

# NATIONAL AGRICULTURAL COOPERATIVE MARKETING FEDERATION OF INDIA LTD.

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# TENDER DOCUMENT

# FOR

# INVITATION OF QUOTATIONS

## FOR APPOINTMENT OF CONSTRUCTION AGENCY FOR DESIGN, SUPPLY, ERECTION, TESTING & COMMISSIONING OF COLDSTORAGE AND OTHER PARAPHERNALIA ON TURNKEY BASIS AT PLOT NO 46/2, SECTOR – 18, MAFCO YARD, VASHI, NAVI MUMBAI IN MAHARASHTRA

**Tender Notice No. HO/E-03/Vashi/2025-2026**

**Dated:- 27.06.2025**

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# NOTICE OF DISCLAIMER

1. The information contained in this TENDER or subsequently provided to intending bidders whether verbally or in documentary form by or on behalf on National Agricultural Cooperative Marketing Federation of India Ltd. (hereinafter referred to as “NAFED”) or any of its employees or officers referred to as “NAFED” Representative”) is provided on the terms and conditions set out in this TENDER document and all other terms and conditions subject to which such information is provided.
2. No part of this TENDER and no part of any subsequent correspondence by NAFED, or NAFED Representative shall be taken neither as providing legal, financial or other advice nor as establishing a contract or contractual obligations. Contractual obligations would arise only if andwhendefinitiveagreementshavebeenapprovedandexecutedbytheappropriateparties having the authority to enter into approve such agreements.
3. The Tender document has been prepared solely to assist prospective bidders in making their decision to get proposed work with NAFED. NAFED does not purport this information to be all inclusive or to contain all the information that intending bidders may need to consider while submitting respective bids. The data and any other information wherever provided in this TENDER is only indicative and neither NAFED, nor NAFED Representative, will make or will be deemed to have made any current or future representative, promise or warranty, express or implied as to the accuracy, reliability or completeness or the information contained herein or in any document or information, whether written or oral, made available to intending bidders, whether or not the aforesaid parties know or should have known of any errors or omissions or were responsible for its inclusion in or omission from this TENDER.
4. Recipients of this document should inform themselves of and observe any applicable legal requirements. NAFED makes no representation or warranty and shall incur no liability under any law, status, rule or regulations to the accuracy, reliability or completeness of the TENDER Document.
5. NAFED reserves the right to reject all or any of the Bids submitted in response to the TENDER at any stage without assigning any reasons whatsoever.
6. All intending bidders are responsible for all costs incurred by them when evaluating and responding to this document and any negotiation costs incurred by the recipient thereafter. NAFED may in its sole discretion proceed in the matter it deems appropriate which may include deviation from its expected evaluation process, the waiver of any documents and the request for additional information. Unsuccessful bidders will have no claim whatsoever against neither NAFED nor its employees, officers.
7. NAFED reserves the right to modify, suspend, change or supplement this Tender at any stage. Any change to the TENDER will be notified through Nafed’s website only to all the intending bidders to whom the TENDER is issued.
8. Mere submissions of Bid do not ensure selection of the Applicant as successful Applicant

**NOTICE INVITING QUOTATION**

Sealed quotation are invited by NAFED State Head, Mumbai from registered and reputed contracted/firms having adequate experience, resources and expertise in dealing with the execution and construction of cold storage and other paraphernalia at Vashi, Navi Mumbai in Maharashtra on turnkey basis.

The last date of submission of quotation is 10.07.2025 upto 3:00 pm. Interested bidders may visit our website: [www.nafed-india.com](http://www.nafed-india.com/) or contact State Head, Mumbai, NAFED at above address.

Quotation are invited by the, State Head , Mumbai, NAFED, Naman centre, ‘A’ Wing, Unit No. 803, 8th Floor,C-31, G-Block, Bandra Kurla Complex, Bandra (East), Mumbai - 51. <Tel:-> 022-2653 1732, Email Id: [nafmbi@nafed-india.com](mailto:nafmbi@nafed-india.com) for following work:

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Particulars** | **EMD Rs.** | **Cost of Tender Form** |
| 1 | **Appointment of Construction Agency for Design, supply, Erection, Testing & commissioning of Cold Storage and other paraphernalia on turnkey basis at Plot no 46/2 Sector – 18, Mafco yard, Vashi, Navi Mumbai in Maharashtra.** | 5,00,000/- | 1000 + 18 % GST  (Non- Refundable) |

Preference will be given to Public sector/ Reputed Private Sector/ Apex bodies/ Govt. Empanelled or Authorized Construction Agencies for construction of cold storage.

