

#### NOTICE INVITING E- TENDER

The Head, Engineering Cell, FRI, Dehradun invites on behalf of Director, FRI Dehradun online item rate bids from approved and eligible contractors of CPWD, MES, Railways, P & T, State PWD & other Govt. Department etc. :

#### 1. NIT No.38-116/2022-23/Head/Engineering Cell/Civil

Name of Work: - Civil Up-Gradation work in AS(E) Office Building at FRI.

- 2.
- 3. Estimated Cost: **Rs. 29,41,852/-**, Earnest money : **Rs.59,000/-**. Tender fee **Rs. 590/-** and period of completion: **45 days**, Last date and time of submission of bid: 16.02.2023 at 3.00 PM.
- 4. Other details can be obtained from the website <u>https://eprocure.gov.in/</u>eprocure/app. and www.fri.res.in

Head Engineering Cell Forest Research Institute Dehradun

### **INDEX**

# <u>Name of Work:</u> Civil Up-Gradation work in AS(E) Office Building at FRI.

S. No.	Description	Page
1	Press Notice/Application for inviting open bid	1-7
2	Instruction for e-tendering	8-12
3	Items Rate Bid construction for the work	13-15
4	Salient/Mandatory Requirements for the tenderer	16-17
5	Additional Conditions	18-21
6	General Conditions	22-23
7	Additional Specifications	24
8	Annexure-I to III: Performa for Guarantee Bonds etc.	25-30
9	Annexure-IV : Performa for Affidavits	31
10	Annexure-V: Integrity Pact	32
11	Annexure-VI to VIII:	33-39
12	Schedule of Quantity of Work	40-47

NIT amounting to Rs. 29,41,852/-(Rs. Twenty nine lakh forty one thousand eight hundred fifty two only) is approved.

Head Engineering Cell FRI, Dehradun



# Press Notice/Application for inviting open bid

#### INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-tendering

The Head, Engineering Cell, Dehradun on behalf of Director, FRI Dehradun invites online item rate bids from approved and eligible contractors of CPWD, MES, Railways, P & T, State PWD & other Govt. Department etc. for the following work:

NIT No.	38-03/ 2022-23/HOD/Engineering Cell
Name of work & Location	CIVIL Up-Gradation work in AS(E) Office Building at FRI.
Estimated cost put to bid	Rs. 29,41,852/-
Tender fee	Rs. 500+18% GST (Total Rs. 590/-)
Earnest Money	Rs 59,000/-
Period of Completion	45 days
Last date & time of submission of bid, original EMD, copy of receipt for deposition of original EMD and other Documents as specified in press notice	16.02.2023, at 3.00PM
Time & date of opening of bid	17.02.2023, at 3.00PM

1. Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.

&

Contractor should have satisfactorily completed the works as mentioned below during the last **FIVE** years ending previous day of last date of submission of bid. One similar work costing not less than Rs. **23.53 Lacs**. Two similar works costing not less than Rs. **14.70 Lacs**. Three similar works costing not less than Rs. **11.76 Lacs**.

2. Similar work would means "**Building Construction work**" The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 10% per annum; calculated from the date of completion to last date of receipt of applications for bids. (Scanned copies of work experience certificates meeting to these criteria shall be uploaded by the agency).



- 3. 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.
- 4. Information and Instructions for bidders posted on website shall form of bid document.
- 5. 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.
- 6. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website <u>www.eprocure.gov.in</u> free of cost.
- 7. But the bid can only be submitted after deposition of original EMD in the Office of Head, Engineering Cell, FRI Dehradun within the period of bid submission. (The EMD document shall only be payable at Dehradun) and uploading the mandatory scanned documents such as Demand Draft or Pay order or Banker's Cheque or Deposit at call Receipt or Fixed Deposit Receipt and Bank Guarantee of any Scheduled Bank towards EMD in favor of Director FRI Dehradun as mentioned in NIT.
- 8. Tender fee: Rs.590/- (including 18% GST) by crossed Demand Draft in favor of Director, FRI payable at Dehradun, as tender fee/processing charges is applicable. The scanned copy of the same should be uploaded in the Web Portal during online submission is essential. The original draft of tender fee along with other tender documents should be submitted in the Office of Head, Engineering & Services Division, FRI Dehradun within the period of bid submission.
- 9. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.

The intending bidder must have valid **class-III digital signature** to submit the bid.

10. The contractor to be deposits original EMD in the office of the Head Engineering Cell, FRI Dehradun within the period of bid submission. (The EMD document shall only be payable at Dehradun). The Bid Document as uploaded can be viewed and downloaded free of cost by anyone including intending bidder. But the bid can only be submitted after uploading and mandatory scanned documents such as Demand Draft/Pay Order or Banker's Cheque of any scheduled Bank towards EMD in favor of respective Director, FRI Dehradun.



- 11. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 12. Contractor can upload documents in the form of JPG format and PDF format.
- 13. Contractor must ensure to quote rate of each item.
- 14. In addition to this, 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 on the lowest amount of the tender or any section/sub head in item rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

- 15. The required documents meeting the criteria to qualify as "approved and eligible contractors" for the following work along with other documents as mentioned under para "List of Documents to be scanned and uploaded within the period of bid submission", as uploaded by the agency shall be checked first, while opening the bid. The financial bid of only those agencies shall be opened who are found to be eligible agencies, as per this NIT.
- 16. The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
- 17. If the agency is not registered with Uttarakhand GST department earlier, he has to get register himself with Uttarakhand GST department before submission of the bid.



**18. Check List** of Documents to be scanned and uploaded and also deposit the hard Copies within the period of bid submission:-

		Yes/No
Tender fee (Rs. 590) in favor of Director FRI,	Physical	
Payable at Dehradun	Uploaded	
EMD (Rs. 59,000/-) in favor of Director FRI,	Physical	
Payable at Dehradun ( As per Tender Document)	Uploaded	
Enlistment/ Registration (CPWD, MES,	Physical	
Railways, P & T, State PWD & other Govt. and Semi Govt. Department including Local bodies etc.).	Uploaded	
Experience of similar type of work i.e. "Building Construction work" Rs. 23.53 lakh for single work.	Physical	
Rs. 14.70 lakh for two works Rs. 11.76 lakh for three works.	Uploaded	
( <mark>Satisfactory Completion certificate of the</mark>		
work duly signed by the competent authority		
should be uploaded and submitted. Without		
Satisfactory Completion such experience will		
not be consider.)		
Affidavit on 10 Rupees e-stamp paper as	Physical	
mention in clause No. 1.2.2	Uploaded	
PAN	Physical	
	Uploaded	
Uttarakhand GST registration	Physical	
	Uploaded	

Note: - The Bidders are required to submit Tender Fee, EMD and hard copy of the tender document along with a copy of all certificates as submitted in technical bid. These documents shall be sent to and received physically by the Office of the Head, Engineering Cell, Forest Research Institute, Dehardun by hand or by post before the date and time of opening of technical bid and in absence of which the technical bid of the bidder will not be considered



The following conditions which already form part of the tender document are specially brought to the notice of all intending tenderers for compliance while filling the tender. They are requested to comply following instructions:

- 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.
- 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.
- When tenders are invited in three bid system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.
- In case of composite tenders, the contractor submitting the tender should read all the three Parts of the tender viz. Part-A, B & C, which are containing schedule of quantities, additional & special conditions, additional specifications, particular specification and other terms and conditions given in the NIT and drawings for Major as well as Minor component of work. Details of these parts are summarized as under :
  - Part A: CPWD -6, CPWD 7/8 including schedule A to F for major component of the work, Standard General Conditions of Contract for CPWD 2014 as amended/ modified up to last date of submission of bid.
  - Part B: General/specific conditions, specifications and schedule of quantities applicable to major component of the work.
  - Part C :- Schedule A to F for minor component of the work, (Head, Engineering Cell of major component shall also be competent authority under clause 2 and clause 5 as mentioned in schedule A to F for major components) General/specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.

The **Major** Component of work is **Civil** Work and **Minor** Component of work is **Electrical** Work-

The bidders should also read the General Conditions of Contract for CPWD from
 7 as modified and corrected up to last date of submission of bid of this work,



which is available as Govt. of India Publications; however provisions included in the tender document shall prevail over the provisions contained in this standard form. The set of drawings and NIT shall be available with the Head, Engineering & Services Division.

