materials, efficiency of roofing work and other related problems.

Ten Years Guarantee bond in prescribed Performa attached herewith as **Annexure-V** shall be submitted by the contractor which shall also be signed by both the manufacturer/supplier (may be taken separately) and the contractor to meet their liability / liabilities under the guarantee bond. However, the sole responsibility about efficiency of this work shall rest with the main contractor.

5% (Five percent) of the tender amount of above profile sheet work including accessories shall be retained as security deposit and the amount so withheld would be released after ten years from the date of completion of the entire work under the contract, if the performance of the work done is found satisfactory. If any defect is noticed during the warrantee period, it shall be rectified by the contractor within seven days of receipt of intimation of defects in the work. If the defects pointed out are not attended to within the specified period, the same will be got done from another agency at the risk and cost of contractor.

However, the security deposit deducted may be released in full against bank guarantee of equivalent amount & validity in favor of Engineer in charge, if so decided by the Engineer in charge.

The Security deposit against this item of work shall be in addition to the security deposit mentioned elsewhere in contract form.

15.0 **FINISHING:**

- 15.1 The work shall be carried out as per CPWD Specifications- 2019 Vol.-I & Vol. II with upto date correction slips.
- 15.2 All painting material shall be brought to the site of work in the original sealed containers. The material brought to the site of work shall be sufficient for at least 30 days of work. The material shall be kept under the joint custody of contractor and representative of the Engineer-in-Charge.

The empty contains shall not be removed from the site till the completion of the work without permission of the Engineer-in-Charge.

- 15.3 Test certificate from manufacturers for each Batch/Lot of paints, primer etc. shall be supplied by the contractor

16.0 LIST OF SPECIALISED ITEMS

16.1 Water proofing treatment work.

For these works, Specialized Agencies shall have to be associated by the agency in case the agency does not possess the requisite eligibility and experience as per NIT conditions to carry out these works.

17.0 PROCEDURE FOR EXECUTION OF THE SPECIALIZED ITEMS:

The contractor shall indicate the name(s) of his associated specialized agencies those fulfilling the eligibility conditions as early as possible and within 10 days of award of work to Engineer-in-Charge for approval *in case, the agency does not possess the requisite eligibility and experience as per NIT conditions to carry out these works.*

The contractors 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 Engineer in Charge.

18.0 ELIGIBILITY CONDITIONS FOR APPROVAL OF SPECIALIZED AGENCIES:

The Contractor(s) shall submit his proposal for the approval of the Engineer-in-Charge, the names of specialized agencies of repute along with their technical capability /experience proposed to be engaged by him. The agency must be currently actively engaged in execution of the said specialized item and must have who have satisfactorily executed similar work during last 7 (Seven) years as below:

(i) Three works each of value not less than 40% of corresponding cost of the specialized items.

or

(ii) Two works each of value not less than 60% of corresponding cost of the specialized items.

or

(iii) One work of value not less than 80% of corresponding cost of the specialized items.

For calculation purpose only, cost of the specialized item as per accepted tendered value of the all the items corresponding to the specialized item under consideration.

For ascertaining the above criteria, contractor shall provide certified copy of Income tax TDS certificates for payments made, work order copy, completion certificate, performance certificate against each completed similar work for verification by Engineer in charge. In case required and directed by Engineer in charge, contractor shall get such similar completed work inspected by Engineer in charge and contractor shall extend all necessary help for same at no extra cost to the department. Decision as to approve or reject the proposed specialized agency based on the inspection of the completed work shall be final and binding on the contractor and no claim, whatsoever, shall be admissible on this account and the contractor shall be required to propose another specialized agency as per the required eligibility criteria.

19.0 LIST OF ACCEPTABLE MAKES OF MATERIALS

Acceptable makes of materials to be used in the work are as given in the table below. In case of non-availability of these makes, the Engineer-in-charge may allow use of alternative makes after approval of NIT approving authority. Only BIS marked materials shall be used in the work. Non-BIS marked materials may be permitted by the Engineer-in-charge only when BIS marked materials are not manufactured.

ANNEXURE-I**GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS
AFTER COMPLETION IN RESPECT OF WATERPROOFING WORKS**

This agreement made this..... day of Two Thousand..... between M/s(hereinafter called the GUARANTOR on the one part) and the PRESIDENT OF INDIA (hereinafter called the Government on the other part)

WHEREAS THIS agreement is supplementary to a Contract No..... dated(Hereinafter called the Contract) and made between the GUARANTOR on the one part and the Government on the other part whereby the contractor inter alia undertook to render the building and structures in the said contract completely water and leak-proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain water and leak proof, for **Ten Years** from the date of completion of the work under the contract.