# TENDER - SCHEDULE

|  |  |  |
| --- | --- | --- |
| 1. | Issuance of Tender Document | 27.06.2025 |
| 2. | Tender submission end date & time | Date 10.07.2025 till 3:00 pm |
| 3. | Date & Time of technical Bid opening | Date 10.07.2025 till 3:00 pm |
| 4. | Date & Time of Financial Bids opening | Date 10.07.2025 till 3:00 pm |
| 5. | Tender Document Fee | Rs 1000 + 18 % GST |
| 6. | EMD | Rs 5,00,000/- (Five Lacs) |
|  |  |  |

**Note:-**

## The rates to be quoted by the agency must be inclusive of travel, lodging boarding and of all taxes i.e. Goods and service tax (GST) etc. No extra payment on this account will be made to the contractor.

1. Cost of Tender form fee shall be paid through pay order/ demand draft in the name of National Agricultural Cooperative Marketing Federation of India Limited payable at Mumbai at par. Tender fee is Rs.1000 +18% GST.
2. Unique Transaction Reference No (UTR) to be mentioned alongwith slip for payments made online, obtained at the time of deposition of EMD & Tender fee.
3. OthertermsandconditionsaredisplayedintheTenderform.Righttorejectanyorallbids of works without assigning any reason thereof is reserved with Branch Manager.
4. The detailed Tender Notice is available on [www.nafed-india.com](http://www.nafed-india.com/) (Any changes in the Tender will be published on above website)

## State Head

## Mumbai

**TENDER DOCUMENT**

# 1.0 BACKGROUND

National Agricultural Cooperative Marketing Federation of India Limited – NAFED, is a National level Federation of State level Cooperative Societies. NAFED is registered under the Multi State Co-operative Societies Act. NAFED was setup with the object to promote Co-operative marketing of Agricultural Produce to benefit the farmers. After sound experience in Cold Storage Warehousing and Dry Warehousing, NAFED has planned to set-up another State of the art Cold Storage at NAFED Plot 46/2, Sector 18, Vashi, Navi Mumbai with a minimum capacity of 3000 MT alongwith Export Assisting Infrastructure.

# 2.0 Scope of Work

The scope of work will cover all works relating civil, electrical, refrigeration including supply and erection of plant and machineries, thermal insulation, mechanized ancillary as desired capacity for cold storage as specified capacity of transformer and specified capacity of DG set etc. BOQ based on ammonia as refrigerant has been prepared and enclosed for arriving at the cost of project. The Tenderer is instructed to further design and calculate the exact BOQ Quantity before quoting the rate as variation in quantity with respect to BOQ. All design and drawings needs to be vetted/ certified by a Professor of govt. Engineering College. Walls and floor insulation may be carried out as per the BOQ given in the Tender document.

* 1. If require, preparation of comprehensive study and **Detailed Project Report (DPR)** of the existing site and its location. The details of work completed as under:
     1. Proposed Project of Multi-commodities Ground + Four stories, Cold Storage of Capacity 3574 MT to be set-up.
     2. The total designated area for construction of Cold Storage is approx. 3000 per sq. mtr.
     3. Civil work carried out for contract or in dimension is 28mtr\*17mtr= Approx 476 sq. mtr. The height of plinth is 2 feet from the ground level.
     4. Design of cold storage on full capacity as originally proposed 3574 MT IN THE AREA OF 3000 sq. mtr. presently covered at clause 2.1.1.
  2. Providing various alternate conceptual designs in consultation with NAFED showing different plans with perspective views.
  3. Preparation and finalization of design as per the requirements of NAFED.
  4. Designing of cold storage facility for the storage of relevant agriculture & horticulture produce along with material handling equipment.
  5. Preparation of cold storage design and the detailed drawings, pertaining to Civil & Structural, Mechanical, Electrical, and Firefighting to be provided in the format as required for uploading while calling the main Tender for execution.
  6. Preparation of Scheme/ working/ execution drawing Civil, Electrical including HT installations and DG Sets, Plumbing, Refrigeration, Firefighting, Structural, Plant & Machinery etc.
  7. Preparation of Bill of Quantities in consultation with NAFED for inviting Tenders for all works for setting up of cold storage.
  8. Periodic site visits during the execution and completion of all the services satisfactory and successful.
  9. Bill checking and certification as and when required.
  10. To ensure that detailed specifications and quality of materials and alternate process and sources are invariably spelt out.

