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# Name of work: Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work).

NIT No.: 04/2024-25/SE/CCU/CED-II/Dehradun (Recall)

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Executive Engineer, CED-II, CCU (For and on behalf of the President of India)

# **PART-A**

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

The Executive Engineer, CED-II, Civil Construction Unit (CCU), Ministry of Environment, Forest & Climate Change (MoEF&CC), PO- New Forest, FRI Campus, Dehradun -248006 (emaileeced2ccu-mef@nic.in, Mo. 9693020115) on behalf of President of India invites online Percentage rate bids from approved and eligible contractors of CPWD for the following work: -

| NIT No.   | 04/2024-25/SE/CCU/CED-II/Dehradun (Recall)                                   |
|---|--|
| Name of Work  | Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work). |
| Location  | Dehradun   |
| Estimated cost put to tender  | Rs. 2,13,30,323/-  |
| Earnest Money   | Rs. 4,26,606/-   |
| Period of Completion  | 06 Months  |
| Last time & date of submission of online bid, copy of receipt of deposition of original EMD and other documents as specified in Notice Inviting e-Tender. | 03:00 PM on 25.10.2025   |
| Time date of opening of bid   | 03:30 PM on 25.10.2025   |

<sup>\*\*</sup>To be filled by Executive Engineer, CED-II

- 1) The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 2) Information and Instructions for bidders posted on websites shall form part of bid document.
- 3) The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of opening of bid is extended, the enlistment of contractor should be valid on the original date of opening of tender.
- 4) The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website https://etender.cpwd.gov.in and https://cpwd.gov.in free of cost.

- But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD/CCU 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 Receipts or/ and Bank Guarantee including e-Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of Executive Engineer as mentioned in NIT, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/ AE), CPWD/CCU and other documents as specified.
- 6) Those contractors who are not registered or have not updated their profile on the website mentioned above, are required to get registered / update their profile beforehand. The necessary training materials including the videos with step-to-step process are available on download section of https://etender.cpwd.gov.in.
- 7) The intending bidder must have valid Class-III digital signature certificate with encryption key (combo type) to perform any operations / transactions on the e-tendering portal / website and the bidder should download and install the eMsigner on their system as per instructions available on download section of https://etender.cpwd.gov.in.
- 8) On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 9) Contractor can upload documents in the form of JPG format and PDF format.
- 10) Contractor must ensure to quote rate in the prescribed column(s) meant for quoting rate in figures appears in yellow colour and the moment rate is entered, it turns sky blue. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).

However, if a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer. The department reserves the right to reject any prospective bid without assigning any reason.

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

- 1) Insurance Surety Bond, Demand Draft/ Account Payee Banker's Cheque / FDR/ Bank Guarantee of any commercial Bank against EMD.
- 2) Enlistment Order of the Contractor.
- 3) Receipt of deposit of EMD in any divisions of CPWD/CCU, MoEF&CC
- 4) PAN Card issued by Income Tax Department.
- 5) 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 under taking 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 CCU, 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 CCU or GST department in this regard".

6) Any other Document as specified in the NIT.

Executive Engineer, CED-II, CCU (For and on behalf of the President of India)

#### **CPWD 6 FOR E- TENDERING**

1. Percentage rate bids are invited on behalf of President of India from approved and eligible contractors of CPWD for the work "Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work)".

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 of **Rs. 2,13,30,323/-.** This estimate, however, is given merely as a rough guide.
- 2. Agreement shall be drawn with the successful bidders on prescribed Form No. **CPWD 7** which is available as a Govt. of India Publication and also available on website **www.cpwd.gov.in.** Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 3. The time allowed for carrying out the work will be **06** (**Six**) **months** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- 4. The site for the work is available on as it is where it is basis. The architectural drawings shall be made available in phased manner, as per requirement of the same and as per approved programme of completion submitted by the contractor after award of work.
- 5. The bid document consisting of Plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract (GCC) Form can be seen on website <a href="https://etender.cpwd.gov.in">https://etender.cpwd.gov.in</a> or www.cpwd.gov.in free of cost.
- 6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
- 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
- 8. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee including e- Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks (drawn in favour of **Executive Engineer, CED-II, CCU, MoEF&CC, New Delhi**) shall be scanned and uploaded on 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/CCU, MoEF&CC within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing EE/AE) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT. A part of earnest money is acceptable in the form of bank guarantee also. In such case, minimum 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in

EE (P)

shape prescribed above, and balance may be deposited in shape of Bank Guarantee including e- Bank Guarantee of any Commercial bank having validity for a period of 90 days for single bid works and 180 days for two bid system or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders. The earnest money given by all the tenderers except the lowest tenderer shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. However, in case of two/three bid system, earnest money deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation. Copy of Enlistment Order and certificate of work experience and other documents as specified in the notice inviting e- tender shall be scanned and uploaded on the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in e- tender notice shall have to be submitted by the lowest bidder 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, who has deposited EMD with any division of CPWD/CCU, MoEF&CC and other documents scanned and uploaded are found in order.

- 9. The bid submitted shall become invalid and e-Tender processing fee (if applicable) shall not be refunded if:
  - (i) The bidder is found ineligible.
  - (ii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
  - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
  - (iv) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer
- 10. The contractor whose bid is accepted will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in schedule E and within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. If applicable and also ensure the compliance of aforesaid provisions by the subcontractors, if any engaged by the contractor for the said work within the period specified in Schedule F.
- 11. The description of the work is as follows: "Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work)."

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

- 12. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
- 13. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- 14. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 15. The contractor (enlisted or non-enlisted in CPWD) shall not be allowed to participate in the tender for work(s) in the CPWD/CCU Zonal/Circle /Division/Sub-division responsible for award and/or execution of contract(s) in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the Chief Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working or are subsequently employed by him and who are near relatives to any Officer working in the CPWD/CCU. Any breach of this condition by the contractor would render him liable to be debarred for a period up to two years from tendering in CPWD/CCU as decided by the accepting authority mentioned in Schedule F and his decision will be excepted from clause 25.
- 16. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- 17. The bid for the work shall remain open for acceptance for a period of 30 (Thirty) days from the date of opening of tenders.

- i) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department within 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
- ii) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
- iii) In case of forfeiture of earnest money as prescribed in para (i) and (ii) above, the bidders shall not be allowed to participate in the rebidding process of the same work.
- 18. This notice inviting Bid shall form a part of the contract document. The successful bidders/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:
  - 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 C.P.W.D. Form 7 or other Standard C.P.W.D. Form as applicable.
  - iii) General Conditions of Contract 2023 for Construction works, Central Public Works Department, as corrected up to last date of submission of bids.
- 19. The main contractor has to associate agencies for specialized component(s) conforming to eligibility criteria as defined in the bid document and has to submit detail of such agency(s) to Engineer-in-Charge of relevant component(s) within prescribed time. Name of the agency(s) to be associated shall be approved by Engineer-in-Charge.
- 20. In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in- Charge. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-Charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- 21. The main contractor has to enter into MoU with agency(s) associated by him/ Copy of such MoU shall be submitted to Engineer in charge. In case of change of associate contractor, the main agency(s) has to enter into MoU/agreement with the new contractor associated by him.

Executive Engineer, CED-II (For and on behalf of the President of India)

## GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE

#### PERCENTAGE RATE BID AND CONTRACT FOR WORKS

Tender for the work of "Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work)."

- i) To be uploaded by 15:00 hours on 25.10.2025 to/upload at
- ii) To be opened in presence of tenderers who may be present at 15:30 hours on 25.10.2025 in the office of in the office of the Executive Engineer, CED-II, Civil Construction Unit (CCU), Ministry of Environment, Forest & Climate Change (MoEF&CC), PO- New Forest, FRI Campus, Dehradun -248006.

\*\* To be filled by EE, CED-II

#### **TENDER**

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

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

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

A copy of earnest money deposit receipt of prescribed amount deposited in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by a Commercial Bank, is scanned and uploaded. If I/We, fail 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 (c) of the tender form. 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.

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.

EE (P)

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

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

| W/www.  | Signature of cont<br>Postal Address<br>Telephone No.<br>Fax<br>E-MAIL | **           |
|---|---|--------------|
| Witness: Address:   |   |              |
| Occupation:   |   |              |
| ** To be filled by Bidder   |   |              |
| ACCEPTANCE  |   |              |
| The above tender (as modified by you as provide accepted by me for and on behalf of the IRs | President of India f  | for a sum of |
| ) The letters referred to below shall form part of this co                                  | ontract agreement: -  |              |
| (a)*<br>(b)*<br>(c)*  |   |              |
| For   | & on behalf of Preside  | ent of India |
|   | Signature   | *            |
| Dated:**  | Designation   |              |
| * To be filled by Executive Engineer  |   |              |

### SCHEDULE - 'A', 'B', 'C', 'D', 'E' & 'F' FOR THE WORK

#### **SCHEDULE 'A'**

Schedule of Quantities -

As per separate sheets attached

#### **SCHEDULE 'B'**

Schedule of materials to be issued to the contractor:

| S.<br>No. | Description of item | Quantity | Rates in figures & words at which the material will be charged to the contractor | Place of issue |
|-----------|---------------------|----------|--|----------------|
| 1         | 2                   | 3        | 4  | 5              |
| NIL       |                     |          |  |                |

#### **SCHEDULE 'C'**

Schedule of Tools and Plants to be hired to the contractor:

| S. No. | Description | Hire charges per day | Place of issue |
|--------|-------------|----------------------|----------------|
| 1      | 2           | 3                    | 4              |
| NIL    |             |                      |                |

#### **SCHEDULE 'D'**

| Extra schedule for specific requirements/document for the work, if any: | As per tender documents |
|---|-------------------------|
|---|-------------------------|

#### SCHEDULE 'E'

| Reference to General<br>Conditions of contract | General Conditions of Contract 2023 for Construction works, Central Public Works Department, as amended up to last date of submission of bids. |
|--|--|
| Name of Work                                   | Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work).   |
| Estimated cost of the work                     | Rs. 2,13,30,323/-  |
| Earnest money                                  | Rs. 4,26,606/-   |
| Performance Guarantee                          | 5.00% of tendered amount   |
| Security Deposit                               | 2.50% of tendered amount.  |