- The contractor should also visit the site of work and acquaint himself with the site and soil conditions before tendering.
- The main contractor shall execute the minor component(s) also. He should be either an eligible contractor himself or associate with himself an eligible agency(s) for execution of electrical work as per CPWD-6 for e-tendering. The contractor shall indicate the names of up-to three such agencies within prescribed time as "Minor component agencies". In case the details of electrical agency are not submitted by the bidder or are not proper then these shall be submitted before acceptance of the bid.
- After acceptance of the tender by competent authority, the Head, Engineering Cell of major component of the work shall issue letter of award on behalf of the Director, FRI Dehradun. After the work is awarded, the main contractor will have to enter into one agreement with Head, Engineering Cell of major component and has also to sign two/or more copies of agreement depending upon number of Head, Engineering Cell of minor components. One such signed set of agreement shall be handed over to Head, Engineering Cell of minor component. Head, Engineering Cell of major component will operate part A and part B of the agreement. Head, Engineering Cell of minor component(s) shall operate Part C along with Part A of the agreement.
- The main contractor has to enter into agreement with the contractor(s) associated by him for execution of minor component(s). Copy of such agreement shall be submitted to Head, Engineering Cell of minor component as well as to Head, Engineering Cell of major component. In case of change of associate contractor, the main contractor has to enter into agreement with the new contractor associated by him.
- Tenders with any condition including that of conditional rebates in the tender document shall be rejected forthwith.



- The rate (s) must be quoted in decimal coinage. Amount must be calculated and rounded in full rupees by ignoring fifty paisa and considering more than fifty paisa as rupee one. Rate must be filled both in words and figures. Amount should be worked out for all the items. Rates in words should start with word "Rs." And finish with word "only" and there should not be undue gap in the words of the rate. For example, the rate of Rs. 2429.50 in figure should be written as "Rs. Two thousand four hundred twenty nine and paisa fifty only"
- The contractor shall have to execute guarantee bonds in respect of water supply and sanitary installation works and water proofing works as per Performa at Annexure I & II.
- GST or any other taxes on materials as applicable shall be paid by the contractor himself. The contractor shall quote his rates considering all such taxes.
- Recovery rates for less use of materials beyond permissible limits is given in Schedule 'F' of Part-A & C & also for excess use of departmentally issued material.

Head Engineering Cell Forest Research Institute Dehradun



#### **INSTRUCTION FOR e-TENDERING**

- Online item rate bids are invited on behalf of Director, FRI Dehradun from approved and eligible contractors of CPWD, MES, Railways, P & T, State PWD & other Govt. Department etc. for the work of "Civil Up-Gradation work in AS(E) Office Building at FRI."
- 1. 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 bids.

The work is estimated to cost Rs. 29,41,852/-

This estimate, however, is given merely as a rough guide.

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

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

#### **1.2** Conditions for all contractors

1.2.1 The Contractor should have satisfactorily completed One similar work costing not less than Rs. 23.53 Lacs. Two similar works costing not less than Rs.
14.70 Lacs. Three similar works costing not less than Rs. 11.76 Lacs.

#### Similar works mean "Building Construction work"

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 10% per annum, calculated from the date of completion to the *previous day of last date of submission of bid.* 

# 1.2.2 To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under:-

"I/We undertake and confirm that eligible similar works(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 bidding in FRI in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Head, Engineering Cell shall be free to forfeit the entire amount of Earnest Money Deposit". (Scanned copy to be uploaded at the time of submission of bid).



1.2.3 It is mandatory for all contractors to upload the work experience certificate(s) and the affidavit as per the provisions of clause 1.2.1 and 1.2.2.

Online bid documents submitted by intending bidders shall be opened only of those bidders, whose "Earnest Money Deposit, Cost of Bid Document and e-tender Processing Fee" and "other documents including eligibility documents as required as per this NIT" placed in separate **sealed envelopes** marked as "Earnest Money, Cost of Bid Document and Cost of Bid Processing Fee" and "Other documents", respectively are found in order. Both these envelopes shall be submitted together in another sealed envelope.

The financial bid of only those agencies shall be opened who are found to be eligible agencies, as per this NIT.

- 2. Agreement shall be drawn with the successful bidder on prescribed Standard Form which is available in office of Engineering & Services Division. Bidder shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 3. The time allowed for carrying out the work will be 45 days 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.
- 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 Form can be seen from website www.eprocure.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. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
- 9. Tender fee in form of Demand draft (Drawn in favor of **Director, FRI Dehradun)** shall be scanned and uploaded to the e-Tendering website within the period of submission.
- 10. Earnest Money in the form of Demand Draft or pay order or Banker's Cheque or Deposit at call Receipt or fixed Deposit (Drawn in favor of **Director, FRI**



**Dehradun)** shall be scanned and uploaded to the e-Tendering website within the period of submission. **The original EMD should be deposited in the office of** Head, Engineering Cell, FRI within the period of bid submission. (The EMD document shall be only payable at Dehradun).

Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-Tendering website within the period of bid submission.

Affidavit as mention in clause No. 1.2.2

PAN, Uttarakhand GST registration.

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

Online bid documents submitted by intending bidders shall be opened only of those bidders, whose original EMD, Tender Fee and hard copies of all other documents deposited in the Head, Engineering Cell office and scanned copy of other document and uploaded in E portal.

The bid submitted shall be opened 17.02.2023, at 3:00 PM

- 11. The bid submitted shall become invalid if any one document does not submitted/ Uploaded by the bidder as mentioned in clause No. 18.
- 12. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.



- 13. The competent authority does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
- 14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
- 15. The competent authority on behalf of Director, FRI Dehradun reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 16. No Engineer of gazetted rank or other gazetted officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- 17. The bid for the works shall remain open for acceptance for a period of **Ninety (90)** days from the date of opening of bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the rebidding process of the work.
- 18. This notice inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 30 days from the stipulated date of start of the work, sign the contract consisting of:
  - a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.



b) Standard C.P.W.D. Form 7 or other Standard C.P.W.D. Form as mentioned.

Signature of the Head Engineering Cell Division For and on behalf of Director, FRI



#### FOREST RESEARCH INSTITUTE ITEM RATE BID AND CONTRACT FOR WORKS

Tender for the work of: - "Civil Up-Gradation work in AS(E) Office Building at FRI."

#### To be submitted online by 16.02.2023, at 3.00 PM

The Bid shall be opened in presence of tenderers who may be present

**38-116/2022-23**/Head/Engineering Cell/Civil in the office of the Head, Engineering Cell, FRI, Dehradun

#### 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 Director FRI Dehradun within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings 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 respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the date of opening of bid and not to make any modifications in its terms and conditions.

A sum of **Rs. 59** 

**,000/-** is hereby forwarded in Deposit at call Receipt of a Scheduled Bank/Fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by scheduled bank as earnest money. I/we agree that the said Director FRI Dehradun 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 of commence work as specified, I/we agree that Director, FRI Dehradun or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of



the items mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

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

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

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

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:



# ACCEPTANCE

Tł	ne above te	ende	er (a	s ma	odifie	d by	you as	pro	ovide	ed in the le	etters m	entioned he	ereunder)
is	accepted	by	me	for	and	on	behalf	of	the	Director,	Forest	Research	Institute,
De	ehradun				for				а		sur	n	of
R	S										. (Ru	ipees	
							)						

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

a) \_\_\_\_\_\_ b) \_\_\_\_\_ c) \_\_\_\_\_

For & on behalf of the Director, FRI

Dated \_\_\_\_\_

Signature\_\_\_\_\_

Designation \_\_\_\_\_



## SALIENT / MANDATORY REQUIREMENTS FOR THE TENDERER

#### Name of Civil Up-Gradation work in AS(E) Office Building at FRI. Work:

The tenderer is advised to read and **examine** the tender documents for the work and the set of drawings available with Head, Engineering Cell. He should inspect and examine the site and its surroundings by himself before submitting his tender.

- 1 Separate schedule of quantity is included in this tender for civil and electrical items of work. If the tenderer wants to offer any unconditional rebates on their rates, the same should also be offered in the respective components of civil and electrical schedule separately. The contractor shall quote the items rates in figures and words accurately so that there is no discrepancy in rates written in figures and words.
- 2 Time allowed for the execution of work is **45 days.**
- 3 The contractor(s) shall submit a detailed program of execution in accordance with the master programme/milestone within ten days from the date of issue of award letter.
- 4 Quality of the project is of utmost importance. This shall be adhered to in accordance with the provisions of CPWD specifications and guidelines given in the relevant paras.
- 5 The contractor (s) shall make his own arrangements for electricity and water required for the execution of work.
- 6 Contractor has to deploy required Plant and machinery on the project. Minimum number of plant and machinery to be deployed by him is indicated in this NIT. However, if any additional type and number of plants and machines are required at site, the same shall be deployed by the agency without any extra cost which shall be in order to adhere to the time schedule, as specified in this NIT. In case the contractor fails to deploy the plant and machinery whenever required and as per the direction of the Head, Engineering Cell, he (Head, Engineering Cell) shall be at a liberty to get the same deployed at the risk and cost of the contractor.
- 7 The contractor shall submit the running bills in the shape of the computerized MB in pages of A-4 size as per the standard format of department and shall act as per modified clause 6A of CPWD-7.
- 8 The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
- 9 In the case of any tender where unit rate of any item / items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer in unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.