# EXPERIENCE

* 1. The Construction Agency must have at least about five (05) years of professional experience in the relevant field and are to enclose the documentary evidence for the same.
  2. The Agency must have experience of Construction of Cold Storage of at least three projects (ongoing or completed) in the Food Processing/ Cold Chain/ Export Logistics/ Agricultural Infrastructure sector during the last five years, the cost of each project should be not less than Rs. 5 Crores and involve at least one of the facilities out of multi-purpose cold storage, warehousing, PEB structural cold storage/warehousing, pack house etc. Documentary evidence is necessary to be submitted.
  3. The bidder must submit a notarized declaration confirming such experience, along with supporting documents such as work orders, supply proofs (e.g., invoices, dispatch records), and relevant financial credentials.

# TURNOVER

* 1. Minimum Average Annual Turnover of Rs.10.00 Crores during the last three financial years viz. 2021-22, 2022– 23 , 2023 – 24 duly certified by Chartered Accountant.
  2. Copies of Audited Financial Statements from chartered accountant shall be attached for last three years.
  3. To submit a positive net worth statement duly certified from the Chartered Accountant.

# WORK ORDERS/CERTIFICATES

It is recommended that the copies of work completion certificates from the clients giving the completion status of each project with project cost along with client recommendations and testimonials to be attached.