#### **SCHEDULE 'F'**

#### GENERAL RULES AND DIRECTION

| Officer inviting tender             | Executive Engineer, CED-II, Civil Construction Unit |  |
|-------------------------------------|---|--|
|                                     | (CCU), Ministry of Environment, Forest & Climate    |  |
|                                     | Change (MoEF&CC), PO- New Forest, FRI Campus,       |  |
|                                     | Dehradun -248006.                                   |  |
| Maximum percentage of quantity of   |   |  |
| items of work to be executed beyond | Saa at annuaniata alauga                            |  |
| which rates are to be determined in | See at appropriate clause                           |  |
| accordance with Clause 12.2 (c)     |   |  |

### **Definitions:**

| 2(vi)   | Engineer-in-Charge  | Executive Engineer, CED-II, CCU, MoEF&CC or his or his legal successor or Assignee thereof.  |
|---------|---|--|
|         |   |  |
| 2(viii) | Accepting Authority   | Superintending Engineer, CCU, MoEF&CC or his or his legal successor or Assignee thereof  |
| 2(x)    | Percentage on cost of materials<br>and labour to cover all<br>overheads and profits | 7.5% for items of supply of materials and 15% for execution of items   |
| 2(x)(a) | Standard Schedule of Rates  |  |
|         | Civil Works   | DSR-2023 with correction slips issued upto last date of submission of bids and Market Rates  |
| 2(xi)   | Department:   | Civil Construction Unit, MoEF&CC   |
| 9(ii)   | Standard CPWD Contract Form   | CPWD Form 7 of General Conditions of Contract 2023 for Construction works, Central Public Works Department, as modified and corrected up to last date of submission of bids. |

| Clause 1 |  |  |
|----------|--|--|
| i)       | Time allowed for submission of Performance<br>Guarantee, Programme Chart (Time and<br>Progress) and applicable labour licenses,<br>registration with EPFO, ESIC and BOCW<br>Welfare Board or proof of applying thereof from<br>the date of issue of letter of acceptance | 7 Days   |
| ii)      | Maximum allowable extension with late fee @0.1% per day of Performance Guarantee amount beyond the period as provided in i) above  | 3 Days   |
| Clause 2 | Authority for fixing Compensation under Clause 2   | Superintending Engineer, CCU,<br>MoEF&CC or his legal<br>successor or Assignee thereof |
| Clause 5 | Number of days from the date of issue of letter of acceptance for reckoning date of start  | 7 Days   |

### Mile stones as per table given below

| Sl.<br>No. | Description of mile stone (s)                          | Time allowed<br>(From date<br>of start) | Amount to be withheld in case of Non-achievement of each Mile stone(s) |
|------------|--|---|--|
| 1          | Work done amounting to 25% of accepted tender amount.  | 1.5 Months                              | 1.25 % of accepted tendered amount.                                    |
| 2          | Work done amounting to 50% of accepted tender amount.  | 3 Months                                | 1.25 % of accepted tendered amount.                                    |
| 3          | Work done amounting to 75% of accepted tender amount.  | 4.5 Months                              | 1.25 % of accepted tendered amount.                                    |
| 4          | Work done amounting to 100% of accepted tender amount. | 06 Months                               | 1.25 % of accepted tendered amount.                                    |

Time allowed for execution of work: 06 (Six) Months

### **Authority to decide:**

| i)   | Authority to convey the decision of          | Executive Engineer, CED-II, CCU, MoEF&CC or his legal successor or Assignee thereof |
|------|--|---|
|      | shifting of milestone and extension of time: | or his legal successor of Assignee thereof  |
|      | time:  |   |
| ii)  | Authority to decide rescheduling of mile     | Superintending Engineer, CCU, MoEF&CC or  |
|      | stones and extension of time.                | his legal successor or Assignee thereof   |
|      |  |   |
| iii) | Shifting of date of start in case of delay   | Superintending Engineer, CCU, MoEF&CC or  |
|      | in handing over of site                      | his legal successor or Assignee thereof   |
|      |  |   |

### Schedule of handing over of site

| Part   | Portion of site                              | Time period for handing over reckoned from date of issue of letter of intent |
|--------|--|--|
| Part A | Portion without any hindrance                | On date of commencement  |
| Part B | Portions with encumbrances                   | NA   |
| Part C | Portions dependent on work of other agencies | NA   |

# **CLAUSE 5.4:** Schedule of rate of recovery for delay in submission of the modified programme in terms of delay days

| S.N. | Contract Value  | Recovery<br>Rs / Per day |
|------|---|--------------------------|
| 1.   | More than Rs. 1 Crore but less than or equal to Rs. 5 Crore | 1000                     |

#### Clause 6

| i) Mode of measurement | CMB |
|------------------------|-----|
|------------------------|-----|

#### 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   | Rs. 40 Lakhs |
| eligible to interim payment   |              |

#### Clause 7A

| No Running Account Bill shall be paid for the work till the applicable |     |
|--|-----|
| labour licenses, registration with EPFO, ESIC and BOCW Welfare Board,  |     |
| whatever applicable as submitted by the Bidder to the Engineer-in-     | Yes |
| Charge.  |     |
|  | 1   |

### Clause 8 A: Completion plans to be submitted by the contractor

| Authority to decide compensation on account if | Superintending Engineer, CCU,  |
|--|--------------------------------|
| contractor fails to submit completion plans    | MoEF&CC or his legal successor |
|  | or Assignee thereof.           |
|  |                                |

#### Clause 10 A

List of testing equipment to be provided by the contractor at site lab.

As per details attached in the relevant pages of this bid document

#### Clause 10 B

| Clause 10B (ii)                              |    |
|--|----|
| Whether Clause 10 B (ii) shall be applicable | No |

### Clause 10 C

| Whether Clause 10 C shall be applicable                   | Yes |
|---|-----|
| Component of labour expressed as percent of value of work | 25% |

# Clause 10CC – Not Applicable

#### Clause 11:

| Specifications to be followed for execution of civil work  | : | CPWD Specifications 2019 Volume-I and II with correction slips issued upto last date of submission of bids. |
|--|---|---|
| Building information model (BlM) is<br>applicable and BIM professional to be<br>deployed by contractor (NlT approving<br>authority to write Yes or No) | : | N.A.  |

#### **Clause 12: Construction work**

| 12.2 (c) | Deviation limit beyond which clause 12.2 (c) shall apply for building work.  | •• | 100% |
|----------|--|----|------|
|          | i) Deviation limit beyond which clause 12.2 (c) shall apply for foundation work (except items mentioned in earth work sub head in DSR and related items) |    | 100% |
|          | ii) Deviation limit for items mentioned in earth work sub head of DSR and related items  | •  | 100% |

#### Clause 16:

| Competent authority for deciding | : | Superintending Engineer, CCU, MoEF&CC or |
|----------------------------------|---|--|
| reduced rates                    |   | his legal successor or Assignee thereof  |

#### **Clause 18:**

List of Mandatory Machinery, tools & plants to be deployed by the contractor at site: -

As per details attached in the relevant pages of this bid document

#### Clause 19

| Clause 19 C | Authority to decide penalty for each default | Executive Engineer, CED-II, CCU, MoEF&CC or his legal successor or Assignee thereof |
|-------------|--|---|
| Clause 19 D | Authority to decide penalty for each default | Executive Engineer, CED-II, CCU, MoEF&CC or his legal successor or Assignee thereof |
| Clause 19 G | Authority to decide penalty for each default | Executive Engineer, CED-II, CCU, MoEF&CC or his legal successor or Assignee thereof |
| Clause 19 K | Authority to decide penalty for each default | Executive Engineer, CED-II, CCU, MoEF&CC or his legal successor or Assignee thereof |

### Clause 25: Settlement of disputes by Conciliation and Arbitration

| Conciliator:                    | : | SE, CCU or his legal successor or Assignee thereof                      |
|---------------------------------|---|---|
| Arbitrator Appointing Authority | : | Chief Engineer, CCU, MoEF&CC or his legal successor or Assignee thereof |
| Place of Arbitration            | : | New Delhi   |

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

| Sl.<br>No. | Minimum<br>Qualification of<br>Technical<br>Representative | Discipline         | Designation                                      | Minimum<br>experience   | Number | Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32 |
|------------|--|--------------------|--|---|--------|--|
| 1          | Graduate Engineer  | Civil              | Project Manager                                  | 5<br>(and having<br>experience of one<br>similar nature of<br>work) | 1      | Rs. 50,000/- per<br>month per person   |
| 2          | Graduate Engineer<br>Or<br>Diploma Engineer                | Civil + Electrical | Project planning/<br>quality/billing<br>Engineer | 2 or 5 years<br>respectively  | 1+1    | Rs. 30,000/- per month per person  |

- 1) Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.
- 2) Diploma holder with minimum 10-year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50 % of requirement of degree engineers.
- 3) Minimum recovery for not deploying Building information Model (BlM) professional shall be Rs. two lac per month or as mentioned above, whichever is higher.

Clause 38

| (i)  | (a) | Schedule/statement for determining theoretical        | DSR 2023 with Amendments/        |
|------|-----|---|----------------------------------|
|      |     | quantity of cement & bitumen on the basis of Delhi    | Correction slips up to last date |
|      |     | Schedule of Rates                                     | of submission of bids            |
| (ii) |     | Variations permissible on theoretical quantities:     |                                  |
|      | (a) | Cement  |                                  |
|      |     | For works with estimated cost put to tender more      | 3% (Three percent)               |
|      |     | than Rs. 25 lakh.                                     | plus/minus.                      |
|      |     | Bitumen for all works                                 | 2.5% (Two-point five percent)    |
|      |     |   | plus only and nil on minus side. |
|      | (b) | Steel Reinforcement and structural steel sections for | 2% (Two percent) plus / minus    |
|      |     | each diameter, section and category                   |                                  |
|      | (c) | All other materials                                   | Nil                              |

# RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

| S.<br>No. | Description of item      | Rates in figures and words at which recovery shall be made from the Contractor       |   |  |
|-----------|--------------------------|--|---|--|
|           |                          | Excess beyond Less use beyond permissi permissible variation variation not permitted |   |  |
| 1.        | Cement OPC 43 grade /PCC | -  | - |  |
| 2.        | Steel reinforcement bars | -  | - |  |
| 3.        | Structural steel         | -  | - |  |

- Nothing extra shall be paid for excess use of materials beyond the theoretical consumption.
- Less use of materials from the theoretical consumption is not permitted.