- 10 The Security deposit 10% of work done will be deducted from the each bill amount and will be release after completion of defect liability period of the work.
- 11 On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Head, Engineering Cell shall be communicated in writing to the Head, Engineering Cell.
- 12 GST or any other tax on material in respect of this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same.
- 13 The contractor shall give a list of both Gazetted and Non-Gazetted CPWD employees related to him, if applicable.
- 14 The tender for maintenance work includes in addition to building work all other works such as sanitary and water supply installations drainage installation, electrical work, horticulture work, roads and paths etc. The tenderer apart from being a registered contractor (B&R) of appropriate class, must associate himself with agencies of appropriate class which are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.
- 15 The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Head/Head, Engineering Cell Engineering Cell, Division may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.



### ADDITIONAL CONDITIONS

- 1. Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same. Extra payment for centering/shuttering, if required to be done for heights greater than 3.5 m shall however be admissible at the rates arrived at in accordance with clause 12 of the agreement, if not already specified.
- 2. The contractor shall make his own arrangement for obtaining electric connection(s) if required and make necessary payments directly to the department concerned.
- 3. Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
- 4. Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
- 5. The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality and abide by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 6. If as per local Municipal regulations, huts for labour are not to be erected at the site of work; the contractor shall be required to provide such accommodation at a place as is acceptable to the local body and nothing extra shall be paid on this account.
- 7. The structural and architectural drawings shall at all times be properly co-related before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Head, Engineering Cell.
- 8. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by department.
- 9. Samples of various materials required for testing shall be provided free of charges by the contractor. Testing charges, if any, unless otherwise provided shall be borne by the department. All other expenditure required to be incurred for taking the samples; conveyance, packing etc. shall be borne by the contractor himself.
- 10. For the purpose of recording measurements and preparing running account bills, the abbreviated nomenclature indicated in the publications Abbreviated



Nomenclature of Items of DSR 2018 shall be accepted. The abbreviated nomenclature shall be taken to cover all the materials and operations as per the complete nomenclature of the relevant items in the agreement and relevant specifications.

In case of items for which abbreviated nomenclature is not available in the aforesaid publication and also in case of extra and substituted items for which abbreviated nomenclature are not provided for in the agreement, full nomenclature of item shall be reproduced in the measurement books and bill forms for running account bills.

For the final bill, however, full nomenclature of all the items shall be adopted in preparing abstract in the measurement books and in the bill forms.

- 11. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the Head, Engineering Cell. Nothing extra shall be paid on this account.
- 12. No payment will be made to the contractor for damage caused by rains, or other natural calamities during the execution of the works and no such claim on this account will be entertained.
- 13. The contractor shall take instructions from the Head, Engineering Cell for stacking of materials. No excavated earth or building materials etc. shall be stacked/ collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.
- 14. Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machinery's and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.
- 15. It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 16. 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.
- 17. The entire royalty at the prevalent rates shall have to be paid by the contractor on all the boulders, metals, shingle sand etc. collected by him for execution of the work, directly to the Revenue authority or authorized agents of the State Government concerned or the Central Government, as the case may be.
- 18. Various factory made materials shall be procured from reputed and approved manufacturers or their authorized dealers. Decision of Head, Engineering Cell in this regard shall be final and binding.
- 19. It must be ensure that all materials to be used in work bear BIS certification mark. In cases where BIS certification system is available for a particular material/product but not even a single producer has so far approached BIS for certification the material can be used subject to the condition that it should confirm to CPWD specification and relevant BIS codes. In such case written



approval of the Technical sanctioning Authority may be obtained before use of such material in the work.

- 20. Contractor shall have to execute a Guarantee Bond in respect of Water Proofing works as per Performa attached in this N.I.T. He shall also have to execute guarantee bonds for water supply and sanitary installations work on the Performa attached in this NIT.
- 21. 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.
- 22. Wherever work is specified to be done or material procured through specialized agencies, their names shall be got approved well in advance from Head, Engineering Cell. Failure to do so shall not justify delay in execution of work. It is suggested that immediately after award of work; contractor should negotiate with concerned specialist agencies and send their names for approval to Head, Engineering Cell. Any material procured without prior approval of Head, Engineering Cell in writing is liable to be rejected. Head, Engineering Cell in writing is liable to be rejected. Head, Engineering Cell acceptance. Non standard materials shall not be accepted.
- 23. The contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case, he or his authorized representative is not present or does not associate him, the results or such tests and consequences thereon shall be binding on the contractor.
- 24. The contractor shall get the water tested with regard to its suitability of use in the works and get written approval from the Head, Engineering Cell before he proceeds with the use of same of execution of works. If the tube-well water is not suitable, the contractor shall arrange Municipal water or from any other sources at his own cost and nothing extra shall be paid to the contractor on this account. The water shall be got tested at frequency specified in latest CPWD specifications/BIS code.

#### 37. Till the work is almost completed to the satisfaction of Head, Engg. Cell

a. Contractor shall not divert any advance payments or part thereof for any other purpose other than needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e. mobilization, secured against materials brought at site, secured against plant & machinery and / or for work done during interim stages, etc) are required to be re-invested in the contracted work to ensure advance availability resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.



b. All running account bills preferred by the contractor for advance payments shall be processed only if **Head**, **Engineering Cell** is satisfied that up-to date investments made by the contractor against contracted work are more than the payments received. Accordingly, all running account bills shall be supported with an account of update payments received vis-à-vis up-to date investments made on the work to enable Head, Engineering Cell to check to his satisfaction that the payments made by Head, Engineering Cell are properly utilized only on the work and nowhere else".



# **GENERAL CONDITIONS**

1 The contractor (s) shall inspect the site of work before tendering and acquaint himself with the site conditions and no claim on this account shall be entertained by the department.

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.

- 2. The contractor (s) shall study the soil investigation report for the site, available in the office of the **Head, Engineering Cell** and satisfy him about complete characteristics of soil and other parameters of site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.
- 3. The tenderer shall see the approaches to the site. In case any approach from main road is required 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.
- 4. The contractor (s) shall give to the Municipality, 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 livable on account of these operations in executing the contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain light and other illumination on for cautioning the public at night.
- 5. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night speed limit board's red flags, red lights and providing barriers. He shall be responsible for all dangers and incidents caused to existing / new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work.
- 6. The contractor shall provide at his own cost suitable weighing surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in advance from laboratory, approved by the **Head**, **Engineering Cell**. Nothing extra shall be payable on this account.
- 7. Contractor shall provide permanent bench marks and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings
- 8. The contractor shall submit for the approval of **Head, Engineering Cell** names of specialized agencies of repute along with their technical capacity proposed to be engaged by him for executing specialized works, who must have executed satisfactorily works of value as specified in mandatory conditions.
- 9. The contractor shall take all precautions to avoid accidents by, exhibiting caution boards day and night, speed limit boards, red flags, red light and providing



necessary barriers and other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.

- 10. Other agencies will also simultaneously execute and install the works of electrification, air conditioning, lifts, fire-fighting etc. for this work and the contractor shall provide necessary facilities for the same. The contractor shall leave such recesses, holes openings etc. as may be required for the electric, air-conditioning and other related works (for which inserts, sleeves, brackets, conduits base pinion, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stone work & brick work, if required and nothing extra shall be payable on this account.
- 11. All materials obtained from Govt. stores or otherwise shall be get checked by the **Head, Engineering Cell** or his any authorized supervisor staff on receipt of the same at site before use.
- 12. 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 **Head, Engineering Cell** 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.
  - 13. Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. 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.
- 14. The contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 15. The contractor shall be fully responsible for the safe custody of materials brought by him issued to him even though the materials are under double lock key system.
- 16. No payment shall be made to the contractor for any damage caused by rain, snowfall; floods, earthquake or any other natural causes whatsoever during execution of work. The damages of the work will be made good by the contractor at his own cost and no claim on this account shall be entertained.
- 17. For construction works which are likely to generate malba/rubbish to the tune of more than a tempo/truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at their own cost to the notified/specified dumping ground and under no circumstances these shall be stacked/dumped, even temporarily outside the construction premises.



### ADDITIONAL SPECIFICATIONS

- 1. The work in general shall be executed as per the description of the item, specifications and conditions attached and CPWD specifications 2009, Vol I & II with up-to-date correction slips and instructions of **Head, Engineering Cell**.
- 2. The order of preference in case of any discrepancy as indicated in condition No. 8.1 under "Conditions of Contract" give in standard CPWD contract form may be read as the following:
  - i) Nomenclature of items as per schedule of quantities.
  - ii) Additional conditions, General Conditions, Additional Specification and Particular Specifications attached with the tender document.
  - iii) CPWD Specifications 2009, Vol I & II with up-to-date correction slips..
  - iv) Indian standard specifications of B.I.S.
  - v) Sound Engineering Practice.
  - vi) Decision of **Head**, **Engineering Cell**.

A reference made to any Indian Standard specification in these documents, shall imply to the latest version of that standard. Including such revision/amendments as issued by the bureau of Indian standard 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.