# TECHNICAL BID/FINANCIAL BID

As per Annexure 1A and 1B 1A - Technical Bid Form

1B – Financial Bid Form

# OTHER TERMS & CONDITIONS FOR SELECTION OF CONSTRUCTION AGENCY

* 1. The prospective Construction Agency shall be consisting of qualified civil engineer/ architect/ qualified electrical engineer, a financial expert/ advisor/ chartered accountant and the principal Construction Agency who will manage the project execution from all points of view and also have a minimum of 15 permanent employees designated to and having work experience in the relevant field.
  2. The Agency shall be prepared to visit the site and other approving agencies as and when required.
  3. Construction Agency will prescribe inspection/testing by an independent inspection if needed.
  4. The technology suggested by the Agency should be from a certified background, energy efficient, environment friendly and economical.
  5. The technology should be correlated and adaptable to the local conditions and locally available inputs.
  6. Construction Agency should draw execution monitoring chart (like CPM/PERT**)** in respect of Sequence of delivery of equipment, plant & machinery and other construction works indicated in the Tender. This should synchronize the time fixed for erection and commissioning of the plant and is required to be submitted during actual execution of the project.
  7. The Agency should have a constant review after every important event of the project. Delays due to any reason whatsoever maybe examined and intimated to the client (NAFED) well in time.
  8. The offer should be accompanied by an EMD of Rs.5,00,000/- (Rupees five lacs Only) paid through online payment gateway or pay order/demand draft in the name of National Agricultural Cooperative Marketing Federation of India Limited payable at Mumbai at par. The EMD of the successful bidder will be adjusted against security deposit. The EMD/ Security Deposit so retained by NAFED will not carry any interest.
  9. The successful and qualified bidders in the technical bid only are eligible for consideration for opening of their financial bids. False or misleading submissions will invite blacklisting.
  10. The bidders should sign on all the pages of Tender documents, terms & conditions given by NAFED and submit the same along with their bids.
  11. The agency has to submit following documents/information in their Technical Bids:
      1. Registration Certificate
      2. Permanent Account No (PAN)
      3. Address proof & Name, address, mobile number & e-mail address of contact person.
      4. GST Registration Certificate
  12. Any partnership firm or company is eligible to bid, provided they produce any valid proof of firm registration such as Certificate of Incorporation/ Partnership Deed etc.
  13. Documents if not in original must be self attested.
  14. All taxes will be applicable as per prevailing rules and to be included in the fee quoted.
  15. Bidders shall comply with all the provisions of Income Tax act / GST Act, etc and in no case NAFED shall be liable for any compliance or future liability in regard to any provisions of Income Tax and GST Act or any other act applicable from time to time.
  16. All the correspondence shall be done in the name of State Head, Mumbai, NAFED, Naman centre,‘A’ Wing, Unit No. 803, 8thFloor, C-31, G-Block, Opp. PNB & Dena Bank, Bandra Kurla Complex, Bandra (East), Mumbai-51. Tel:-022-2653 1732, Email Id: [nafmbi@nafed-india.com.](mailto:nafmbi@nafed-india.com) SH, Mumbai – Cell – 9167760741.
  17. The Bidder is required to furnish interest free EMD of Rs.5,00,000/-(Five lakh only) with submission of Bid/Proposal. No interest shall be payable in any case on the amount of earnest money. The earnest money will be returned to the unsuccessful Tenderers after decision of Tenders. In case of successful Tenderer, the earnest money will be appropriated towards the security deposit required to be furnished, if so desired by the successful Tenderers or will be returned to them.
  18. The Construction Agency is bound to carry out the work as per contract for a period of completion of project, the terms and conditions of the contract to be prepared by mutual consent.
  19. State Head reserves the right to terminate the contract, agreement/ arrangement at any time, if the performance of the Construction Agency is found unsatisfactory by giving 15 days’ notice in writing to the Construction Agency. However, in the event of any breach of any of the conditions of the agreement, NAFED reserves the right to terminate the agreement with immediate effect without giving any notice. The security deposit (SD) shall be forfeited in case of nonperformance of the construction agency. The Construction Agency is not entitled for any compensation by reason of termination.
  20. State Head reserves the right to terminate the Contract, Agreement/arrangements at any time for any reason by giving 15 days notice to the Construction Agency. However, in the event of any breach or non-performance of the any of the conditions of the agreement, NAFED reserves the right to terminate the agreement with immediate effect without giving any notice.
  21. The security money shall be liable to forfeiture if the Tenderer after submitting their Tender resign from their offer, modifies the rates OR the terms and conditions thereof. The earnest money is also liable to be forfeited in the Event of the Tenderer’s failure, after accepting of their Tender to furnish the security deposit by due date without prejudice to any other right or remedy of NAFED under the contract and law. In such cases NAFED may blacklist the Tenderer for the period which it may deem fit.
  22. Upon selection of successful bidder, a detailed agreement between NAFED and successful bidder shall be executed and all legal relations between the parties shall be governed as per the proposed agreement irrespective of any clause/riders in this Tender document. The contents of said proposed agreement shall prevail over the terms and conditions mentioned in this Tender document. For any legal dispute, suit, application, claims or proceeding of any kind whatever in respect of, arising out of directly/ indirectly or incidental to anything in respect of this contract shall be subject to Mumbai jurisdiction only.
  23. The liability of Construction agency for all and any aspects of the project including at the time of execution and after completion, will only expire after one year from the date of completion of project.
  24. Construction Agency shall assist for getting approval for building permission, NOC from pollution control board, Fire NOC, Electrical load sanction & allied permissions/ NOC’s.
  25. The Construction Agency/individuals who had worked with NAFED directly or indirectly as a Construction Agency and having bad reputation with NAFED, will be considered as invalid to participate in this Tender.
  26. The Construction Agency should have an existing and operational working office in Mumbai.

# TIME SCHEDULE

|  |  |  |
| --- | --- | --- |
| Sr. No. | Description of works | Time |
| A | Submission of Detailed Project Report  (DPR) | 15 Days after issuance of work order. |
| B | Preparation of final basic drawings, specifications and Tender documents and finalization of contracts for  Execution. | All documents/ drawings & other information etc. as required for execution of project to be made available in required time, till completion of project. Scheduled Period for Completion of Project is 9 (nine) Months. |
| C | Submission of working drawing for civil, Electrical & Electromechanical,  Insulation works |
| D | Commissioning of plant. |
| E | Full and final completion of project and submission of completion certificate by Construction Agency |

# BY LAWS

1. The Contractor shall comply with all bylaws and regulations of local and other statutory authorities having jurisdiction over the work and shall be responsible for the payment and other charges, giving and receiving of all necessary notices and keep employer inform of the said compliance with the bylaws, payments made notices issued and received.
2. The contractor shall indemnify the employer against all claims in respect of patent rights, design, trade mark of name or other protected rights in respect of any plan, machine work or material used for or in connection with works or temporary work and from and against all claims, demands, proceedings, damages, costs, charges and expanses whatsoever in respect thereof or in relation thereto. The contractor shall defend all actions arising from such claims, and shall himself pay all royalties, license fees, damages, costs and charges of all and every sort that may be legally incurred in respect thereof.