# PROFORMA FOR THE RECEIPT TO BE ISSUED BY THE EXECUTIVE ENGINEER RECEIVING THE EMD

| Receipt of deposition of original EMD (drawn in favour of Executive Engineer, CED-II, CCU, MoEF&CC, New Delhi) |                   |   |  |  |  |  |
|--|-------------------|---|--|--|--|--|
| (Receipt No  | (Receipt No date) |   |  |  |  |  |
| Name of work   | :                 | Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work).                        |  |  |  |  |
| NIT No   | :                 | 04/2024-25/SE/CCU/CED-II/Dehradun (Recall)  |  |  |  |  |
| Estimated Cost   | :                 | Rs. 2,13,30,323/-   |  |  |  |  |
| Amount of Earnest Money<br>Deposit   | :                 | 4,26,606/-  |  |  |  |  |
| Last date of submission of bid   | :                 | 25.10.2025  |  |  |  |  |
| To be filled by EMD receiving  | Exe               | ecutive Engineer  |  |  |  |  |
| Name of contractor   | :                 |   |  |  |  |  |
| Form of EMD  | :                 |   |  |  |  |  |
| Amount of Earnest Money<br>Deposit   | :                 |   |  |  |  |  |
| Date of Submission of EMD  | :                 |   |  |  |  |  |
|  |                   | (Signature) Name and Designation of EMD receiving officer (EE/AE(P)/AO/AAO) along with office stamp |  |  |  |  |

# (On non-judicial stamp paper of minimum Rs. 100)

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

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

| 1. | Whereas the Executive Engineer  |
|----|---|
|    |   |
|    | OR**  |
|    | Whereas the Executive Engineer  |
| 2. | We,   |
| 3. | We,   |
| 4. | We,, 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. 5. We, ..... (indicate the name of the Bank) ....., further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us. 6. We, ...... (indicate the name of the Bank)....., further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities. 7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor. 8. We, ..... (indicate the name of the Bank) ....., undertake not to revoke this guarantee except with the consent of the Government in writing. 9. This Bank Guarantee shall be valid up to ...... unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. ...... (Rupees ...... only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged. Date ..... Witnesses: Signature..... Authorized signatory Name and address Name Designation Staff code no. Signature ..... Bank seal

payment there under and the Contractor shall have no claim against us for making such

\*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.

Name and address

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

# LIST OF EQUIPMENTS FOR TESTING OF MATERIALS&CONCRETE AT SITE

#### **LABORATORY**

All necessary equipment for conducting all necessary tests shall be provided at the site in the well-furnished site laboratory by the contractor at his own cost The following minimum laboratory equipment's shall be set up at site office laboratory:

| Sl. No. | Equipment  | Numbers                    |
|---------|--|----------------------------|
|         |  | (Minimum)                  |
| 1       | Compressing testing machine  |                            |
| 2       | Cube mould   |                            |
| 3       | Slump cone, steel plate, tamping rod, steel scale, scoop   |                            |
| 4       | Graduated glass measuring cylinder   |                            |
| 5       | Sets of sieves of 450mm internal dia for coarse aggregate [100mm, 80mm, 40mm; 20mm;12.5mm, 10mm;4.75mm complete with lid and |                            |
| 8       | Sets of sieves of 200mm internal dia for fine aggregate [4.75mm;2.36mm;1.18mm; 600 microns;300 microns& 150micron ,          |                            |
| 9       | Sieve Brushes and sieve shaker capable of 200mm and 300mm dia sieves, manually operated with timing switch assembly          |                            |
| 10      | Electronic balance 600gx0.1g., 10kg and 50kg   |                            |
| 11      | Physical balance weight upto 5 kg  | As per Requirement of work |
| 12      | Measuring jars100ml, 200ml,500ml   | OI WORK                    |
| 13      | Gauging trowels 100mm & 200mm with wooden Handle   |                            |
| 14      | Spatula 100mm & 200mm with long blade wooden Handle  |                            |
| 15      | Vernier callipers12" &6" size  |                            |
| 16      | GI tray 600x450x50mm, 450x300x40mm,300x250x40mm  |                            |
| 17      | Screw gauge 0.1mm-10mm, least count 0.05   |                            |
| 18      | Set of box spanner   |                            |
| 19      | Hammer1lb & 2lb  |                            |
| 20      | Rubber Hammer  |                            |
| 21      | Hacksaw with 6 blades  |                            |
| 22      | Measuring tape 5mtr  |                            |
| 23      | Depth gauge 20cm   |                            |
| 24      | Shovels &Spade   |                            |

**Note:** The above list is only indicative and not exhaustive. The contractor may be required to provide more equipment's as per the requirement of work and as per the direction of the engineer- in- charge.

# LIST OF MANDATORY MACHINERY, TOOLS & PLANTS TO BE DEPLOYED BY THE CONTRACTOR AT SITE

| S. No. | Equipment  | Numbers (Minimum)           |
|--------|--|-----------------------------|
| 1.     | Needle Vibrators.  |                             |
| 2.     | Plate Vibrator   |                             |
| 3.     | JCB, Excavator, Dumper, Tipper   |                             |
| 4.     | Reinforcement cutting & Bending machines   |                             |
| 5.     | Total station.   |                             |
| 6.     | Auto level & staff.  |                             |
| 7.     | Water tanker (Minimum capacity of 5000 litres)   |                             |
| 8.     | Welding machine 400 Ampere   |                             |
| 9.     | Screener for coarse sand and fine sand   | As per Requirement of work  |
| 10.    | Centrifugal mono block water pump minimum capacity 2 HP  | ras per requirement or work |
| 11.    | Steel Shuttering with necessary steel props  |                             |
| 12.    | Steel scaffolding and staging materials  |                             |
| 13.    | Plain Concrete/Mortar Mixer  |                             |
| 14.    | Semi-Automatic Pavement Concrete Paver   |                             |
| 15.    | Screed Vibrator  |                             |
| 16.    | Any other machinery required for completion of the work as per decision of Engineer-in-charge. |                             |

# **PART-B**

ADDITIONAL CONDITIONS, SPECIFICATIONS
APPLICABLE TO CIVIL WORK AND SCHEDULE OF
QUANTITIES

#### ADDITIONAL CONDITIONS

#### 1. GENERAL

- 1.1. The Contractors are advised to inspect and examine the site and its surroundings and satisfy themselves with the nature of site, the means of access to the site, the constraints of space for stacking material / machinery, labour etc., constraints put by local regulations (if any), weather conditions at site (rainfall, snowfall, winter/summer temperatures etc.), general ground / subsoil conditions etc. or any other circumstances which may affect or influence their tenders. No claims, whatsoever, shall be entertained at a later date for any errors found, on plea that the information supplied by the Department in the tender is insufficient or is at variance with the actual site conditions.
- 1.2. The work shall generally be carried out in accordance with the "CPWD Specifications 2019 Vol. I & II" with correction slips up to last date of submission of bid (including any extension in last date of bid submission), additional/Particular Specifications, Architectural/Structural drawings and as per instructions of Engineer-in-Charge. Any additional item of work, if taken up subsequently, shall also conform to the relevant specifications mentioned above.
- 1.3. The several documents forming the tender are to be taken as mutually complementary to each other. Detailed drawings shall be followed in preference to small scale drawings and figured dimensions in preference to scale dimensions. Between two or more Clauses of this Contract, the provisions of a specific Clause relevant to the issue under consideration shall prevail over those in other Clauses.
- **1.4.** Should there be any difference or discrepancy between the description of items as given in the particular specifications for individual items of work, special conditions and I.S. Codes, drawings etc., the following order of preference shall be observed-
  - (i) Nomenclature of items as per Schedule of Quantities
  - (ii) Special/Additional Conditions
  - (iii) Particular Specifications
  - (iv) Architectural/Structural drawings
  - (v) CPWD Specifications including upto date correction slips.
  - (vi) CPWD General Conditions of Contract (2023) for Construction works including correction slips issued up to last date of submission of bid including extensions if any.
  - (vii) Indian Standards Specifications of B.I.S.
  - (viii) ASTM, BS, or other foreign origin code mentioned in tender document.
  - (ix) Manufacturer's specifications and as decided by the Engineer-in-Charge.
  - (x) Sound Engineering practices or well-established local construction practices.
- 1.5. A reference made to any Indian Standard Specifications in these documents, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards up to last date of receipt of tenders. The Contractor shall keep at his own cost all such publications of relevant Indian Standard applicable to the work at site.
- **1.6.** 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.