- 3. Samples of all materials and fittings to be used in the work in respect of brand manufacturer and quality shall be got approved from the **Head**, **Engineering Cell**, well in advance of actual execution and shall be preserved till the completion of the work. Articles bearing BIS certifications mark shall only be used unless no manufacturer has got BIS mark for the particular material. Any material/fitting whose sample has not been approved in advance and any other unapproved material brought by the contractor shall be immediately removed as soon as directed.
- 4. The rates for all items of work shall unless clearly specialized otherwise include cost of all labour, material tools and plants and other inputs involved in the execution of the item.
- 5. The contractor (s) shall quote all inclusive rates against the items in the schedule of quantities and nothing extra shall be payable for any of the conditions and specifications mentioned. In the tender documents unless specifically specified otherwise.
- 6. Unless otherwise specified in the schedule of quantities 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. Those conditions shall be considered to include water from any source such as inflow of flood, surface and sub-soil water etc. and shall apply to the execution in any season



Annexure-I

# TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF STONE WORKS

The agreement made this \_\_\_\_\_ day of \_\_\_\_\_ Two Thousand and \_\_\_\_\_ between \_\_\_\_\_ son of \_\_\_\_\_\_ (hereinafter called the GUARANTOR of the one part) and the Director, Forest Research Institute Dehradun (hereinafter called the Government of the other part.)

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated \_\_\_\_\_\_ and made between the GUARANTOR OF THE ONE PART AND the Government of the other part, whereby the contractor inter alia, undertook to render the work in the said contract recited structurally stable workmanship, finishing and use of sound materials.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the affect that the said work will remain structurally stable and guaranteed against faulty workmanship, finishing and unsound materials and other related problems.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable after the expiry of maintenance period prescribed in the contract for the **minimum life of five years** to be reckoned from the date after expiry of maintenance period prescribed in the contract.

The decision of the Head, Engineering Cell with regard to nature and cause of defect shall be final. During this period of guarantee, the guarantor shall make good all defects to the satisfaction of the Head, Engineering Cell calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor's risk and cost. The decision of the Head, Engineering Cell as to the cost payable by the Guarantor shall be final and binding.

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



IIN WITNESS WHEREOF these presents, have been executed by the obligator and by \_\_\_\_\_\_\_\_ for and on behalf of the DIRECTOR, FRI DEHRADUN on the day, month and year first above written.

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

1.	
2	

SIGNED FOR AND ON BEHALF OF THE DIRECTOR, FRI DEHRADUN BY

\_\_\_\_\_ in the presence of:

1. \_\_\_\_\_ 2.



Annexure-II

#### GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER SUPPLY AND SANITARY INSTALLATIONS

The agreement made this \_\_\_\_\_ day of \_\_\_\_\_ Two Thousand and \_\_\_\_\_ between \_\_\_\_\_ son of \_\_\_\_\_ (hereinafter called the GUARANTOR of the one part) and the DIRECTOR; FRI DEHRADUN (hereinafter called the Government of the other part.)

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated \_\_\_\_\_\_ and made between the GUARANTOR OF THE ONE PART AND the Government of the other part, whereby the contractor inter alia, undertook to render the work in the said contract recited structurally stable workmanship, finishing and use of sound materials.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the affect that the said work will remain structurally stable and guaranteed against faulty workmanship, finishing, manufacturing defects of materials and leakages, etc.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable after expiry of maintenance period prescribed in the contract for the **minimum life of three year** to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Head, Engineering Cell with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects to the satisfaction of the Head, Engineering Cell calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor's cost and risk. The decision of the Head, Engineering Cell as to the cost, payable by the Guarantor shall be final and binding.



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

IN WITNESS WHEREOF these presents, have been executed by the obligator and \_\_\_\_\_\_ by \_\_\_\_\_\_ for and on behalf of the DIRECTOR, FRI DEHRADUN on the day, month and year first above written.

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

1.	
2	

SIGNED FOR AND ON BEHALF OF THE DIRECTOR, FRI DEHRADUN BY \_\_\_\_\_ in the presence of:

1. \_\_\_\_\_2.



Annexure-III

#### BANK GUARANTEE BOND

In consideration of the DIRECTOR, FRI DEHRADUN (hereinafter called "the Government") having agreed under the terms and conditions of agreement No. dated made between \_\_\_\_\_ (hereinafter called "the contractor(s)") and for the work (hereinafter called "the said agreement") having agreed to production of a irrevocable Bank Guarantee for Rs. (Rupees \_\_\_\_\_ only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement, we (hereinafter referred to as "the Bank") hereby undertake to pay to the (Indicate the name of the Bank) Government an amount not exceeding Rs.\_\_\_\_\_ (Rs. \_\_\_\_\_

only) on demand by the Government.

2 We

do hereby undertake to pay the amounts due and payable

(Indicate the name of the Bank)

under this Guarantee without any demure, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_\_ only).

3. We, the said bank further undertake to pay to the government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.

4 We

further agree that the guarantee herein contained shall

(Indicate the name of the Bank)



remain in full force and effect during the period that would be taken for performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Head, Engineering Cell on behalf of the government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.

5 We

further agree with the Government that the Government

(Indicate the name of the Bank)

shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) 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(s) and to forebear 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(s) or for any forbearance, act of omission on the part of the government or any indulgence by the Government to the said contractor(s) 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. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

7 We lastly undertake not to revoke this guarantee except with

(Indicate the name of the Bank)

the previous consent of the Government in writing.

8. This guarantee shall be valid up to \_\_\_\_\_\_, unless extended on demand by Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. \_\_\_\_\_\_ (Rs. \_\_\_\_\_\_\_\_ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated: the \_\_\_\_\_ day of

for

(Indicate the name of the Bank)



# Annexure-IV

### AFFIDAVIT

I /We have submitted a bank guarantee for the work \_\_\_\_\_

— (Name of work) Agreement							No.	
Date	ed							from
					(Na	ame of the Ba	ank with f	full address)
to	the	Head,	Engineering	&	Ser.	Division,	FRI	Dehradun
			with a	view				
			(N	ame o	f the Divi	sion)		
		emption from from spires on	om payment of	perf	ormance	guarantee	in cash.	This Bank I / We
•			validity of the ba	ank gu	arantee	intact by gett	ting it ext	ended from
			our own initiative	•			0	
mon			led date of comp		•		cted by th	ne Engineer

I / We also indemnify the Government against any losses arising out of nonencasement of the bank guarantee if any.

> (Deponent) Signature of Contractor

Note: The affidavit is to be given by the Executants before a first class Magistrate.



<u>Annexure-V</u>

#### INTEGRITY PACT

Τo,

 ,
 ,

Sub: NIT No. ..... for the work .....

Dear Sir,

It is here by declared that FRI, Dehradun is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the FRI.

Yours faithfully

Head Engineering Cell Forest Research Institute



Annexure-VI

Τo,

Head, Engineering Cell Forest Research Institute Dehradun

Sub: Submission of Tender for the work of .....

Dear Sir,

I/We acknowledge that FRI, Dehradun is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by FRI. I/We acknowledge and accept the duration of the

Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, FRI shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid is accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)



Annexure-VII

## To be signed by the bidder and same signatory competent / authorized to Sign the relevant contract on behalf of FRI

## **INTEGRITY AGREEMENT**

#### BETWEEN

DIRECTOR, FRI DEHRADUN represented through Head, Engineering & Services Division, ....., (Name of Division) FRI,...... (Address of Division), (Hereinafter referred as the '**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

#### AND

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:



## Article 1: Commitment of the Principal/Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
  - (c) The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

### Article 2: Commitment of the Bidder(s)/Contractor(s)

- It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.



b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict

Competitiveness or to cartelize in the bidding process.

- c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of along the first manufacturer another manufacturer with in а subsequent/parallel tender for the same item.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).



## Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify Bidder(s)/Contractor(s) the from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- 2) Forfeiture of EMD /Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract accrued or has the riaht to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

### Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.



3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

## Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

### Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 08 (Eight) Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, CPWD.

### Article 7- Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Head quarters of the Division** of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.



5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

# Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....

(For and on behalf of Principal/Owner)

.....

(For and on behalf of Bidder/Contractor)

WITNESSES:

1.....

(Signature, name and address)

2.....