NOW THE GUARANTOR hereby guarantees that work executed 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 of completion of the work under the contract.

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

- (a) Misuse of roof shall mean any operation which will damage 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 story or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts;
- (c) The decision of the Engineer-in-Charge with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects and in case of any defect being found render the building water proof to the satisfaction of the Engineer-in-Charge 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 execute the water proofing or commits breach there under, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and or cost incurred by the Government, the decision of the Engineer-in-Charge will be final and binding on both the parties.

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

SIGNED, sealed and delivered by OBLIGATOR in the presence of:

1. 2.

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

1. 2.

Corrections - Nil
Insertions - Nil
Omissions - Nil

A.E.-I

ANNEXURE-IV**GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF EXTERNAL WALL PLASTER (READY MIX PLASTER)**

This agreement made this..... day of Two Thousand..... between M/s(hereinafter called the GUARANTOR on the one part) and the PRESIDENT OF INDIA (hereinafter called the Government on the other part)

WHEREAS THIS agreement is supplementary to a Contract No..... dated(Hereinafter called the Contract) and made between the GUARANTOR on the one part and the Government on the other part whereby the contractor inter alia undertook to render the building and structures in the said contract completely intact and in good condition.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain intact and in good condition, for **Three Years** from the date of completion of the work under the contract.

NOW THE GUARANTOR hereby guarantees that work executed by him will render the External Wall Plaster (Ready Mix Plaster) Work intact and in good condition and the minimum life of such External Wall Plaster (Ready Mix Plaster) work shall be **Three years** to be reckoned from the date of completion of the work under the contract.

Provided that the guarantor will not be responsible for damage caused by earthquake or structural defects or misuse of wall or alteration and for such purpose:

- (a) Misuse of wall shall mean any operation which will damage External Wall Plaster (Ready Mix Plaster) work, like scratching and things of the same nature which might cause damage to the external plaster;
- (b) Alteration shall mean painting over existing surface
- (c) The decision of the Engineer-in-Charge with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects and in case of any defect being found render the External Wall Plaster (Ready Mix Plaster) work to the satisfaction of 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 execute the External Wall Plaster (Ready Mix Plaster) work or commits breach there under, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and or cost incurred by the Government, the decision of the Engineer-in-Charge will be final and binding on both the parties.

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

SIGNED, sealed and delivered by OBLIGATOR in the presence of:

- 1. 2.

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

- 1. 2.

Corrections - Nil
Insertions - Nil
Omissions - Nil

A.E.-I

LIST OF ACCEPTABLE MAKES OF MATERIALS FOR CIVIL WORKS

LIST OF ACCEPTABLE MAKES OF MATERIALS

- i) A List of Preferred Brand Names of Various Materials / Products are shown below for usage in execution of Work. However, approved equivalent material of any other Specialized Companies / Firms may also be used, in case it is established that the Brands Specified below are not available in the market and subject to approval of the alternate brand by the Engineer In charge.
- ii) It must be ensured, in general, that all materials to be used in the works shall bear BIS Certification mark. In cases where for a particular material/product, BIS Certification Mark is not available, then the material proposed to be procured can be used subject to the condition that it should conform to CPWD Specifications and relevant BIS codes. In such cases written approval of the Engineer-in - Charge shall be obtained before use of such material in their works.
- iii) The list given below does not absolve the Executing Agency from their responsibility for using these products. It is only after, they are satisfied about the quality and performance, and the products shall be used. To achieve this, proper check on the quality of the product, actually to be used, should be exercised.