- **1.7.** The contractor will not be allowed to construct labour huts in the Campus. The contractor has to make arrangement for labour huts outside Campus at his own cost. Nothing extra shall be paid on this account.
- **1.8.** The contractor shall keep the site neat & clean during execution of the work and cover the building materials with cloths.
- **1.9.** In case of any fine imposed by authorities due to scattered malba / building materials or any harm due to malba / materials or by worker of the contractor the same shall be paid by contractor within prescribed period otherwise same shall be recovered from the bills or securities / performance guarantee of the contractor.
- **1.10.** 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.
- **1.11.** Any legal or financial implications resulting out of disposal of earth shall be sole responsibility of the contractor. Nothing extra shall be paid on this account.
- **1.12.** 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.
- **1.13.** The contractor(s) shall give to the local body, police and other authorities all necessary notices etc. that may be required by law and obtain all requisite licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be levied on account of these operations in executing the contract. The building work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed and nothing extra shall be paid on this account.
- **1.14.** The contractor shall ensure that there is no damage to adjoining property. If any such untoward incident happens, he shall be entirely responsible for any consequences besides making good any damages to the adjoining property whether public or private. He shall supply and maintain lights either for illumination or for cautioning the public at night.
- **1.15.** The work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.
- **1.16.** 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.
- **1.17.** 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.
- **1.18.** Other agencies may also simultaneously execute and install the works of other civil and E&M services for the work. The contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works and the contractor shall fix the same at time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
- 1.19. 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.
- **1.20.** 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.
- **1.21.** Permission for the Excavation of the Basement and/or any Mining Approval along with carriage and disposal of surplus excavated earth shall be obtained by the contractor at his own expenses from Local Administration / Revenue Authority. Department / Client Department shall only forward the case to the concerned Authority. Moreover, all the fee including royalty for surplus excavated earth is to be paid by the contractor to the concerned department. Nothing extra shall be paid on account of this to the contractor.
- **1.22.** 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.
- **1.23.** The contractor shall deploy adequate resources e.g. manpower, labour, T&P, Plant & Equipment etc. as per actual requirement of work.
- **1.24.** 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.
- **1.25.** The Contractor shall keep himself fully informed of all acts/laws of the Central/State/Local Governments, orders of central/state/local government, decrees of statutory bodies, tribunals

having any jurisdiction or authority, which in any manner may affect those engaged or employed and anything related to carrying out the work. All the rules & regulations and bye-laws laid down by Collector / Municipal Corporation of area (where site is located) and any other statutory bodies shall be adhered to, by the contractor, during the execution of work. The Contractor shall also adhere to all traffic restrictions notified by the national/state/local authorities. The contractor shall abide and ensure compliances to terms and conditions of various approvals obtained for the project. He shall protect and indemnify the Department and it's officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself or by his employees or his authorized representatives. The Contractor shall indemnify the Department against all claims in respect of patent rights, royalties, design, trademarks- of name or other protected rights, damages to adjacent buildings, roads or members of public, in course of execution of work or any other reasons whatsoever, and shall himself defend all actions arising from such claims and shall indemnify the Department in all respect from such actions, costs and expenses. Nothing extra shall be payable on this account.

- **1.26.** The fee payable to statutory authorities for obtaining the various permanent service connections and occupancy certificate for the building shall be borne by the Department.
- **1.27.** The rates for all items shall be considered as inclusive of pumping/baling out water, if necessary, for which no extra payment shall be made. The conditions shall be considered to include water from any source such as inflow of flood, rain water, surface drainage, sewerage or due to any other reason including surface and sub-soil water etc. and shall apply to the executionin any season.
- **1.28.** 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.
- **1.29.** 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.
- **1.30.** 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.
- **1.31.** 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.
- **1.32.** 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.

- **1.33.** 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.
- **1.34.** The terms machine batched, machine mixed and machine vibrated concrete used elsewhere in agreement shall mean the concrete produced in concrete batching and mixing plant and if necessary, transported by transit concrete mixers, placed in position by the concrete pumps, tower crane and vibrated by surface vibrator /needle vibrator / plate vibrator, as the case may be to achieve required strength and durability.
- **1.35.** 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.
- **1.36.** Any cement slurry added over base surface for continuation of concerting 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.
- **1.37.** 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.
- **1.38.** 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.

#### 1.39. SAFETY PRECAUTIONS

- (i) 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.
- (ii) The contractor(s) shall erect the barricading of required height with Precoated galvanized iron profile sheet/MS sheets with proper structural support for enclosing the full area of constructions as per direction of Engineer-incharge.
- (iii) Entry to the site shall be controlled for proper security of man and materials and to avoid accidents.

- (iv) 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.
- (v) The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards, day & 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.
- (vi) 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.
- (vii) It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- (viii) Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machineries and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.
- (ix) 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.

#### 1.40. QUALITY ASSURANCE

- (i) 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 & contractor shall be bound to replace / remove such sub-standard / defective work immediately. If any material, even though approved by Engineer-In-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.
- (ii) All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the particular specification, the same shall be used after getting the same approved from Engineer-In-Charge. Wherever brand / quality of material are not specified in the particular specifications; the contractor shall submit the sample as per list of preferred make given in tender documents. For all other items, materials and fittings of ISI Marked shall be used with the approval of Engineer-In-Charge. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant specifications or IS codes and use the same only after getting the approval of Engineer-In-Charge.

Correction - Nil Insertion - Nil Deletion - Nil

- (iii) The Contractor shall procure and provide all the materials from the manufacturers / suppliers as per the item description in schedule of quantity and particular specifications for the work. The equivalent brand other than brand / make mentioned in particular specification for any item, shall be permitted to be used in the work, only when the specified make is not available. This is, however, subject to documentary evidence produced by the contactor for non-availability of the brand specified and also subject to independent verification by the Engineer-in-Charge. In exceptional cases, where such approval is required, the decision of Engineer-in-Charge as regards equivalent make of the material shall be final and binding on the Contractor. No claim, whatsoever, of any kind shall be entertained from the Contractor on this account. Nothing extra shall be payable on this account. Also, the material shall be procured only after written approval of the Engineer-in-Charge.
- (iv) Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to byelaws and municipal body / corporation where CPWD Specifications are not available. The contractor should engage licensed plumbers for the work and get the materials (fixtures/fittings) tested by the Municipal Body/Corporation authorities wherever required at his own cost. Nothing extra shall be paid on this account.
- (v) The tests, as necessary, shall be conducted in the laboratory approved by the Engineer–in-Charge. The samples shall be taken for carrying out all or any of the tests stipulated in the particular specifications and as directed by the Engineer-in-Charge or his authorized representative.
- (vi) All the registers of tests (carried out at Construction Site or in outside laboratories) and all material at site (MAS) registers including cement register shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-charge. All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by JE/AE/AEE/EE. Contractor shall be responsible for safe custody of all the registers.
- (vii) The Contractor shall at his own risk and cost make all arrangements and shall provide all such facilities including material and labour, the Engineer-in-Charge may require for collecting, preparing, forwarding the required number of samples for testing as per the frequency of test stipulated in the contract specifications or as considered necessary by the Engineer-in-Charge, at such time and to such places, as directed by the Engineer-in-Charge. Nothing extra shall be payable for the above.
- (viii) 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 result of such tests and consequences thereon shall be binding on the Contractor. The Contractor or his authorized representative shall remain in contact with the Engineer-in-Charge or his authorized representative associated for all such operations. No claim of payment or claim of any other kind, whatsoever, shall be entertained from the Contractor.
- (ix) Unless specified otherwise, all the testing charges shall be borne by contractor.
- (x) All the hidden items such as water supply lines, drainage pipes, electrical conduits, sewers etc. are to be properly tested as per the design conditions before covering.

- (xi) The contractor shall give performance test of the entire installation(s) as per the standing specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
- (xii) The Contractor shall make available, on request from the Department, the copies of challan, cash memos, receipts and other certificates, if any, vouchers towards the quantity and quality of various materials procured for the work. The Contractor shall also provide information and necessary documentation on the name of the manufacturer, manufacturer's product identification, manufacturer's instructions, warning, date of manufacturing and test certificates (from manufacturers for the product for each consignment delivered at site), shelf life, if any etc., for the department to ensure that the material have been procured from the approved source and is of the approved quality, as directed by the Engineer-in-Charge. Wherever specified, day-to-day account of receipt of such material shall be maintained at site of work.
- (xiii) If the Contractor does not provide adequate supporting staff or labour or both for carrying out field tests or collecting and forwarding samples to outside laboratory or for maintaining test records, Engineer in charge may carry out field tests or collect and forward sample to outside laboratory or appoint any person to maintain the registers at risk and cost of Contractor. The charges so incurred shall be entirely borne by contractor and shall be deducted from Running or final bill of contractor. Further, recovery of Rs. 1000/- for each default shall be levied to contractor.

#### 1.41. CLEANLINESS OF SITE

- (i) The Contractor shall not stack building material / malba / muck on the land or road of the local development authority or on the land owned by the others, as the case may be. So, the muck, rubbish etc. shall be removed periodically, from the site of work to the approved dumping grounds as per the local byelaws and regulations of the concerned authorities and all necessary permissions in this regard from the local bodies shall be obtained by the Contractor. Nothing extra shall be payable on this account. In case, the Contractor is found stacking the building material / malba as stated above, the Contractor shall be liable to pay the stacking charges / penalty as may be levied by the local body or any other authority and also to face penal action as per the rules, regulations and bye-laws of such body or authority. The Engineer –in-Charge shall be at liberty to recover, such sums due but not paid to the concerned authorities on the above counts, from any sums due to the Contractor including amount of the Security Deposit and performance guarantee in respect of this contract agreement.
- (ii) The contractor 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.
- (iii) The site of work shall be always kept clean due to constraints of space and to avoid any nuisance to the users of buildings in the adjacent plots. The Contractor shall take all care to prevent any water- logging at site. The wastewater, slush etc. shall not be allowed to be collected at site. For discharge into public drainage system, necessary permission shall be obtained from relevant authorities after paying the

- necessary charges, if any, directly to the authorities. The work shall be carried out in such a way that the area is kept clean and tidy. All the fees/charges in this regard shall be borne by the Contractor. Nothing extra shall be payable on this account.
- (iv) It is the responsibility of contractor to keep building neat and clean. The contractor shall spray the chemicals furnigate site area to check the mosquitoes at frequent interval or as directed by the Engineer in charge. The contractor shall also make lighting and temporary ventilation arrangement in basement.
- (v) The contractor shall not wash the drum of TM (transit mixture) at site and shall avoid the spread of leachate / cement slurry to be spread at the site of work and all care shall be taken to keep the site neat and clean at his own cost.
- **1.42.** Employ measures to segregate the waste on-site into inert, chemical or hazardous wastes. Recycle the unused chemical/hazardous wastes such as oil, paint, batteries and asbestos. The inert waste is to be disposed off to Municipal Corporation/local bodies dump yard and landfill sites.
- **1.43.** The contractor shall provide potable water for all workers. The contractor shall provide the minimum level of sanitation and safety facilities for the workers at site. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and effluent; provide clean drinking water and latrines and urinals as per applicable standard.