(Signature, name and address)

Place:

Dated:



# <u>Schedule of Quantity of Work</u> Name of Work: Civil Up-Gradation work in AS(E) Office Building at FRI.

Item No	Description of item	Qty	Unit	Rate	Amount	Remarks
1.1	Earth work in rough excavation, banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with ½ tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead up to 50 m and lift up to 1.5 m :					
1.1.1	All kinds of soil	150.00	Cum			
1.2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :					
1.2.1	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	25.00	Mtr			
1.3	Clearing grass and removal of the rubbish up to a distance of 50 m	40.0.00	a			
2.1	outside the periphery of the area cleared. Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :	400.00	Sqm			
2.1.2	1:2:4 (1 Cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 40 mm nominal size).	25.00	Cum			
2.1.2	1:4:8 (1 Cement : 4 coarse sand(zone-III) : 8 graded stone aggregate 40 mm nominal size).	38.00	Cum			
2.1.3	1:5:10 (1 cement : 5 coarse sand(zone-III) : 10 graded stone aggregate 40 mm nominal size)	11.00	Cum			
2.2	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation leveling and dressing and finishing the top smooth.	60.00	Sqm			
3.1	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	1.10	Cum			
3.2	Centering and shuttering including strutting, propping etc. and removal of form for :					
3.2.1	Shelves (Cast in situ).	11.00	Sqm			
3.3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to plinth level.					
3.3.1	Cold twisted bars	120.00	Kg			
4.1	Honey-comb brick work 10/11.4 cm thick with common burnt clay bricks of class designation 7.5 in super structure above plinth level	54.00	Sqm			



	upto floor V level with cement mortar 1:4 (1 cement : 4 coarse sand).				
4.2	Brick edging 7cm wide 11.4cm. deep to plinth protection with				
	common burnt clay F.P.S. (non modular) bricks of class designation				
	7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	80.00	metre		
5.1	Providing and fixing stone slab with table rubbed, edges rounded and				
	polished, of size 75x50 cm deep and 1.8 cm thick, fixed in				
	urinalpartitions by cutting a chase of appropriate width with chase				
	cutter and embedding the stone in the chase with epoxy grout or with				
	cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone				
	aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finishedsmooth.				
5.1.1	White Agaria Marble Stone				
		4.00	Sqm		
5.2	Providing and fixing Ist quality ceramic glazed wall tiles conforming				
	to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green,				
	black of any size as approved by Engineer-in-Charge in skirting, risers				
	of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1				
	cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg				
	per sum including pointing in white cement mixed with pigment of				
	matching shade complete.	45.00	sqm		
6.1	Providing wood work in frames of false ceiling, partitions etc. sawn				
	and fixed in position with necessary stainless steel screws etc.	1.00	C		
6.1.1	Sal wood	1.00	Cum		
6.2	Providing and fixing bright finished brass butt hinges with necessary				
(01	screws etc. complete :				
6.2.1	100x85x5.5 mm (heavy type)	4.00	Nos.		
6.3	Providing and fixing bright finished brass tower bolts (barrel type)				
(21	with necessary screws etc. complete :				
6.3.1	250x10 mm	4.00	Nos.		
6.4	Providing and fixing wire gauge shutters using stainless steel grade				
	304 wire gauge with wire of dia 0.5 mm and average width of aperture				
	1.4 mm in both directions for doors, windows and clerestory windows with necessary screws:				
6.4.1	35 mm thick shutters.				
6.4.1	with ISI marked M.S. pressed butt hinges bright finished of required size - Second class teak wood	6.00	Sqm		
6.5	35 mm thick factory made Solid panel PVC Door shutter made out of	0.00	Juli	 	
	single piece extruded solid PVC profiles, 5 mm ( $\pm$ 0.2mm) thick,				
	having styles &rails (except lock rail) of size 95 mm x 35 mm x 5 mm,				
	out of which 75 mm shall be flat and 20 mm shall be tapered (on both				
	side), having one side thickness of 15 mm integrally extruded on the				
	hinge side of the profile for better screw holding power, including				
	reinforcing with MS tube of size 40 mm X 20 mm x 1 mm, joints of				
	styles & rails to be mitered cut & joint with the help of PVC solvent				
	cement, self driven self tapping screws & M.S. rectangular pipes bracket of size 190 mm X 100 mm of cross section size 35 mm x 17				
	mm x 1 mm at each corner.				
	Single piece extruded 5mm thick solid PVC lock rail of size 115mm X				
	35mm out of which 75mm to be flat and 20mm to be tapered at both				
	ends having 15mm solid core in middle of rail section integrally				
	extruded, fixing the styles and rails with the help of solvent and self				
	driven self tapping screws of 125mm X 11mm including providing				
	5mm single piece solid PVC extruded sheet inserted in the door as				
	panel, all complete as per manufacturer's specification and direction of				
	Engineer-in-Charge.				



6.5.1 Decorative finish (wood grained finish).	1 1
<b>6.5.1</b> Decorative minsh (wood granted minsh).4.00Sqm <b>7.1</b> Providing and fixing pressed steel door frames conforming to IS: 4351,4.00Sqm	
7.1 Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness,	
including hinges, jamb, lock jamb, bead and if required angle threshold	
of mild steel angle of section 50x25mm, or base ties of 1.60 mm,	
pressed mild steel welded or rigidly fixed together by mechanical	
means, including M.S. pressed butt hinges 2.5mm thick with mortar	
guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as	
directed by Engineer-in-charge:	
Profile B	
7.1.1 Fixing with adjustable lugs with split end tail to each jamb.	
10.00 m	
7.2 Steel work in built up tubular trusses including cutting, hoisting fixing	
in position and applying a priming coat of approved steel primer,	
welded and bolted including special shaped washers etc. complete.         7.2.1       Hot finished welded type tubes         550.00       kg	
530.00 Kg	
8.1 Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer),	
of 1st quality conforming to IS : 15622, of approved make, in all	
colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on	
20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand), jointing	
with grey cement slurry @ 3.3kg/sqm including pointing the joints	
with white cement and matching pigments etc., complete. 13.00 Sqm	
8.2 Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than	
0.08% and conforming to IS : 15622, of approved make, in all colours	
and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse	
sand) jointing with grey cement slurry @ 3.3kg/sqm including grouting	
the joints with white cement and matching pigments etc., complete.	
8.2.1         Size of Tile 600x600 mm         225.00         Sqm	
9.1 Providing corrugated G.S. sheet roofing including vertical/curved	
surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet	
washers filled with white lead, including a coat of approved steel	
primer and two coats of approved paint on overlapping of sheets	
complete (up to any pitch in horizontal/ vertical or curved surfaces),	
excluding the cost of purlins, rafters and trusses and including cutting	
to size and shape wherever required.	
9.1.1     0.63 mm thick with zinc coating not less than 275gm/m <sup>2</sup> 30.00     Sqm	
10.1   12 mm cement plaster of mix :	
10.1         1:6 (1 cement: 6 fine sand)         Sqm	
15.00	
10.2Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.800.00sqm	
plastered surface to prepare the surface even and smooth complete.800.00sqm10.3Distempering with oil bound washable distemper of approved brand	
and manufacture to give an even shade.	
<b>10.3</b> New work (two or more coats) over and including water thinnable	
priming coat with cement primer. 600.00 sqm	
10.4   Finishing walls with Acrylic Smooth exterior paint of required shade :	
10.4 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). 250.00 Sqm	
<b>10.5</b> Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :	
and manufacture of required colour to give an even shade :	L



				1	
10.5	New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution.	400.00	Sqm		
10.6	Painting with synthetic enamel paint of approved brand and	100.00	Squi		
	manufacture to give an even shade :				
10.6	Two or more coats on new work.	200.00	Sqm		
10.7	French spirit polishing :				
10.7	Two or more coats on new works including a coat of wood filler.	60.00	Sqm		
10.8	Removing dry or oil bound distemper, water proofing cement paint and				
	the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	800.00	sqm		
11.1	Dismantling W.C. Pan of all sizes including disposal of dismantled	000.00	Sqiii		
	materials i/c malba all complete as per directions of Engineer-in-				
10.1	Charge.	4.00	No.		
12.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of				
	Engineer-in-charge.				
	1:4:8or linear mix	15.00			
12.2	Demolishing brick work manually/ by mechanical means including	15.00	cum		
14.4	stacking of serviceable material and disposal of unserviceable material				
	within 50 metres lead as per direction of Engineer-in-charge.				
	In cement mortar	0.50	Cum		
12.3	Dismantling doors, windows and clerestory windows (steel or wood)	0.00	Cull		
	shutter including chowkhats, architrave, holdfasts etc. complete and				
	stacking within 50 metres lead : Of area 3 sq. metres and below				
	Or area 5 sq. menes and below	2.00	No.		
12.4	Dismantling tile work in floors and roofs laid in cement mortar				
	including stacking material within 50 metres lead.				
	For thickness of tiles 10 mm to 25 mm	56.00	Sqm		
12.5	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	500.00	Kg		
12.6	Dismantling cement asbestos or other hard board ceiling or partition	200.00	**5		
	walls including stacking of serviceable materials and disposal of		~		
12.7	unserviceable materials within 50 metres lead. Dismantling old plaster or skirting raking out joints and cleaning the	135.00	Sqm		
12.1	surface for plaster including disposal of rubbish to the dumping ground				
	within 50 metres lead.	8.00	Sqm		
13.1	Fencing with angle iron post placed at required distance embedded in				
	cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side				
	only and provided with horizontal lines and two diagonals interwoven				
	with horizontal wires, of barbed wire weighing 9.38 kg per 100 m				
	(minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete (Cost of posts struts earth work and				
	turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately) :-Payment to be made per				
	metre cost of total length of barbed wire used.				
	With G.I. barbed wire	1 000 00			
13.2	Supplying at site Angle iron post & strut of required size including	1,000.00	m		
13.4	bottom to be split and bent at right angle in opposite direction for 10				
	cm length and drilling holes upto 10 mm dia. etc. complete.	200.00	Kg		
13.3	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making	360.00	Sam		
L	Interiocking paver block of the -50 grade made by block making	300.00	Sqm		



	machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.				
14.1	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :				
	W.C. pan with ISI marked white solid plastic seat and lid	2.00	No.		
14.2	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : One urinal basin with 5 litre white P.V.C. automatic flushing cistern				
14.3	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls	3.00	No.		
	wherever require: White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.	2.00	No.		
14.4	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	2.00	No.		
14.5	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	Flexible pipe 32 mm dia				
		6.00	No.		
14.6	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Rectangular shape 1500x450 mm				
14.7	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	2.00	No.		
14.8	Providing and fixing toilet paper holder :		•		
	C.P. brass	2.00	No.		
14.9	Providing and fixing soil, waste and vent pipes :				
	100 mm dia.				
14.10	Sand cast iron S&S pipe as per IS: 1729.	25.00	m		
14.10	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.				
	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.	2.00	No.		
14.11	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes. Weighing not less than 60 gms.	3.00	No.		
14.12	Providing and fixing PTMT urinal cock of approved quality and				



	colour.				
	15 mm nominal bore, 80 mm long. 42 mm high and 30 mm wide with BSP female threads weighing not less than 48 gms.	3.00	No.		
15.1	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe including painting with anticorrosive bitumastic paint, cutting chases and making good the wall:				
	15 mm dia. nominal bore	15.00	Mtr		
15.2	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
	15 mm nominal bore	4.00	No.		
15.3	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) 15 mm nominal bore				
		25.00	No.	 	
15.4	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank. Circular tank				
	Circular tank	1,600.00	Litre		
15.5	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931:				
	15 mm nominal bore.	4.00	No.		
15.6	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
	15 mm nominal bore	6.00	No.		
15.7	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore				
	15mm nominal bore	6.00	No.		
15.8	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball.				
	15 mm nominal bore, 105 mm long. Weighing not less than 138 gms.	4.00	No.		
15.9	Providing and fixing PTMT soap Dish Holder having length of 138 mm, breadth 102 mm, height of 75 mm with concealed fitting arrangements. Weighing not less than 106 gms.	2.00	No.		
15.10	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.				
	15 mm nominal bore. Weighing not less than 32 gms.	4.00	No.		
15.11	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)including disposal of malba.	12.00	m		
16.1	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :				
	150 mm diameter S.W. pipe	25.00	m		