S. No.	Materials	List of Approved Make
1.	i) Ordinary Portland Cement/PPC	ACC / Ultratech / Ambuja Cement / J.K. Cement
	ii) White Cement	Birla White / J.K. White / Ferrocement
2.	Reinforcement Steel TMT Bars	SAIL, Tata Steel, RashtriyaIspat Nigam Ltd (RINL), JSW Steel Ltd., Jindal Steel & Power Ltd.,
3.	Water Proofing Compounds, Admixtures, Plasticizer, Super Plasticizer, Curing Compounds	Fosroc / ROFF / Pidilite / CICO / Sika / BASF / Ardex Endura (Bal Endura) / MC Baucheme / Impermo / UltraTech / M/s Perma Const. Aids Pvt. Ltd. / STP Ltd. / Penetron / Rammers
4.	Integral Water proofing compound with cement (For Plaster & Mortar)	Fosroc: Conplast 421 Dr. Fixit: LW+, Sika: Sikacim, Asian Paints: Smart care vitalia, & equivalent product of BASF, CICO, Ardex Endura, STP Ltd.
5.	Water proofing for bathroom/toilet/balcony & other wet areas	Fosroc: Brush Bond, RFX, Nitocete 210 CICO: Tapecrete, Dr. Fixit: Pidifine 2k Sika: Nito Bond, Asian Paint: Damp Block 2 K & equivalent product of BASF, Ardex Endura, STP Ltd., Velosit
6.	Crystalline water proofing compound	Fosroc: Fosroc Crystalline Dr. Fixit: Dr. Fixit Crystalline Sika: Sika Crystalline Asian Paint: Crystalline Quart & equivalent product of BASF, CICO, Ardex Endura, Penetron, STP Ltd., Velosit
7.	Grouts, Tile Adhesive	Latecrete, Kerokoal, BASF, Ardex Endura, Ferrous Crete, STP Ltd., Oswal Industries
8.	Structural Steel	SAIL, Tata Steel, RashtriyaIspat Nigam Ltd (RINL) and JSW Steel Ltd., Jindal Steel & Power Ltd.,

9.	Polycarbonate Sheet	GE Plastic, LEXAN, MG Polyplast
10.	Profile steel sheet	Ezydeck of TATA / Lloyd Superdeck / JSW / Jindal
11.	Particle Board	Action TESA, Greenlam, Merino, Archid Ply
12.	Laminates	Action TESA, Greenlam, Century Ply, Merino, Sunmica, Decolam, Formica, Asislam
13.	Flush door shutters trap	Duro, Century, Durian, Green ply, Archidply, JAYNA (Jain Wood Industries), Kutty flush door, Anchor, Kitlam, National, KITPLY, Kalpataru, Ecoboard NOTE: Only ISI marked flush door shutters to be used.
14.	Fire Rated Doors	Signum Fire Protection, Shakti Metdoor, NAVAIR, Sukri, Promat International, Bhawani Fire Pvt. Ltd.
15.	False Ceiling system	Armstrong / Hunter Douglas / Anutone, Dexune / USG Boral / Saint Gobain / Gyproc / Aerolite / Durlum / Interarch / Gyptech Systems / M/s Complete Infrastructure Pvt. Ltd. Of Make "BOLLARD" / Rajshri Plastiwood (Division of Rajshri Production Pvt. Ltd)
16.	Plywood/Veneer	Green ply, Century, Merino, Duro, Durian
17.	Melamine Polish	Asian Paints Melamine Gold, Wudfin of Pidlite, Timber tone of ICI Dulux.
18.	Floor Spring & Door Closure	Godrej, Dorma, Kich, Autoingress
19.	Aluminum Section	Hindalco, Jindal, Indian Aluminium co.
20.	Anodized Aluminum Hardware (Heavy Duty)	Kilong, Alualpha, Classic, Ebco
21.	Clear/Float/Frosted/Toughened Glass/Refractive Glass	Saint Gobain, AIS, Modiguard, Ashahi Float.
22.	Stainless Steel Railing, Accessories etc.	JINDAL, Dorma, Kich, GEZE, Godrej, Hardwyn , Hettich, HefeLe,Autoingress
23.	S.S. Door /window & Fittings	Jindal / Dorma / Kich / Dorset / Godrej / Hardwyn / Hettich / HefeLe, Autoingress / Rajshri Plastiwood (Division of Rajshri Production Pvt. Ltd)
24.	Silicon based water repellant/Weather Sealant	G.E. Plastics, Dow Corning, Wacker, BASF, Pidilite (Dr. Fixit/Roff), STP Ltd.
25.	Poly-Sulphide Sealant	Fosroc, Pidilite, Dow Corning, Wacker, BASF/STF, STP Ltd.
26.	Mosaic tiles/Chequered Tiles	Ultra Tiles, NITCO, Hyper (Mayur), Pavcon, Oswal Industries
27.	Ceramic wall Tiles/Antiskid floor tiles (Only premium range)	Kajaria, Somany, RAK, NITCO, Johnson, AGL (Asian), Orient Bell Note: The tiles manufactured at mother plant only to be used.
28.	Vitrified Tiles (Antiskid/Matt/Glazed) (only GVT vitrified tile permitted)	Kajaria, Somany, RAK, NITCO, Johnson, AGL (Asian), Orient Bell Note: The tiles manufactured at mother plant only to be used.
29.	Paver block &Kerb Stone	Pavcon, Hyper Tiles/Dynamic Industries/Mayur, KK, Power, Sharda, Navya, Spectra, Elegant, Kseries, Paegant, Oswal Industries
30.	Dash/Anchoring Fasteners	HILTI, Fischer, Bosch, Wurth.
31.	Cement Based Wall Putty	Birla wall care, JK White, Berger, Asian Paints, Ferrous