#### 2. Special condition for Cement

- **2.1.** Agency shall procure OPC conforming to IS: 8112 / PPC conforming to IS: 1489 (Part 1) as required in the work from cement manufacturers mentioned in the list of Preferred makes for civil works.
- 2.2. 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.
- **2.3.** The cement shall be brought at site in bulk supply of approximately **10 tonnes** or as decided by the Engineer-in-Charge.
- **2.4.** The cement godown of the capacity to store a minimum of **200 bags** of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.
- **2.5.** 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.
- **2.6.** 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

Correction - Nil Insertion - Nil Deletion - Nil

- charge the cement required for testing including its transportation cost to test laboratories.
- **2.7.** The actual issue and consumption of cement on work shall be regulated and proper accounts maintained. 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 so prescribed shall be made after ensuring structural soundness and stability on the basis of testing. In case of excess consumption, no adjustment need to made.
- **2.8.** 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.
- **2.9.** 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.
- **2.10.** 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.

Correction - Nil Insertion - Nil Deletion - Nil

# LIST OF PREFERRED MAKE / MANUFACTURERS FOR DIFFERENT MATERIALS TO BE USED IN THIS PROJECT FOR CIVIL WORKS

List of preferred make/ manufactures of the different materials to be used in the work mentioned herein below. In case of non-availability of these makes, the Superintending Engineer, CCU may allow use of alternative makes on the recommendations of Engineer-in-charge. Only BIS marked materials in the list 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. If approved make/brand of any material is not given in the list, the same will be approved by the Superintending Engineer, CCU on the recommendations of Engineer-in-charge.

| S. NO.                    | DETAILS OF MATERIALS                | MANUFACTURERS NAME                     |
|---------------------------|-------------------------------------|--|
| 1                         | ANTI TERMITE PESTICIDES             | BAYER, FMC INDIA, HINDUSTAN            |
| 1                         | ANTI TERMITE PESTICIDES             | INSECTICIDES                           |
| 2                         | STEEL (TMT FE-500D)                 | TATA TISCON, RINL, JINDAL STEEL &      |
| 2                         |                                     | POWER LTD, JSW STEEL LTD. AND SAIL     |
| 3                         | STRUCTURAL STEEL SECTIONS           | TATA, JINDAL, SAIL, RINL               |
| 4                         | CEMENT [OPC AND (P.P.C.) 43 GRADE)] | ACC, AMBUJA, ULTRATECH, WONDER,        |
| 7                         |                                     | JK, SHREE                              |
| 5                         | PRECAST DUCTS/DRAINS/ DRAIN         | KK, NITCO, KERAKROME,                  |
| 3                         | COVER/KERB CHANNEL                  | TERRAFIRMA, FUJISILVERTECH             |
| 6                         | WHITE CEMENT                        | BIRLA WHITE, J.K. WHITE, ULTRATECH     |
| 7                         | CC PAVERS                           | NITCO, UNISTONE, KK                    |
|                           | VITRIFIED TILES (DOUBLE CHARGED /   |  |
|                           | FULL BODY/ULTRA SLIM /ANTISKID /    |  |
|                           | ACID-ALKALI RESISTANT)- (ALL        |  |
| 8                         | TILES SHALL BE PROCURED FROM        | SOMANY, KAJARIA, RAK                   |
|                           | FULLY OWNED FACTORY OF THE          |  |
|                           | MANUFACTURER AND NOT FROM JV /      |  |
|                           | OUTSOURCED)                         |  |
| 9                         | CERAMIC GLAZED TILES                | SOMANY, KAJARIA, RAK                   |
| 10                        | WATER-PROOF CEMENT PAINT            | SNOWCEM, ASIAN PAINT, SIKA,            |
|                           |                                     | NEROLAC                                |
| 11 SYNTHETIC ENAMEL PAINT |                                     | ASIAN PAINT, AKZONOBEL (DULUX),        |
|                           |                                     | NEROLAC, ICI                           |
| 12                        | PLASTIC EMULSION PAINT              | ASIAN PAINT, NEROLAC, AKZONOBEL        |
|                           | DIGERANDED A CDAN IC EN MIN GION    | (DULUX),, ICI                          |
| 13                        | DISTEMPER/ACRYLIC EMULSION PAINT    | ASIAN PAINT, BERGER, NEROLAC,<br>DULUX |
| 1.4                       |                                     |  |
| 14                        | TEXTURED PAINT                      | ASIAN, OIKAS, DULUX                    |
| 15                        | STEEL PRIMER                        | NEROLAC, BERGER, ASIAN PAINTS          |
| 16                        | WOOD PRIMER                         | NEROLAC, BERGER, ASIAN PAINTS          |
| 17                        | EXTERIOR WATERPROOFING PAINT        | RAINCOAT (DR. FIXIT), ASIAN, BERGER    |
| 18                        | WOOD FINISH (MELAMINE & PU          | ASIAN. ICI, JOTUN, NEROLAC             |
|                           | POLISH)                             |  |

| S. NO. | DETAILS OF MATERIALS   | MANUFACTURERS NAME                                 |
|--------|--|--|
| 19     | LAMINATE   | MERINO, GREENLAM, CENTURY, DURO                    |
| 20     | PLY BOARD, PLYWOOD (PINE BOARD)  | GREEN, MERINO, CENTURY, DURO                       |
| 21     | SELF LEVELLING COMPOUND  | MAPAI, ARDEX ENDURA, BIZZAR                        |
| 22     | EPDM GASKET  | HANU, ANAND, VICTOR                                |
| 23     | WOOD ADHESIVE  | FEVICOL, 3M, ARALDITE, SIKA                        |
| 24     | FLUSH DOOR (ALL FLUSH DOORS SHALL BE PROCURED FROM FULLY OWNED FACTORY OF THE MANUFACTURER AND NOT FROM JV / OUTSOURCED) | GREEN, MERINO, CENTURY, DURO                       |
| 25     | WATER REPELLENT PAINT  | ARDEX ADURA, WEBER, PIDILITE                       |
| 26     | FIRE SEALENT   | HILTI, 3M, MCCOY                                   |
| 27     | TILE ADHESIVE  | PIDILITE, ARDEX ENDURA, WEBER,<br>MAPEI            |
| 28     | STONE ADHESIVE   | PIDILITE, ARDEX ENDURA, WEBER                      |
| 29     | DASH, ANCHORING FASTENERS  | HILTI, FISCHER, CANON                              |
| 30     | ALUMINIUM COMPOSITE PANEL  | ALUCOBOND, REYNOBOND, ALPOLIC                      |
| 31     | EPOXY GROUTING COMPOUND  | PIDILITE, ARDEX ENDURA, WEBER,<br>MAPEI            |
| 32     | READY MIX GYPSUM PLASTER   | SAINT GOBAIN, USG BORAL,<br>ULTRATECH              |
| 33     | READY MIX CEMENT PLASTER   | WEBER, ULTRATECH, BIRLA WHILTE                     |
| 34     | SILICON SEALANT  | GE, DOW CORNING, PIDILITE                          |
| 35     | GYPSUM BOARD   | USG BORAL, LAFAGE, SAINT GOBAIN,<br>KNAUF DANOLINE |
| 36     | FLOAT GLASS  | ASAHI, MODI GLASS, SAINT GOBAIN<br>GLASS           |
| 37     | MECHANICAL COUPERS   | USHA MARTIN, DEXTRA, HALFEN                        |
| 38     | CRYSTALLIANE CEMENTITIOUS<br>WATERPROOFING COMPOUND  | XYPEX CONSTRUCTION CHEMICAL,<br>KRYTONE, PENETRON  |
| 39     | WATERPROOFING MEMBRANE<br>(SBS/HDPE/POLYUREA/CEMENTITIOUS<br>ETC.)   | SIKA, GRACE, SOPREMA                               |
| 40     | WATERPROOFING CUM PU FOAM INSULATION   | SIKA, GRACE, SOPREMA                               |
| 41     | VERMICULLITE TREATMENT   | NEWKEM, GRACE, SOPREMA                             |
| 42     | HOLLOW METAL PRESSED DOORS<br>(METAL DOORS)  | NAVAIR, TATA PRAVESH, SHAKTI<br>HORMANN            |

| S. NO. | DETAILS OF MATERIALS   | MANUFACTURERS NAME  |
|--------|--|---|
| 43     | ROLLER BLIND   | VISTA, MAC, HUNTER DOUGLUS  |
| 44     | PRELAMINATED PARTICLE BOARD  | MERINO, CENTURY PLY, GREENLAM   |
| 45     | HYDRAULIC DOOR CLOSER, FLOOR<br>SPRING, DOOR AUTOMATION                        | DORMA, GEZE, HAFELE, HORMANN  |
| 46     | HARDWARES FOR FIRE RATED DOORS   | HAFELE, DORMA, GEZE, HORMANN  |
| 47     | HARDWARE FOR FURNITURE ITEMS   | HETTICH, EBCO, HAFELE   |
| 48     | STAINLESS STEEL FITTINGS/HARDWARE FOR WOODEN/METAL/GLAZED/STEEL DOOR & WINDOWS | HAFELE, DORMA, GEZE, HORMANN  |
| 49     | WIRE MESH  | STERLING ENTERPRISES, MICROMESH,<br>HARVER STANDARD, INDIA WIRE<br>MESH |
| 50     | ADHESIVE TAPE  | 3M, NORTON, BOPD, TESA  |
| 51     | HIGH PERFORMANCE EPOXY BASED RESIN ANCHOR SYSTEM                               | FOSROC, CICO, SIKA  |
| 52     | EPOXY MORTAR   | FOSROC, SIKA, MYK LATICRETE, CICO                                       |
| 53     | NUTS, BOLTS & SCREWS   | GKW, KUNDAN, PRIYA, ATUL  |
| 54     | ALUMINIUM SECTIONS FOR DOORS & WINDOWS ETC.                                    | JINDAL, HINDALCO, BHORUKA   |
| 55     | HARDWARE FITTINGS FOR<br>ALUMINIUM WINDOWS & DOORS                             | GEZE, HAFELE, DORMA   |
| 56     | MS SECTIONS (PIPES, BOXES CHANNELS)  | JINDAL HISAR, TATA, SURYA   |
| 57     | S.S. MATERIAL/HADRAILS/RAILINGS  | JINDAL STAINLESS STEEL LTD., TATA STEEL, SAIL                           |
| 58     | WALL PUTTY   | JK, BIRLA, ASAIN PAINT  |
| 59     | FLOOR HARDENER   | PIDILITE, FOSROC, SIKA, CICO  |
| 60     | POLYSULPHIDE SEALANT   | PIDILITE, ARDEX ENDURA, WEBER, BASF.                                    |
| 61     | EXPANSION JOINT  | MIGUA, CS, CAMEO  |
| 62     | WATERPROOFING COMPOUND   | FOSROC, SIKA, PIDILITE  |
| 63     | ADMIXTURES/CURING COUMPOUND  | FOSROC, SIKA, ATPL, KUNALCOM<br>CHEM, ASIAN PAINT, PIDILITE             |
| 64     | REFLECTIVE GLASS, TINTED GLASS,<br>HIGH PERFORMANCE GLASS,<br>LACQUERED GLASS  | SAINT GOBAIN, ASAHI (INDIA),<br>PILKINGTON                              |
| 65     | LOOKING GLASS / MIRROR   | ATUL, MODI GUARD, GOLDEN FISH   |
| 66     | HIGH PERFORMANCE GLASS   | SAINT GOBAIN, ASAHI, PILKINGTON   |