16.2       Constructing brick masonry manhole in centent mortar 1:4 (1 centent : 2 coarse sand ) vitils RCC. top slab with 11:24 mix (1 centent : 2 coarse sand : 8 graded stone aggregate 20 mm nominal size), finishel store is a coarse sand i vitil centent is 10 centent : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size), finishel with a floating coat of neat cernent and making channels in cennent concrete 11:24 (1 cennet : 3 coarse sand ) vitils readed stone aggregate 20 mm nominal size), finishel with a floating coat of neat cernent complete as per standard design :         Inside size WX80 cm and 45 cm deep including C.L. cover with frame (light dup) 455x60 tum internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):       2.00       No.         16.3       Constructing brick masonry road gully chamber 50x45x60 cm with bricks in centern torat 1:4 (1 centern : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal graing with frame complete as per standard design :       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying event stury mixed with water proofing centent complete as near standard design :       4.00       No.         18.1       Providing and hurding with mater proofing centent complete as near standard design :       4.00       No.         19.1       Providing and hurding with mater proofing centent complete the fast kge sign with start proofing centent compound coarsing of priping a large archices of the coars with water proofing centent compound coarsing of applying a large archice with water proofing centent compound thure fast kge sing the coarsing of the coars of the coars						r	
coarse sand : 4 graded some aggregate 20 mm nominal size), inside plastering 12 mm thick with cement motical size, inside plastering 12 mm thick with ement motar : 5 coarse sand in finished with floating coar of neat cement and making channels in cement concrete 1:2:4 (Lement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), insided with afford size grageate 20 mm nominal size). Inside with afford some aggregate 20 mm nominal size) inside with afford some aggregate 20 mm nominal size). Inside with afford some aggregate 20 mm nominal size) inside with afford some aggregate 20 mm nominal size). Inside size 90x500 cm and 45 cm deep including C.L. cover with frame (light dup) 455x610 mm internal dimensions, total wight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame [5 kg):         With Sever bricks conforming to IS : 4885       2.00       No.         16.3       Constructing brick masorny road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 ( corner sont) including signification of the sont signification of the sont signification on roofs of slabs by and signification of the sont sont signification of the sont should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of phyling: a) after surface preparation, first layer of slaw signification of the sont sont signification of the sont sont signification of the sont sont sont sont sont signification of the sont sont sont sont sont sont sont sont	16.2	Constructing brick masonry manhole in cement mortar 1:4 (1 cement :					
<ul> <li>size), foundation concrete 1:45 mix (1 cement : 4 coarse sand) inside with thick with cement mortur 1:3 (1 cement : 3 coarse sand) finished with floating coat of next cement and making channels in cement concrete 1:2:4. (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with af floating coat of next cement complete as per standard design :</li> <li>Inside size 90x80 cm and 45 cm deep including C.L. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame 15 kg):</li> <li>With Scower bricks conforming to 18: 4885 2.00 No.</li> <li>Ioasting brick masonry road guly chamber 50x45x60 cm with reads in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast RC.L. forizontal grating with frame complete as per standard design 1.</li> <li>With common bornt clay F.P.S. (non modular) bricks of class 4.00 No.</li> <li>Hord signation 7.3</li> <li>Providing and hying water proofing treatment on roofs of slabs by applying: a) after strafter or first glass closh with water proofing cement compare compare consisting of pplying: a) after strafter of First glass closh with any to read with water proofing cement compare consisting of slave still green. Overlaps of joints of there don's should not be less than 10 cm. c) third layer of First glass closh with water proofing cement with water proofing cement with water proofing cement with applying and any apply dig and any apply apply dig and any apply apply and and strafter preparation. first layer of slaver should be don's bootid not be less than 10 cm. c) third layer of First glass closh with water proofing cement the entire treated surface consisting of pplying: a) after strafter of 4 hours followed by water proofing cement with be taken upto 30 cm on parapet will and tacked with strafter cond (3 fourth and final layer of trick tilling with cement motar (with with less of 0.3 Size 55x555 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimu</li></ul>		4 coarse sand ) with R.C.C. top slab with 1:2:4 mix (1 cement : 2					
<ul> <li>size), foundation concrete 1:45 mix (1 cement : 4 coarse sand) inside with thick with cement mortur 1:3 (1 cement : 3 coarse sand) finished with floating coat of next cement and making channels in cement concrete 1:2:4. (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with af floating coat of next cement complete as per standard design :</li> <li>Inside size 90x80 cm and 45 cm deep including C.L. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame 15 kg):</li> <li>With Scower bricks conforming to 18: 4885 2.00 No.</li> <li>Ioasting brick masonry road guly chamber 50x45x60 cm with reads in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast RC.L. forizontal grating with frame complete as per standard design 1.</li> <li>With common bornt clay F.P.S. (non modular) bricks of class 4.00 No.</li> <li>Hord signation 7.3</li> <li>Providing and hying water proofing treatment on roofs of slabs by applying: a) after strafter or first glass closh with water proofing cement compare compare consisting of pplying: a) after strafter of First glass closh with any to read with water proofing cement compare consisting of slave still green. Overlaps of joints of there don's should not be less than 10 cm. c) third layer of First glass closh with water proofing cement with water proofing cement with water proofing cement with applying and any apply dig and any apply apply dig and any apply apply and and strafter preparation. first layer of slaver should be don's bootid not be less than 10 cm. c) third layer of First glass closh with water proofing cement the entire treated surface consisting of pplying: a) after strafter of 4 hours followed by water proofing cement with be taken upto 30 cm on parapet will and tacked with strafter cond (3 fourth and final layer of trick tilling with cement motar (with with less of 0.3 Size 55x555 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimu</li></ul>		coarse sand : 4 graded stone aggregate 20 mm nominal					
graded stone aggregate 40 mm nominal size), inside plastering 12 mm         thick with centert torus 1:3 corres sould 1:4 graded stone aggregate 20 mm         nominal size) finished with a floating coat of neat centent concrete         1:2:4 (cortent 1: 2 coarse sand 1:4 graded stone aggregate 20 mm         nominal size) finished with a floating coat of neat centent complete as         per standard design 1         finished with 4 floating coat of neat centent complete as         grade state 90:800 cm and 45 cm deep including CL cover with frame         of fame 15 kg):         With Sever bricks conforming to IS : 4885         2.00       No.         16.3       Constructing brick masonry road gulty chamber 50x45x60 cm with bricks in centent motir 1:4 (1 centent : 4 coarse sand) including 500x450 cm pre-cast RC.C horizontal grating with frame complete as per standard design:         as per standard design :       4.00         With common burnt clay F.P.S. (non modular) bricks of class designation 7.5       4.00         Providing and laying water proofing treatment on roofs of slabs by applying centent shary mixed with water proofing centent compound (0 cors) kg/sqm. and carses and (0 1.289         of exercising of phying: a) after strafe system as eased (0 1.289         when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm trickness consisting of slary of centent (0 1.289 kg/sqm mixed with water proofing centent compound (0 0.670 kg/sqm and coarses and (0 1.289 kg/sqm							
ibick with centent and making channels in connet correte 1:2:4 (Leement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :         Invide size 90:80 cm and 45 cm deep including C.L. over with frame (light duy) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):         With Sever bricks conforming to IS : 4885       2.00         Constructing brick masorry road gully chamber 50x45x60 cm with bricks in cement morat: 14: (Leement : 4 corse sand) including 500x450 nm pre-cast R.C.C. horizontal grating with frame complete as per standard design :         With common burnt clay F.P.S. (non modular) bricks of class designation 7.5       4.00       No.         17.1       Providing and laying water proofing creament comported consisting of pplying: a) after surface preparation, first layer of fibre cloth should not be less than 10 cm. c) thrd layer of fibre cloth should not be less than 10 cm. c) thrd layer of fibre cloth should not be less than 10 cm. c) thrd layer of fibre cloth should not be less than 10 cm. c) thrd layer of 1.5 mm thickness consisting of shours. The chirth returned with water proofing cement surpower and approved texture, design and patterns thaying returned with a layer and proves samd 0 l.230 kg/sgm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The chirth returned with bate frash celling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction ceefficient) of 0.50 (minimum) ap er IS 8252-1987, Light reflectance of 55% (minimum). Non combustible as per B3476 (part 4), fibre performance as per B3576 (part 6 47), humidity resistance of 100%, thermal conduc							
Induiting cost of neat cennent and making channels in cennert concrete       12.42 (cennert : 2 coarse sand : 4 graded store aggregate 20 mm nominal size) finished with a floating cost of neat cennent complete as per standard design :         Inside size 90.800 cm and 45 cm deep including C.L cover with frame (tight day) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):         With Sewer bricks conforming to IS : 4885       2.00       No.         16.3       Constructing brick masonry road gally chamber 50x45x60 cm with bricks in cennent motar 1.4 (1 cennet) : 4 coarse sand) including 500x450 mm pre-cast RC.C. horizontal grating with frame complete as per standard design :       2.00       No.         16.3       Constructing brick masonry mode gally chamber 50x45x60 cm with bricks in cennent motar 1.4 (1 cennet) : 4 coarse sand) including 500x450 mm pre-cast RC.C. horizontal grating with frame complete as per standard design :       2.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cennent shurp mixed with water proofing cennent compound consisting of shury of a part surface scond kay of fibre glass clob when the first layer is still green. Overlaps of joints of fibre clobs slob when the first layer is still green. Overlaps of joints of fibre clobs clob when the first layer is still green. Overlaps of joints of fibre clobs slob when the first layer of size stages and 1.289 kg/sgm, mixed with water proofing cennent compound @ 0.670 kg/sgm and coarse sand @ 1.289 kg/sgm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treamate will be taken cuiling the stage stage stage st							
1:2:4 (Leement : 2 coarse sand : 4 grided stone aggregate 20 mm nominal size) finished with a floating cost of neat ecment complete as per standard design : <ul> <li>Inside size 90.880 cm and 45 cm deep including CL cover with frame (fight daty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):</li> <li>With Sever bricks conforming to IS : 4885</li> <li>Constructing brick masonry road gulty chamber 50x45x60 cm with bricks in cement mortar 14 (1 cement : 4 coarse sand) including 500x4550 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :</li> <li>With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</li> <li>Providing and laying water proofing treatment on roofs of slabs by applying cement slavny mixed with water proofing cement compound consisting of pplying: a) after surface preparation, frist layer of slarry of cement (= 0.253 kg/sgm b) laying second layer of fibre class closh should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slarry of cener for thours followed by water curing for 43 hours. The entire treatment will be kalor slar for an optimal water proofing cement compound (= 0.670 kg/sgm and coarses and # 0.280 kg/sgm mixed with water proofing cement will be slared for separately. For the purpose of measurement the chirts treated surface will be reactive of 355 mm of approved texture, design and coarse sand # 1.280 kg/sgm mixed with water profing cement will be kalor for separately. For the purpose of measurement will be kalor for a hours. The entire treatment will be kalor for exceeding the separately. For the purpose of measurement will be kalor for an optimal providing and fixing rate exceeding of 30.00 mm, cross - T of size 24x32 mm of length 1200 mm and secondary interreduce cover of 3 bits 26000 x 6000 mm, suspended for mering using alaymater M-6</li></ul>							
invalue							
Imide size 90x80 cm and 45 cm deep including C.I. cover with frame (light dury) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):         With Sewer bricks conforming to IS : 4885       2.00       No.         16.3       Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 14 (1 cnemt : 4 corses and) including 500x450 nm pre-cast R.C.C. horizontal grating with frame complete as per sindard design :       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm.b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 15. mm thickness crasisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The cnitre treatment will be taken upto 30 cm on parapet wall and tucked into groose in parapet all around(d) forth and final layer of brick tiling with ement motrar (which will he paid for separately. For the purpose of measurement the entire treated surface will be measured       12.00       sgm         18.1       Providing and fixing false ceiling at all heights with integral densified calcium slicater reinforced with fibre and natural filler false ceiling tiles of Xize 55x5555 mm of approved texture, design and pattetres having NRC (Noise Reduction coefficient) o		1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 20 mm					
Imide size 90x80 cm and 45 cm deep including C.I. cover with frame (light dury) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):         With Sewer bricks conforming to IS : 4885       2.00       No.         16.3       Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 14 (1 cnemt : 4 corses and) including 500x450 nm pre-cast R.C.C. horizontal grating with frame complete as per sindard design :       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm.b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 15. mm thickness crasisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The cnitre treatment will be taken upto 30 cm on parapet wall and tucked into groose in parapet all around(d) forth and final layer of brick tiling with ement motrar (which will he paid for separately. For the purpose of measurement the entire treated surface will be measured       12.00       sgm         18.1       Providing and fixing false ceiling at all heights with integral densified calcium slicater reinforced with fibre and natural filler false ceiling tiles of Xize 55x5555 mm of approved texture, design and pattetres having NRC (Noise Reduction coefficient) o		nominal size) finished with a floating coat of neat cement complete as					
Inside size 90x80 cm and 45 cm deep including CL cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):         With Sewer bricks conforming to 1S : 4885       2.00       No.         16.3       Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement motar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-case RCC. Dorizontal grating with frame complete as per standard design :       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of pplying: 0) Laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 0.128b kg/sqm mixed with water proofing cement compound @ 0.273 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer of case for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groow in parapet all around(d) fourth and final layer of brick tiling with cement motar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured       12.00       sqm         18.1       Providing and lixing false ceiling at all heights with integral densified calcium slicate reinforced with fibre and natural filler fulse ceiling tiles of Size 355x595 mm of approved texture, design and patterns having NRC (Noise Reduction corfficient) of 0.30 (minimum), as per IS 82251987, Light reflectance of 85% (minimum), suspended on inter- locking mani T-Grid of bot dipped galaviased iron sece							