32.	Oil Bound Washable Distemper/ Dry Distemper	Asian Paints / Nerolac / Berger / Dulux ICI
33.	1st Quality Acrylic Distemper/ Dry Distemper	Asian Paints / Nerolac / Berger / Dulux ICI
34.	Acrylic Emulsion Paints	Asian Paint (Tractor Aqua Lock Paint) / Berger: Commando or equivalent paints of Nerolac or ICI-Dulux
35.	Plastic Emulsion Paints	Asian Paints: (Apolite Heavy Duty Premium Emulsion Paint) / Nerolac: Beauty Gold / Berger: Easy Clean / ICI-Dulux: 3 in 1
36.	Premium Acrylic Emulsion Paints (Interior)	Asian Paints: (Royal Luxury Emulsion), Apolite, Tractor Nerolac: Impression Berger: Silk ICI Dulux: Velvet touch
37.	Textured Exterior Paint	Asian Paints, Nerolac, Berger Paints, Ultratech Paints, Luxture
38.	Acrylic Smooth Exterior Paint	Asian Paints: (Apex/Professional Premium Exterior Emulsion) Nerolac: XL Berger: Weather Coat ICI-Dulux: Weather Shield
39.	Premium Acrylic Smooth Exterior Paint with Silicon additive.	Asian Paints: Apex Ultima Nerolac: XL Total Berger: Weather Coat all guard ICI-Dulux: Whether Shield max
40.	Cement Primer	Asian: Apolite Premium gloss enamel Nerolac: Synthetic Hi gloss Berger: Luxol Hi gloss ICI-Dulux: Gloss Synthetic enamel
41.	Steel Primer (Red Oxide Zinc Chromate Primer)	Nerolac, Berger, BP White (Berger), Decoprime WT(Asian), White primer (ICI)
42.	Wood Primer	Nerolac, Paints (Wood Primer- White/Pink), Berger ICI, Nerolac
43.	Epoxy Paint	Asian, Nerolac, Berger, ICI, Kansai Akzo Nobel, Pidilite, CICO, Sika
44.	Fire Paint	Asian Paints, Akzo Nobel Coatings India Ltd., PROMAT, Jotun
45.	G.I./ M.S. Pipe	Tata, Jindal (Hisar), Prakash Surya
46.	G.I. Fittings	Unik, AVR, Zoloto
47.	HDPE Pipes	Reliance, Jain Pipes, ORIPLAST, Supreme
48.	DI PIPES	Electrosteel, Jindal, TATA DUCTURA, Kapilansh, Kesoram
49.	DI Fittings	Electrosteel, Jindal, TATA DUCTURA, Kapilansh, Kesoram
50.	CPVC pipe and Fittings	Astral, Supreme, Prince, Ashirwad, Savoir Faire Manufacturing Co. Pvt. Ltd. (SFMC)
51.	Centrifugally Cast spun) Iron Pipes & Fittings	NECO / SKF / RIF / Kapilansh / Electrosteel