| S. NO. | DETAILS OF MATERIALS                              | MANUFACTURERS NAME  |
|--------|---|---|
| 67     | METAL/ALUMINUM FALSE CEILING                      | SAINT GOBAIN, HUNTER DOUGLUS,<br>ARMSTRONG                              |
| 68     | AAC BLOCK   | AEROCON, JINDAL BLOCK, MODCRETE, FINECRETE                              |
| 69     | AAC BLOCK ADHESIVE                                | ARDEX ENDURA, PIDILITE, WEBER   |
| 70     | HIGH PRESSURE LAMINATE<br>INTERIOR/EXTERIOR GRADE | MERINO, FUNDERMAX, GREENLAM   |
| 71     | UPVC WINDOWS                                      | FENESTA, ALUPLAST, KOENMERLING  |
| 72     | WALL GUARD, HAND RAIL, CORNER<br>GUARD            | CONSTRUCTION SPECIALITIES / GRADUS INPROCORP INDIA PVT. LTD./WINDOWTECH |
| 73     | SOLID ACRYLIC SURFACE                             | MERINO, LG, GRANIUM, SAMSUNG-<br>STARON                                 |
| 74     | VINYL / CONDUCTIVE FLOORING,<br>DADO SKIRTING     | FORBO, TARAKETT, ARMSTRONG,<br>GERFLOOR                                 |
| 75     | CALCIUM SILICATE TILES FALSE<br>CEILING           | AEROLITE, RAMCO, HILUX  |
| 76     | FIRE CHECK DOORS<br>(METAL/ROLLING/GLAZED)        | NAVAIR, TATA PRAVESH, SHAKTI<br>HORMANN                                 |
| 77     | FIRE CURTAIN                                      | ORIENT, PACIFIC, KENT, NECO   |
| 78     | LEAD LINED DOOR                                   | NAVAIR, SHAKTI HORMANN,<br>METAFLEX, RESPONSIVE                         |
| 79     | FIRE RESISTANT GLASS                              | SAINT GOBAIN, ASAHI, PILKINGTON   |
| 80     | ALUMINIUM GLAZED<br>DOORS/WINDOWS                 | HINDALCO, SHAKTI HORMANN, GLAZE<br>TECHNO, SARLA                        |
| 81     | POLYESTER POWDER COATING/ PVDF<br>COATING         | JOTUN, AKZONOBEL, ASIAN PPG,<br>NIPPON                                  |
| 82     | GLASS PROCESSOR FOR MAKING<br>DGU/TOUGHENING      | AIS, ART N GLASS, GSC, KAENAL<br>GLASS, SAINT GOBAIN                    |
| 83     | PVB/ SGP LAMINATE FILM, SENTRY FILM               | DUPONT, SAFLEX, EASTMAN, LG, 3M   |
| 84     | ACOUSTIC SEAL / DOOR SEAL                         | LORIENT, RAVEN, DORMA, 3M, HAFELE                                       |
| 85     | PAINT AND PRIMER FOR FIRE CHECK DOOR.             | VIPER, BERGER, NULLIFIRE  |
| 86     | INTUMESCENT FIRE / SMOKESEAL                      | ASTRO FLAME, RAVEN, SEALZ,<br>LORIENT                                   |
| 87     | CALCIUM SILICATE BOARD FOR FIRE DOOR              | PROMOTECH, PROMINA, RAMCO   |
| 88     | FRP DOOR & FRAMES                                 | FIBREWAYS, JAISHREE, FIBRE<br>TECHNO, BHATT FRP, JAYNA                  |
| 89     | FLY ASH BRICKS                                    | POWERBRICKS, PAUBHARA, YBW  |

| S. NO.     | DETAILS OF MATERIALS                           | MANUFACTURERS NAME                                     |
|------------|--|--|
| 90         | INSULATION                                     | UP TWIGA, LLOYD, ROXUL<br>ROCKWOOL, ROCKWOOLINDIA      |
| 91         | ANTI BACTERIAL PAINT                           | JOTUN/LIQUIDE PLASTIC /CONSTRUCTION SPECIALITY         |
| 92         | GRAPHIC FILM                                   | 3M, AVERY DENNISON                                     |
| 93         | GRC/ FRP                                       | BIRLA WHITE, UNISTONE, SANDERSON, SHENISHA CORPORATION |
| 94         | PLASTER OF PARIS                               | JK, BIRLA, SAKARNI, ULTRATECH                          |
| 95         | MR BOARD                                       | SAINT GOBAIN, USG BORAL,<br>ARMSTRONG                  |
| 96         | MINERAL FIBRE SUSPENDED CEILING                | SAINT GOBAIN, USG BORAL,                               |
| <i>7</i> 0 | SYSTEM   | ARMSTRONG, KNAUF AMF                                   |
| 97         | CURTAIN TRACK AND CURTAIN                      | WINDOWTECH, DECOREX,                                   |
|            | FABRIC   | MEDFRESHE, RESPONSIVE                                  |
| 98         | POLYMER MODIFIED ADHESIVE                      | ULTRATECH, BALL ENDURA, PIDILITE,<br>WEVER             |
| 99         | ANTI BACTERIAL AND ANTI SKID                   | SOMANY, SIMPOLO, KAJARIA,                              |
|            | VITRIFIED TILES                                | JOHNSON, RAK   |
| 100        | POLYCARBONATE SHEET                            | DANPALON, SOLALITE, DPI SYSTEM,<br>EVERLITE, CPI       |
| 101        | GI PIPES                                       | JINDAL, PRAKASH SURYA                                  |
| 102        | GI FITTINGS                                    | UNIK, KS, ICS  |
| 103        | CPVC PIPES                                     | ASTRAL, PRINCE, SFMC                                   |
| 104        | HDPE PIPES                                     | SUPREME, FINOLEX, ASTRAL,                              |
| 104        | HDFE FIFES                                     | RELIANCE, SMARTFLOW                                    |
| 105        | CC (SPUN) IRON PIPE                            | NECO, SKF, HIF   |
| 106        | CCI SOIL, WASTE, VENT PIPES & FITTINGS         | NECO, SKF, HIF   |
| 107        | C.P. BRASS FITTING                             | JAQUAR, ROCA, KOHLER                                   |
| 108        | SS SINK  | NILKANTH, NIRALI, JAYNA                                |
| 109        | C.P. BRASS BATHROOM ACESSORIES / FITTINGS      | JAQUAR, ROCA, KOHLER                                   |
| 110        | GLASS SHOWER PARTITION                         | DORMA, HAFELE, GEZE                                    |
| 111        | SANITARY WARE (URINAL, WASH<br>BASIN, WC ETC.) | JAQUAR, GROHE, KOHLER                                  |
| 112        | GLASS MOSAIC TILE                              | ITALIA, CORAL, KAJARIA                                 |
| 113        | LIQUID SOAP DISPENSER                          | EURONICS, TOSHI, UTEC, DOLPHY                          |
| 114        | HAND DRIER                                     | EURONICS, TOSHI, UTEC, DOLPHY                          |
| 115        | AROMA DISPENSER                                | EURONICS, TOSHI, UTEC, DOLPHY                          |

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|--------|--|---|
| S. NO. | DETAILS OF MATERIALS   | MANUFACTURERS NAME  |
| 116    | SHOE SHINNING MACHINE  | EURONICS, TOSHI, UTEC, DOLPHY   |
| 117    | TISSUE DISPENSER WITH TRASH  | EURONICS, TOSHI, UTEC, DOLPHY   |
| 118    | HAND TOWEL DISPENSER   | EURONICS, TOSHI, UTEC, DOLPHY   |
| 119    | NITRILE RUBBER INSULATION  | ARMACELL, K-FLEX, A-FLEX, SUPREME                                       |
| 120    | FAÇADE AND WINDOW SYSTEM   | SCHUCO, ALUK, REYNAERS, GUTMANN   |
| 121    | FIRE STOP IN CURTAIN WALL SYSTEM   | HILTI, 3M, FISCHER, LORIENT   |
| 122    | POP OUT VENT FOR FAÇADE AND<br>SYSTEM WINDOW HARDWARE                          | COTSWOLD, SCHUCO, ALUK, REYNAERS  |
| 123    | ALUMINIUM OPERABLE LOUVER  | TECHNAL, DOMAL, YOGI GLAZE, SCHUCO                                      |
| 124    | AIR TRANSFER GRILL   | RUSKIN, SYSTEM AIR, TROX, TREMCO  |
| 125    | POLYURETHANE CONCRETE<br>FLOORING, EPOXY FLOORING, SELF-<br>LEVELLING FLOORING | ARDEX ENDURA, SIKA, MAPEI, SAINT<br>GOBAIN - WEBER                      |
| 126    | ENGINEERED WOODEN FLOORING<br>AND SKIRTING                                     | MIKASA (GREENLAM), TARKETT,<br>HAVWOODS, PARADOR (HIL), PERGO,<br>KAHRS |
| 127    | RAISED/ FALSE ACCESS FLOORING<br>SYSTEM  | LINDNER, UNIFLOOR, TANKARIA,<br>FLEXI FLOOR                             |
| 128    | SOLID SURFACE (CORIAN)   | DUPONT, LG, STARON-SAMSUNG,<br>LUXOR (DURLAX)                           |
| 129    | CAR DECK FLOORING SYSTEM   | MAPEI, SAINT GOBAIN – WEBER, MYK<br>ARMENT                              |
| 130    | ENGINEERED MARBLE  | HR JOHNSON, KALINGA STONE, NITCO, QUASTONE                              |
| 131    | RUBBERISED PAVERS  | SUNFLEX, FLOOR GUARD, BORON<br>RUBBERS                                  |
| 132    | COLOUR HARDENER  | SIKA, FOSROC, PIDILITE  |
| 133    | IPE WOOD   | HKS FLOORING, INDIANA,<br>RESHAWOOD                                     |
| 134    | SYNTHETIC THATCH ROOFING   | PALMEX, WINROYAL, SYNTHETIC<br>THATCH                                   |
| 135    | ASPHALT CEMENT SHINGLES  | TAPCO, CERTAINTEED, MALARKEY  |
| 136    | STRETCH MEMBRANE / TENSILE<br>FABRIC   | SERGE FERRARI, CHUKOH, MEHLER,<br>VERSAIDAG                             |
| 137    | STAMP CONCRETE PIGMENT /<br>APPLICATOR   | UNITED FLOORING, CONCRETE BY DESIGN, FLEX STONE                         |
|        |  |   |