(light duty) 455x610 mm internal dimensions, total weight of cover         and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):         With Sewer Dricks conforming to 1S : 4885         2.00       No.         16.3       Constructing brick masoury road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (I cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :       2.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of pplying; a) after stratce preparation. first layer of slurry of cement @ a 0.488 kg/sqm. bil aging second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of Fibre glass cloth when the dist layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of Fibre glass cloth when the dist layer is mill green alayer of Fibre glass cloth when the dist layer is still green overlaps of loints of fibre cloth should not be less than 10 cm. c) third layer of LSM whater proofing cement compound @ 0.670 kg/sqm and coarses sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upo 30 cm on parapter wall and nucked intor groove in parapte all anound(d) fourth and final layer of brick tiling with cement mortat (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.       12.00       sgm         18.1       Proxiding and fixing false ceiling at all heights							
and frame' to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):       2.00       No.         With Sewer bricks conforming to IS : 4885       2.00       No.         16.3       Constructing brick masoury road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :       2.00       No.         With common burnt clay F.P.S. (non modular) bricks of class designation 7.5       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement story mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.233 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlays of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ a 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of frick tling will cement motar (which will be pid for separately. For the purpose of measurement the entire treated surface will be measured       12.00       sqm         18.1       Providing and fixing false ceiling at all heights with integral densified calcium slitcater reinforced with fibre and natural filler false ceiling tilles (dia waited the 20 kg/sqm mixed dia wg/sqm kg/sqm mixed) with water profing material densified cal							
of frame 15 kg):       2.00       No.         16.3       Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1.4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :       2.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of pplying; a) after surface preparation. first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) haying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm trickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water caring for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured       12.00       sgm         18.1       Providing and fixing false ceiling at all heights with integral densified calcium silicar erinforced with fibre and naturel (S% (minimum) as per 15 822:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4). Fire performance as per BS:476 (part 6 & 7), humidity resistance of 1008, thermal conductivity < 0.043 Wm K as per ASTM 518:1991.in true horizontal level suspended on inter- locking metal T-runners of size 24x32 mm of length 3000 mm, mcroxs - T of size 24x32 mm of length 3000 mm and galvanised							
With Sewer bricks conforming to IS: 4885       2.00       No.         16.3       Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement: 4 coarse sand) including 500x45x 0m pre-cast R.C.C. Incircontal grating with frame complete as per standard design :       2.00       No.         With common burnt clay F.P.S. (non modular) bricks of class designation 7.5       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of plying: a) after surface preparation, first layer of slurry of cement @ 4.0488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of I.5 mm thickness consisting of slurry of cement @ 1.299 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqn macl oarse sand @ 1.239 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tilling with cement morar (which will be pid for separately. For the purpose of measurement the entire treated surface vill be measured       12.00       sqm         18.1       Providing and fixing false ceiling at all heights with integral densified calcium slicate reinforced with fibre and natural filler false ceiling tills with remal conducitive < 0.043 Nm K as per ASTM 518:1991.in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.3mm thick (galvanized @ 120 gm spr s sym including both sides) comprising of main-T runners of size 24x32 mm of length 300 mm, suspended from ceiling using galvanised mild steel it							
16.3       Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :       2.00       No.         With common burnt clay F.P.S. (non modular) bricks of class designation 7.5       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slurey slass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 12.59 kg/sqm listed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to allows flow flow the water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet vall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treatd surface will be measured if low and fibre and natraf filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimun). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 & 67), humidity resistance of 100%, thermal conductivity < 0.043 Wm K as per ASTM 518:1991,in true horizontal level suspended on inter locking med 1.761 do hot dipped galvanised rion section of 0.37mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main Trunners of size 24x32 mm of length 3000 mm, coros - T of size 24x32 m							
16.3       Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :         With common bount clay F.P.S. (non modular) bricks of class designation 7.5       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slury mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slurry of cement @ a 0.488 ks/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ a 1.289 kg/sqm mixed with water proofing cement compound @ 0.767 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured       12.00       sqm         18.1       Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having press 18:476 (part-4), fire performance as per BS:476 (part 6 & 7), humidity resistance of 100%, hermal conductivity < 0.043 W/m K as per ASTM 518:1991.in true horizontal level suspended on inter-locking metal T-foid oht dipped galavanised into nestein of 0.33mm thick (galvanized @ 120 g		With Sewer bricks conforming to IS: 4885					
16.3       Constructing brick masoury road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :       With common burnt clay F.P.S. (non modular) bricks of class designation 7.5       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with fere and natural filler false celling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 47), humidity resistance of 100%, thermal conductivity < 0.043 Wm K as per ASTM 518:1991.in true horizontal level suspended on inter-locking metal T-field ob dipped galvanised iron section of 0.33mm thick (galvanized metal conductivity < 0.043 Wm K as per ASTM 518:1991.in the horizontal level suspended on inter-locking metal T-field ob dipped galvanised iron section of 0.33mm thick (galvanized metal conductivity < 0.043 Wm K as per ASTM 518:1991.in the horizontal level suspended on inter-locking me			2.00	No.			
bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 nm pre-cast R.C.C. horizontal grating with frame complete as per standard design : <ul> <li>With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</li> <li>Providing and laying water proofing treatment on roofs of slabs by applying cement sturry mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slury of cement @ a 0.488 kg/sqn mixed with water proofing cement compound @ 0.233 kg/sqn. b) laying second layer of F15e glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slury of cement @ 1.289 kg/sqn mixed with water proofing cement compound @ 0.670 kg/sqn and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all aroun(d(f) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> </ul> <li>18.1 Providing and fixing false ceiling at all heights with integral densified calcium slicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS/476 (part-4), fire performance as per BS/476 (part 6 &amp; 7), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on inter- locking metal. T-forid of hot dipped galvamised iron section of 0.33mm thick (galvamized @ 120 grams per sqm including both sides) comprising of main-T runners of</li>	16.3	Constructing brick masonry road gully chamber 50x45x60 cm with					
500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :	10.5						
as per standard design:							
With common burnt clay F.P.S. (non modular) bricks of class       4.00       No.         17.1       Providing and laying water proofing treatment on roofs of slabs by applying coment slurry mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured       12.00       sqm         18.1       Providing and fixing false ceiling at all heights with integral densified clium slicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum). No combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 k7), humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASIM 518:1991,in true horizontal level usepanded on inter-locking metal T-critid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 5000 mm, cross - T of size 24x32 mm of length 6000 mm to form grid module of size 600 x 600 mm, suspended from ceiling using galv							
designation 7.5     4.00     No.       17.1     Providing and laying water proofing treatment on roos of slabs by applying cement surry mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) thrid layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured     12.00     sqm       18.1     Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity < 0.043 Win K as per ASTM 518:1991, in ture horizzontal level suspended on inter- locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x332 mm of length 5000 mm, cross - T of size 24x32 mm of length 6000m to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 10000 mm to be							
<ul> <li>17.1 Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of plying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treates urface will be measured</li> <li>12.00 sqm</li> <li>18.1 Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum). Non combustible as per Bis/476 (part 4), fire performance as per Bis/476 (part 6 &amp;7.), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991,in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized <i>m</i> 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 6000 mm and secondary intermediate cross-T of size 24x32 mm of length 6000 mm tofrm grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threade hanger rod up to 1000 m</li></ul>							
<ul> <li>17.1 Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of plying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treates urface will be measured</li> <li>12.00 sqm</li> <li>18.1 Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum). Non combustible as per Bis/476 (part 4), fire performance as per Bis/476 (part 6 &amp;7.), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991,in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized <i>m</i> 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 6000 mm and secondary intermediate cross-T of size 24x32 mm of length 6000 mm tofrm grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threade hanger rod up to 1000 m</li></ul>		designation 7.5	4.00	No.			
applying cement slurry mixed with water proofing cement compound consisting of pplying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sgm mixed with water proofing cement compound @ 0.253 kg/sgm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement moratra (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured       12.00       sqm <b>18.1</b> Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 & 7), humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on inter- locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, eross - T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long. 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm length and	17.1						
<ul> <li>consisting of pplying: a) after surface preparation, first layer of slurry of cement @ a 0.488 kg/sqm mixed with water proofing cement (compound @ 0.253 kg/sqm, b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> <li>18.1 Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp; Z7), humidity resistance of 100%, thermal conductivity &lt; 0.043 Wm K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main.T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 1200 mm and secondary intermediate cross-T of size 24x32 mm of length 6000 mm torm grid module of size 600 x 600 mm, suspended from ceiling using galvanised milds teel items (galvanizing @ 80 grams per sqm) i.c. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 25x2x 2mm. Galvanised iron operiptery wall /</li> </ul>							
<ul> <li>of cement @ a 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet vall and tucked into groove in parapet all anoud(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> <li>18.1 Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595:595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp;7), humidity resistance of 100%, thermal conductivity &lt; 0.043 Wm K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal T-corid of hot dipped galavaised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 1200 mm and secondary intermediate cross-T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised wild seel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall /</li> <th></th><th></th><th></th><th></th><th></th><th></th><th></th></ul>							
<ul> <li>compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> <li><b>18.1</b> Providing and fixing false ceiling at all heights with integral densified clicum silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp; 7), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991,in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm including both sides) mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall /</li> </ul>							
<ul> <li>when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slury of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> <li>12.00 sqm</li> <li>18.1 Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp; X), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal T-Grid of hot dipped glavainsed iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, ercoss - T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using glavanised mid steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm hength and L-shape level adjuster of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall /</li> </ul>							
<ul> <li>should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> <li>12.00 sqm</li> <li>18.1 Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IIS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp; 7), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm) including both sides) comprising of main-T runners of size 24x32 mm of length 3000 mm, cross - T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 x mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm to be fixed on periphery wall /</li> </ul>							
<ul> <li>consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> <li>12.00 sqm</li> <li>18.1 Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp; 7), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991,in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 1200 mm and secondary intermediate cross-T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 m, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall /</li> </ul>		when the first layer is still green. Overlaps of joints of fibre cloth					
<ul> <li>proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> <li><b>18.1</b> Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp; X7), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 24x24x0.40 mm of length 3000 mm, be fixed on periphery wall /</li> </ul>		should not be less than 10 cm. c) third layer of 1.5 mm thickness					
<ul> <li>proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured</li> <li><b>18.1</b> Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &amp; X7), humidity resistance of 100%, thermal conductivity &lt; 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 24x24x0.40 mm of length 3000 mm, be fixed on periphery wall /</li> </ul>							
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partition with the neip of plastic rawl plugs at 450 mm center to center							
		partition with the help of plastic rawl plugs at 450 mm center to center			l	l	



<u> </u>	crews. The work shall be carried out as and as per directions of Engineer-in-				
With 15 mm thick tegular ed ceiling tiles.	ged light weight calcium silicate false	135.00	Sqm		

Note: Rates to be quoted inclusive GST & all other taxes.