52.	C.I. Manhole covers, frames, & GI Gratings	NECO, BIC, SKF, RPMF, RAJ Iron Foundary Agra
53.	SFRC Manhole covers & gratings	K.K. Jain PRAGATI
54.	CP Brass Fittings (Superior Range)	Grohe, Roca, Kohler
55.	CP Brass Fittings (Normal Range)	Hindware / Somany / Jaquar / Parryware / PRIMA (ISI marked) / CERA / ESS-ESS / Plumber / Kingston
56.	Mirror Glass	Atul, Modi Guard, Golden Fish, Asahi, Saint Gobain
57.	Sanitary ware, Fittings & accessories (Superior Range)	Kohler / Roca / Jaguar / Somany / Kajaria / Hindware / Kartar Valves Pvt. Ltd
58.	Sanitary ware, Fittings & accessories (Normal Range)	CERA / Parryware / Jaquar / Hindware / Kingston
59.	CPVC pipe & fitting	Astral, Supreme, Prince, Ashirwad, Flowguard, Finolex, RAVINDRA (HISAR) of M/s Ajay Polymers
60.	Stainless Steel sink	Neelkanth, Niralli, Jyna, Hindware, Frankee, Cobra, Kingston, Prayag
61.	RCC Pipes (NP-2)	Lakshmi, Sood & Sood, Jain Pipe Co.(Newai), Mahaveer Enterprises (Newai), Work well spun pipes pali, Nagpur cement product, Eagle pipe Kolhapur
62.	UPVC Doors & Windows (PROFILE makers & their authorized Fabricators only)	Fenesta / KOMERLING / REHAU / Aluplast / Jangid Engg Works / Wintech / Duroplast / Saint Gobain / Rajshri Plastiwood (Division of Rajshri Production Pvt. Ltd)
63.	Extruded Polystyrene Insulation Board	Dowcorning / Supreme / Texas / Analco
64.	Heat Resistant Tiles	Swastik / Thermatek / OSWAL
65.	Gypsum Plaster	Ferrous Crete, Gyproc - Saint Gobain, Ultra Tech, USG Boral, India Gypsum, Aerolite
66.	Floor hardener	Ironite / Ferrok / hardonate
67.	Modular Expansion Joint	Herculus / Sanfield India Ltd. Vexcolt / Kemper (Kemperol)
68.	Glass wool	Dow Corning U.P., Twiga, Isover
69.	UPVC doors and window hardware	Rotto / Dorset / Kinlong / Rajshri Plastiwood (Division of Rajshri Production Pvt. Ltd)
70.	AAC Block Adhesive	Ultra Tech / Ardex Endura / Ferrous Crete / Bostik / M/s Delite Blocks Pvt. Ltd. / Siporex
71.	Ready Mixed Plaster	ACC / RMC India / Ultratech / Nuvoco / VALTECH / Armine / Ferrous Crete
72.	Aluminum Composite Panel	Alpolic / Aluco Bond / Reynobond / Euro bond / Al-strong / Virgo
73.	Designer colored cement concrete floor tiles for outdoor use.	Ultra / Nitco / Hindustan / Raj-Tiles / OM Tiles
74.	Fiber Glass Shelf	Kamal, Bath King.
75.	Float Glass	Modi Float, Saint Gobain, Tata.
76.	FRP Shutters	Fibre Glass Engineers, Raipur, Om Ventures (E.P.Kamat Group)
77.	Glass Mosaic Tile	Bissazza / Saon.
78.	Hydraulic Door Closer/ Spring	Dorma, Kich, Godrej, Hettich, HefeLe, Autoingress

79.	Mineral Fiber Ceiling	Armstrong / Anutone / Daiken / Aerolite / USG Boral M/s Complete Infrastructure Pvt. Ltd. Of Make “BOLLARD”
80.	M. S. Pipe	Kesoram, Electro Steel.
81.	Acoustic panels and ceiling	Armstrong / Anutone, Gyptech Systems / M/s Complete Infrastructure Pvt. Ltd. Of Make “BOLLARD”
82.	Clay tiles on Roof	Kenjai / Johnson.
83.	Orissa Pan	Hindware, Cera, Somany, Jaguar, Parryware
84.	PPR Pipes	SFMC / Safe / Pioneer.
85.	Plastic Connection Pipe	Parryware, Kamal, Delux, Somany, Hindware
86.	PVC Rain Water Pipe & Fitting IS:13592 Type A & B	Finolex / Supreme / Plasto / Ashirvad / RAVINDRA (HISAR) of M/s Ajay Polymers
87.	PVC Shutter	Rajshri, Sintex, Akal America.
88.	PVC Tank	Sintex, Star, Lotus, Plasto.
89.	SS Railing	Metallica India, Stark steel Fabricator, Mobel Hardware, ICICH Industries, Essal, Kich, D-Line, Godrej, Dorma
90.	Towel Ring/Towel Rod/Towel Rack	Jaquar, Marc, Roca, Kohler
91.	RMC (Ready mix concrete)	ACC, RMC India, Ultratech, Nuvoco
92.	Mangalore Tiles	Johnson / Kenjai / Monier
93.	RCC Door Frame	Ventura / Mahalaxmi
94.	Galvalum Sheet	Jindal / Tata Bluescope / JSW / Interach / Multicolour
95.	PTMT	Prayag / Supreme / Kingston
96.	Anti Carbonation Paint	Dulux (ICI) / Asian / Berger
97.	Fly Ash Bricks	C“Cure / Shree adhe Enterprises
98.	AAC Block	Ultratech / Aerocon from HIL / Siporex India limited / Emmkay Greens / Ultralite,
99.	PUF sandwich Panel	Sintex / Llyod / Jindal / Multicolour / Interarch
100.	Polymer Based Contentious Water Proof Coatings/Polyurea treatment	Ardex Endura / Dow / BASF / Mc-Bauchemie / Sika / Fosroc / Pidilite / Berger / Asian Paint Smartcare / Xterra/ velosit
101.	Fire Rated Glass	Saint Gobain / Pyran Schott / Pilkington
102.	Hardware/Fixtures/Fittings for Fire rated doors including Glazed fire rated doors	Briton / AssaAbloy (King) / Dormakaba
103.	Aluminium Door/Window/Partitions Fabricators	AluK / Kalco / Schuco / Reynaer / Technal