| S. NO. | DETAILS OF MATERIALS   | MANUFACTURERS NAME   |
|--------|--|--|
| 138    | SS TACTILE   | EMINENT, FERROTECH, SUNDARAM,<br>JINDAL  |
| 139    | BAMBOO DECKING, ROOFING & CLADDING                                   | ECO GREEN FLOORING, EPITOME<br>BAMBOOWOOD, LAMIWOOD                              |
| 140    | OUTDOOR SIGNAGES   | 3M, AVERY DENNISON, VEDAAANSHI<br>SIGNS  |
| 141    | ACOUSTIC PANELS  | ARMSTRONG, USG BORAL, ANUTONE, ROCKWORTH,  |
| 142    | C&D WASTE PRECAST ELEMENT  | GM CONCRETE, ILFS  |
| 143    | THERMOPLASTIC PAINT/ROAD<br>MARKING PAINT                            | NEROLAC, ASIAN, SHALIMAR, BERGER, STP LTD  |
| 144    | WEATHER/STRUCFTURE SILICON<br>SEALENT                                | WACKER, MCCOY, DOW CORNING   |
| 145    | BACKER ROD   | SUPREME/SYSTRANS   |
| 146    | POLYSTRENE BOARD   | SUPREME, DOW CORNING, TEXAS, PIDILITE  |
| 147    | DUCTILE IRON PIPES   | ELECTROSTEEL, KESORAM, TISCO   |
| 148    | STAINLESS STEEL PIPES AND FITTINGS                                   | VIEGA, JINDAL STAINLESS STEEL, J-<br>PRESS                                       |
| 149    | SLUICE VALVES  | SANT, ADVANCE, AUDCO, ZOLOTO,<br>KIRLOSKAR, LEADER                               |
| 150    | GATE / BALL VALVES   | SANT, LEADER, ZOLOTO   |
| 151    | ELECTROMAGNETIC FLOWMETER  | ENDRESS HAUSER, KROHNE<br>MARSHALL, NEXTENG ENVIRO PVT<br>LTD, SEIMENS, ABB      |
| 152    | CI/DI MANHOLE COVER  | NECO, SKF, RIF, BIC  |
| 153    | DWC PIPES  | NOBLE POLYTEC, ALOM POLY<br>EXTRUSIONS LTD., ASTRAL, ANEK<br>INDUSTRIAL PLASTICS |
| 154    | DRAIN CHANNEL WITH SS SLOTTED GRATING                                | ACO, KESSEL, PRUTHA  |
| 155    | WATER BASED MELAMINE POLISH  | ASIAN, PIDILITE, DULUX   |
| 156    | ALL FURNITURE ITEMS (CHAIRS / WORKSTATIONS/BEDS, STORAGE UNITS ETC.) | ROCKWORTH / STEELCASE / HERMAN<br>MILLER/ HAWORTH                                |
| 157    | CARPET   | SUPINOE/ MILLIKAN/ SHAW  |
| 158    | IRRIGATION FITTINGS, VALVES AND OTHER ACCESSORIES                    | RAIN BIRD / NETAFIM / BERMAD /<br>HUNTER / TORO                                  |
| 159    | IRRIGATION PUMPS   | LUBI / RAIN BIRD / GRUNDFOS  |

# SCHEDULE OF QUANTITY FOR CIVIL WORK

## **SCHEDULE OF QUANTITY**

Name of work: Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work).

| S. 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, lift upto 1.5 m, 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.   | 1627.00 | cum  | 260.30  | 423508.00 |
| 3      | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.  Excavating holes more than 0.10 cum & upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil, as directed within a lead of 50 m and lift upto 1.5 m. | 537.00  | cum  | 196.00  | 105252.00 |
| 3.1    | All kinds of soil.   | 68.00   | each | 82.45   | 5607.00   |
| 4      | Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.   | 2150.00 | sqm  | 17.60   | 37840.00  |
| 5      | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:  |         |      |         |           |
| 5.1    | 1:1½:3 (1 Cement: 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)   | 21.00   | cum  | 8340.85 | 175158.00 |
| 6      | 1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)  | 74.00   | cum  | 6518.60 | 482376.00 |

| _     | T =:   | ı        |      |          |            |
|-------|--|----------|------|----------|------------|
| 7     | Centering and shuttering including   |          |      |          |            |
|       | strutting, propping etc. and removal of form for                                       |          |      |          |            |
| 7.1   | Foundations, footings, bases of columns,   |          |      |          |            |
| /.1   | etc. for mass concrete   | 000.00   |      | 202.15   | 252151.00  |
| 7.2   |  | 898.00   | sqm  | 392.15   | 352151.00  |
| 7.2   | Lintels, beams, plinth beams, girders, bressumers and cantilevers                      |          |      |          |            |
|       |  | 992.00   | sqm  | 736.40   | 730509.00  |
| 7.3   | Columns, Pillars, Piers, Abutments, Posts  | 1157.00  |      | 061.20   | 1112224.00 |
| 8     | and Struts Steel reinforcement for R.C.C. work   | 1157.00  | sqm  | 961.30   | 1112224.00 |
| 0     | including straightening, cutting, bending,   |          |      |          |            |
|       | placing in position and binding all complete   |          |      |          |            |
|       | in foundation and supersturcture.  |          |      |          |            |
| 8.1   | Thermo-Mechanically Treated bars of  |          |      |          |            |
|       | grade Fe-500D or more.   | 32600.00 | kg   | 107.85   | 3515910.00 |
| 9     | Providing and laying in position ready   | 32000.00 | - 15 | 107.03   | 3313710.00 |
|       | mixed or site batched design mix cement  |          |      |          |            |
|       | concrete for reinforced cement concrete  |          |      |          |            |
|       | work; using coarse aggregate and fine  |          |      |          |            |
|       | aggregate derived from natural sources,  |          |      |          |            |
|       | Portland Pozzolana / Ordinary Portland   |          |      |          |            |
|       | /Portland Slag cement, admixtures in   |          |      |          |            |
|       | recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to |          |      |          |            |
|       | improve durability and workability without   |          |      |          |            |
|       | impairing strength; including pumping of   |          |      |          |            |
|       | concrete to site of laying, curing, carriage   |          |      |          |            |
|       | for all leads; but excluding the cost of   |          |      |          |            |
|       | centering, shuttering, finishing and   |          |      |          |            |
|       | reinforcement as per direction of the  |          |      |          |            |
|       | engineer-in- charge; for the following   |          |      |          |            |
|       | grades of concrete. 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.  |          |      |          |            |
| 9.1   | All works upto plinth level  |          |      |          |            |
| 9.1.1 | Concrete of M30 grade with minimum   |          |      |          |            |
|       | cement content of 350 kg /cum  | 274.00   | cum  | 9655.70  | 2645662.00 |
| 9.2   | All works above plinth level upto foor V   |          |      |          |            |
|       | level  |          |      |          |            |
| 9.2.1 | Concrete of M30 grade with minimum   |          |      |          |            |
|       | cement content of 350 kg /cum  | 52.00    | cum  | 10011.35 | 520590.00  |
| 10    | Add for using extra cement in the items of   |          |      |          |            |
|       | design mix over and above the specified  |          |      |          |            |
|       | cement content therein.  | 115.00   | QTL  | 733.50   | 84353.00   |