# DRAWINGS AND LITERATURE

1. The fund  received by  Branch from State Government under Rashtriya Krishi Vikas Yojana was of Rs 3.46 Cr ( approx.). The total designated area  for  civil construction is approx 3000 Sq.mtr. The dimension is 28M x17M = 476 Sq.mtr. which is 40 % of the total plinth area approx & presently the height of column is upto 2 Ft from the ground level has been completed by earlier contractor.
2. It is to mention here that this cold storage project is under grant of RKVY schemes. Therefore, the selected bidder may obtained the original copy of design & drawing of cold storage part, from the office of State Head, NAFED Mumbai, as the original copy of design and drawing has already been submitted to the local office of RKVY Mumbai .
3. Within 21 days of the acceptance of the Tender contractor shall furnish three prints of Civil layout drawing showing roads, boundary wall, gate, Cold storage, plant room and DG set, foundation details etc. complete including assembly and erection drawings duly vetted/certified and attested by Professor of Govt. Engineering College for approval. The selected bidder may please visit the Project site for inspection of Project partially completed by the contractor.
4. Approval by the NAFED of the drawings shall not relieve the Contractor of any part of his obligation to meet all the requirements of the Contract or of the correctness of his drawings. The Contractor shall be responsible for and pay for all alterations of the works due to discrepancies or omissions in the drawings or other particulars supplied by him whether such drawings have been approved by the NAFFED or not in line with the scope of services.

# PROGRAMME OF WORK AND PROGRESS SCHEDULE

The contractor shall submit after acceptance of the Tender, detailed schedules showing the program and the sequence in which the Contractor proposes to carry out the work with dates and estimated completion times for various parts of the work. Such schedules shall be approved by the Employer before starting of the work and shall be binding on the Contractor. If so required the contractor shall also furnish fortnightly or other periodically progress reports.

# VARIATION OF WORK

NAFED/Employer shall have full power and authority to instruct the Contractor, from time to time, during the execution of the work, to make any alternations in, omissions from, additions to, or substitutions for, the original specification, drawings, designs and instruction that may appear to him to be necessary or advisable during the execution of the work and the contractor shall be bound to carry on the work in accordance with any instructions which may be given to him in writing (in order book kept at site of work or by any special letter) and such alternations, omissions, additions or substitutions shall not invalidate the contract. Any altered above specified, as part of the work shall be carried out by the Contractor difference in cost of such variation shall be added to or deducted from the rates applicable in the contract, they shall be agreed by the Employer and the Contractor.

# NEGLIGENCE

If the Contractor shall neglect to execute the work with due diligence or shall contravene the provisions of the contract, the NAFED may give notice in writing to the Contractor calling upon him to make good the neglect or contravention complained of.

# INSPECTION & TESTING

The Employer or its/their authorized representative shall have full power to inspect the work or examine the materials and workmanship of the plant at the Contractor’s works or at any place from which the material or equipment is obtained. The Contractor shall carry out any modification or rectification as may be necessary in the opinion of the Employer for proper functioning of the equipments/system. The material, cement, steel, timber, CC cube test, pressure tests and/or running test of the equipment shall have to be arranged by the Contractor at his own cost. Acceptance of any material or equipment shall in no way relieve the Contractor of his responsibility for meeting the requirement of the Specifications.

# TAKING OVER

The complete Property, after the erection at site will be taken over by the Employer, only after the Employer issue certificates in writing that the plant has fulfilled the contract conditions/obligations.

# CONTRACTOR’SREPRESENTATIVES

The contractor shall employ at least one qualified and experienced representative whose name shall have previously been communicated in writing to the Employer to supervise the complete work. Any written order or instructions given to the representative shall be deemed to have been given to the Contractor. The Employer shall be at liberty to object to any particular representative employed by the Contractor on the work and the Contractor shall removethepersonsobjectedtoonreceiptfromEmployerinwritingarequestrequiringhimto do so and shall provide in his place another competent and experienced representative acceptable to the Employer.