- Note:
- 1) In case approved make for any material/item is not specified in the NIT, the decision of finalizing a particular brand shall rest with EE-Dehradun, CPWD, Dehradun
 - 2) In case of non-availability of a particular material/item from specified manufacturers/make, the decision of CE-Dehradun, CPWD, Dehradun in selection of alternate manufacturer/make is final.
 - 3) Contractor shall provide minimum three samples of three different makes for each item of work as per the list of approved makes for the approval of Engineer-in-charge. It shall be the discretion of Engineer-in-charge to approve any of the three samples to be submitted by the contractor and decision of Engineer-in-charge in this regard shall be final and binding and nothing extra, whatsoever, shall be admissible on this ground.

SCHEDULE OF QUANTITIES

Name of work: Construction of Parking Shed for old and new Guest House in Hathibarkala Estate, Survey of India, Dehradun. (SH: Sewer Line and Septic Tank).

SL No	Description	Qty	Unit	Rate	Amount
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
1.1	All kinds of soil.	25.00	cum	273.53	6838.00
2	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:				
2.1	All kinds of soil				
2.1.1	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	52.00	metre	370.05	19243.00
3	Providing and laying in position cement concrete of specified grade excluding the cost of cantering and shuttering - All work up to plinth level:				
3.1	1:5:10 (1 cement: 5 coarse sands (zone-III) derived from natural sources: 10 graded stone aggregate 40 mm nominal size derived from natural sources)	5.00	cum	6850.01	34250.00
4	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of cantering, shuttering, finishing and reinforcement - All work up to plinth level:				
4.1	1:1.5:3(1 cement: 1.5 coarse sand (zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources)	3.00	cum	9505.63	28517.00
5	Cantering and shuttering including strutting, propping etc. and removal of form for				
5.1	Suspended floors, roofs, landings, balconies and access platform	25.00	sqm	974.39	24360.00
5.2	Lintels, beams, plinth beams, girders, bressummers and cantilevers	10.00	sqm	773.84	7738.00
6	Edges of slabs and breaks in floors and walls				
6.1	Under 20 cm wide	15.00	metre	219.15	3287.00
7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to plinth level.				
7.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	400.00	kg	113.34	45336.00
8	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
8.1	Cement mortar 1:4(1 cement :4 coarse sand)	15.00	cum	7745.37	116181.00

8.2	Cement mortar 1:6(1 cement :6 coarse sand)	5.00	cum	7494.85	37474.00
9	12 mm cement plaster of mix:				
9.1	1:6 (1 cement: 6 coarse sand)	70.00	sqm	361.12	25278.00
10	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete:				
10.1	100 mm diameter	28.00	metre	466.15	13052.00
10.2	150 mm diameter	28.00	metre	731.17	20473.00
11	Providing and laying cement concrete 1:5:10 (1 cement: 5 coarse sands: 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:				
11.1	100 mm diameter S.W. pipe	30.00	metre	1013.80	30414.00
11.2	150 mm diameter S.W. pipe	30.00	metre	1239.83	37195.00
12	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
12.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):				
12.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	4.00	each	13419.81	53679.00
13	Extra for depth for manholes:				
13.1	Size 90x80 cm				
13.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	0.50	metre	9274.08	4637.00
14	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.				
14.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2.00	each	28227.56	56455.00
	Total				5,64,407.00

**Assistant Engineer,
Dehradun Sub-Division-I,
CPWD, Dehradun**