| - 4 4 | D. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | I        |       |               |            |
|-------|--|----------|-------|---------------|------------|
| 11    | Brick work with common burnt clay F.P.S.   |          |       |               |            |
|       | (non modular) bricks of class designation  |          |       |               |            |
| 11.1  | 7.5 in foundation and plinth in:   |          |       |               |            |
| 11.1  | Cement mortar 1:6 (1 cement : 6 coarse   | 102.00   | 01140 | 7122.25       | 724622.00  |
| 12    | sand)  Priok work with common burnt clay E.D.S.                                    | 103.00   | cum   | 7132.25       | 734622.00  |
| 12    | Brick work with common burnt clay F.P.S. (non modular) bricks of class designation |          |       |               |            |
|       | 7.5 in superstructure above plinth level up  |          |       |               |            |
|       | to floor V level in all shapes and sizes in:                                       |          |       |               |            |
| 12.1  | Cement mortar 1:6 (1 cement : 6 coarse   |          |       |               |            |
| 12.1  | sand)  | 328.00   | cum   | 9105.95       | 2986752.00 |
| 13    | Steel work welded in built up sections/  |          |       | , , , , , , , |            |
|       | framed work, including cutting, hoisting,  |          |       |               |            |
|       | fixing in position and applying a priming  |          |       |               |            |
|       | coat of approved steel primer using  |          |       |               |            |
|       | structural steel etc. as required.   |          |       |               |            |
| 13.1  | In gratings, frames, guard bar, ladder,  |          |       |               |            |
|       | railings, brackets, gates and similar works  | 13878.00 | kg    | 172.60        | 2395343.00 |
| 14    | 12 mm cement plaster of mix :  |          |       |               |            |
| 14.1  | 1:6 (1 cement: 6 fine sand)  | 1800.00  | sqm   | 333.35        | 600030.00  |
| 15    | 15 mm cement plaster on the rough side of  | 1000.00  | Sqiii | 333.33        | 000030.00  |
|       | single or half brick wall of mix:  |          |       |               |            |
| 15.1  | 1:6 (1 cement: 6 fine sand)  | 1800.00  | sqm   | 383.00        | 689400.00  |
| 16    | 6 mm cement plaster of mix :   |          |       |               |            |
| 16.1  | 1:3 (1 cement : 3 fine sand)   | 2149.00  | sqm   | 300.45        | 645667.00  |
| 17    | Finishing walls with Acrylic Smooth  |          |       |               |            |
|       | exterior paint of required shade:  |          |       |               |            |
| 17.1  | New work (Two or more coat applied @   |          |       |               |            |
|       | 1.67 ltr/10 sqm over and including priming   |          |       |               |            |
|       | coat of exterior primer applied @ 2.20   |          |       |               |            |
|       | kg/10 sqm)   | 5749.00  | sqm   | 160.60        | 923289.00  |
| 18    | Painting with synthetic enamel paint of  |          |       |               |            |
|       | approved brand and manufacture to give an  |          |       |               |            |
|       | even shade :   |          |       |               |            |
| 18.1  | Two or more coats on new work  | 403.00   | sqm   | 155.90        | 62828.00   |
| 19    | Dismantling steel work manually/ by  |          |       |               |            |
|       | mechanical means in built up sections  |          |       |               |            |
|       | without dismembering and stacking within   |          |       |               |            |
|       | 50 metres lead as per direction of Engineer-                                       |          |       |               |            |
| 20    | in-charge.   | 2804.00  | kg    | 3.85          | 10795.00   |
| 20    | Dismantling barbed wire or flexible wire   |          |       |               |            |
|       | rope in fencing including making rolls and   | 764.00   | 1     | 26.00         | 20115.00   |
|       | stacking within 50 metres lead.  | 764.00   | kg    | 36.80         | 28115.00   |

|      | _   |         |       |         | -         |
|------|---|---------|-------|---------|-----------|
| 21   | Providing and fixing concertina coil          |         |       |         |           |
|      | fencing with punched tapeconcertina coil      |         |       |         |           |
|      | 600 mm dia 10 metre openable length (         |         |       |         |           |
|      | total length90 m), having 50 nos rounds per   |         |       |         |           |
|      | 6 metre length, upto 3 m height ofwall with   |         |       |         |           |
|      | existing angle iron 'Y' shaped placed 2.4m    |         |       |         |           |
|      | or 3.00 m apartand with 9 horizontal R.B.T.   |         |       |         |           |
|      | reinforced barbed wire, stud tied with G.I.   |         |       |         |           |
|      | staples and G.I. clips to retain horizontal,  |         |       |         |           |
|      | including necessarybolts or G.I. barbed       |         |       |         |           |
|      | wire tied to angle iron, all complete as per  |         |       |         |           |
|      | direction of Engineer-in-charge, with         |         |       |         |           |
|      | reinforced barbed tape(R.B.T.) / Springcore   |         |       |         |           |
|      | (2.5mm thick) wire of high tensile strength   |         |       |         |           |
|      | of 165 kg/ sq.mmwith tape (0.52 mm thick)     |         |       |         |           |
|      | and weight 43.478 gm/ metre (cost of M.S.     |         |       |         |           |
|      | angle, C.C. blocks shall be paid separately)  | 1000.00 | metre | 375.80  | 375800.00 |
| 22   | Providing and fixing G.I. chain link fabric   |         |       |         |           |
|      | fencing of required width in mesh size        |         |       |         |           |
|      | 50x50 mm including strengthening with 2       |         |       |         |           |
|      | mm dia wire or nuts, bolts and washers as     |         |       |         |           |
|      | required complete as per the direction of     |         |       |         |           |
|      | Engineer-in-charge.                           |         |       |         |           |
| 22.1 | Made of G.I. wire of dia. 4 mm, PVC           |         |       |         |           |
|      | coated to achieve outer dia not less than 5   |         |       |         |           |
|      | mm in required colour and shade               | 400.00  | Sqm   | 1067.10 | 426840.00 |
| 23   | Providing and mixing integral crystalline     |         |       |         |           |
|      | admixture for water proofing treatment to     |         |       |         |           |
|      | RCC structures like basement raft, retaining  |         |       |         |           |
|      | walls, reservior, sewage & water treatment    |         |       |         |           |
|      | plant, tunnels / subway and bridge deck etc.  |         |       |         |           |
|      | at the time of transporting of concrete into  |         |       |         |           |
|      | the drum of the ready-mix truck, using        |         |       |         |           |
|      | integral crystalline admixture @0.80%         |         |       |         |           |
|      | (minimum) to the weight of cement content     |         |       |         |           |
|      | per cubic meter of concrete) or higher as     |         |       |         |           |
|      | recommended by the manufacturer's             |         |       |         |           |
|      | specification in reinforced cement concrete   |         |       |         |           |
|      | at site of work. The material shall meet the  |         |       |         |           |
|      | requirements as specified in ACI-212-3R-      |         |       |         |           |
|      | 2010 i.e. by reducing permeability of         |         |       |         |           |
|      | concrete by more than 90%, compared with      |         |       |         |           |
|      | control concrete as per DIN 1048 and          |         |       |         |           |
|      | resistant to 16 bar hydrostatic pressure. The |         |       |         |           |
|      | crystalline admixture shall be capable of     |         |       |         |           |
|      | self-healing of cracks up to a width of       |         |       |         |           |
|      | 0.50mm. The work shall be carried out all     |         |       |         |           |
|      | complete as per specification and the         |         |       |         |           |
|      | direction of the Engineer-in-charge. The      |         |       |         |           |
|      | product performance shall carry guarantee     | 1002.00 | 1     | 200.00  | 16676400  |
|      | for 10 years against any leakage.             | 1203.00 | kg    | 388.00  | 466764.00 |

| 24   | Providing and laying in position plum   |         |      |         |             |
|------|---|---------|------|---------|-------------|
|      | cement concrete in retaining walls having   |         |      |         |             |
|      | 60% random rubble masonry stone size 150  |         |      |         |             |
|      | x 200 mm and 40% cement concrete of   |         |      |         |             |
|      | grade 1:3:6 (1 cement: 3 coarse sand : 6  |         |      |         |             |
|      | graded stone aggregate 20 mm nominal  |         |      |         |             |
|      | size) including the cost of centering and   |         |      |         |             |
|      | shuttering for all levels including providing                                       |         |      |         |             |
|      | PVC pipe weep holes of dia 75mm/100mm   |         |      |         |             |
|      | horizontally @ 2 metre c/c and vertically   |         |      |         |             |
|      | @ 1 metre c/c placed staggerred. (cost of   |         |      |         |             |
|      | PVC pipe of specified dia for weep holes to   |         |      |         |             |
| 2.5  | be paid separately).  | 112.00  | cum  | 6922.95 | 775370.00   |
| 25   | Filling filter media Stone Boulder of size  |         |      |         |             |
|      | 63mm to150mm on the back side of  |         |      |         |             |
|      | retaining walls as per direction of the   | 20.00   |      | 2621.25 | 102610.00   |
| 26   | Engineer-in-charge.   | 39.00   | cum  | 2631.25 | 102619.00   |
| 26   | Providing and placing the PVC pipe in the   |         |      |         |             |
|      | retaining walls for weephole etc.as per direction of Engineer in Charge.            |         |      |         |             |
| 26.1 | 110 mm dia (4 kg/sqm)   |         |      |         |             |
|      | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \   | 75.00   | mtr  | 270.65  | 20299.00    |
| 27   | Deduct for taking away old structural steel   |         |      |         |             |
|      | received from the dismantling existing  |         |      |         |             |
|      | boundary wall structural steel work so  |         |      |         |             |
|      | received shall be the property of contractor after dismantling duly measured before |         |      |         |             |
|      | removing from site in the presence of   |         |      |         |             |
|      | Engineer-in-charge or his authorised  |         |      |         |             |
|      | representative all complete   | 2805.00 | kg   | -30.00  | -84150.00   |
| 28   | Deduct for taking away old G.I barbed   | 2005.00 | - 15 | 50.00   | 0.1150.00   |
| 20   | wire received from the dismantling existing   |         |      |         |             |
|      | boundary wall work so received shall be the   |         |      |         |             |
|      | property of contractor after dismantling  |         |      |         |             |
|      | duly measured before removing from site in  |         |      |         |             |
|      | the presence of Engineer-in-charge or his   |         |      |         |             |
|      | authorised representative all complete  | 530.00  | kg   | -40.00  | -21200.00   |
|      |   |         |      | Total=  | 21330323.00 |

#### **CIVIL CONSTRUCTION UNIT**

#### NIT No: 04/2024-25/SE/CCU/CED-II/Dehradun (Recall)

Name of work: Construction of Boundary Wall in Block-III at WII, Dehradun. (Balance work).

### **SCHEDULE OF QUANTITY**

|            | Name of the Contractor |                      |  |                 |                     |
|------------|------------------------|----------------------|--|-----------------|---------------------|
| Sl.<br>No. | Name of component      | Estimated cost (Rs.) | Percentage<br>above or<br>below the<br>estimated<br>cost | % in<br>Figures | Total<br>Cost (Rs.) |
| 1          | 2                      | 3                    | 4  | 5               | 6                   |
| 1          | Civil Works            | 2,13,30,323          | *  | *               | *                   |

:\*- To be filled online in bid document.

- 1) The Column Nos. 4 & 5 are mandatory to be filled by the bidders / tenderers. If these columns are left blank, the tender become invalid.
- 2) The amount in figures in column No.6 shall appear automatically corresponding to the percentage quoted in column No.4 & 5.
- 3) The tenderer is required to quote the percentage only above or below or at par with the estimated cost to cover all the rates of item covered under the respective packages.
- 4) The percentage shall be written in 2 (two) place of decimal.
- 5) If the percentage selection in column No 4 is "At Par", by default the percentage will be considered as "Zero" only. In other words, if "At par" is selected in column No.4, then no need to fill column No. 5