# EXTENSION OF TIME

If the contractor shall desire an extension of time, for completion of the work, due to any act of neglect of the Employer or due to some extra work, additions and alterations in original specifications, designs and drawings ordered during the execution of work, or by strikes, lockouts, fire, war act or public enemy or by any other reasonable cause (which the Employer decides the same reasonable and justify the delay), then he shall apply in writing to the Employer within 7 days from the date of occurrence of the delay.

# LIQUIDATED DAMAGES/COMPENSATION FOR DELAY

1. If the Contractor fails to complete the work within the stipulated time of completion or within any agreed extension of time, the Contractor shall pay penalty at the rate of 0.5% (half percent) of the contract value of complete work for each week or part thereof the work remains un-commenced and incomplete. The total penalty under this shall, however, not exceed 10% (ten percent) of the contract value.
2. The Terms & Conditions mutually agreed upon shall be subject to Force Majeure. Neither the Contractor, nor the Employer shall be considered to be in default in the performance of its obligations, if such performance is prevented or delayed because of war, hostilities, revolution, civil commotion, strike, epidemic, accident, fire, flood or because any law, order, proclamation, regulation or ordinance of any Government or if any act of God or dissimilar nature beyond the reasonable control of the party affected, provided notice of any such cause is given within 7 days from the happening of the event. Should one or both parties be prevented from fulfilling his/their contractual obligations by a State of Force Majeure lasting continuously for a period of six months, the two parties should consult, with each other regarding the further implementation of the contract.

# GUARANTEE & DEFECTS LIABILITY PERIOD

1. The Contractor shall guarantee that the complete cold storage Work including installation of all equipments shall be free from any defect due to defective materials and bad workmanship and that the equipment/system shall operate satisfactorily and the performance and efficiencies of the equipment/system shall not be less than the guaranteed values. The guarantee shall be valid for a minimum period of 24 months after taking over (i.e after approval of testing and commissioning) and any parts found defective shall be replaced free of all costs by Contractor. The services of the Contractor’s personnel if requisitioned during this period for such work shall be made available free of any cost to the NAFED. If it is necessary to send the defective equipment or parts for repair/replacement, cost from the site to works and back shall be borne by the contractor. The maintenance of this plant shall be arranged by the Contractor within the guarantee period without any extra cost.
2. If the defects are not remedied within a reasonable time, NAFED may proceed to do so at the Contractor’s risk and expense without prejudice to any other rights.

# INSURANCE

The Contractor shall arrange insurance of all materials & equipments during the transport and execution of work until the work is ‘Taken over’ under clause 16 by the NAFED, the Contractor shall keep insured such works as may be upon the site against all risks viz., fire, flood, lighting, earthquake, tempest, theft, strikes, riot, Terrorist activities or civil commotion for the value thereof and shall produce documentary evidence in support of the same whenever required by the Employer. All moneys received against such insurance policies shall be applied towards the rectification and/or replacements of the works so damaged. The provision of this clause shall be applicable without prejudice to the liability of the Contractor under other provisions of the Contract.

# MODE OF PAYMENT

As the above work is scheduled to be awarded on **turnkey basis**, the overall cost of Project will be fixed irrespective of variation in the estimated quantities. However, if any additional work arises due to variation in the scope of service, the same should be got approved from NAFED prior to its execution and it will be paid extra. The mode of payment after duly certification of bill/work and recommendation for payment by representative/ Engineer-in- charge of NAFED, will be as under:

* 1. 25% of the total cost of Project shall be released by NAFED before starting of work against Bank Guarantee of equivalent amount valid upto 30 days beyond the completion of the project and after submission of approved drawing (complete plan and elevation along with structural design/heat load calculation for packhouse including refrigeration, gate, road etc. complete).
  2. 25% of the total project cost shall be released on pro-rate basis for the civil work.
  3. 25% of the total project cost shall be released on pro-rata basis against supply of plant and machinery, thermal insulation, transformer etc.
  4. 10% of the total project cost shall be paid on erection of plant & machinery, thermal insulation, transformer, DG set etc.
  5. 15% of the total project cost shall be paid on handing over of the complete Cold storage after successful commissioning along with Completion Certificate and submission of Bank Guarantee of equivalent amount valid upto the end of Free Maintenance Period.
  6. NAFED will deduct all payment, if paid on behalf of the contract or on account of PF,ESI, other Govt. dues or any other dues for any account paid or recovered on behalf of the Contractor whatsoever from the bills of the Contractor for this Project.
  7. **Time Schedule - The time is the essence of the contract and the whole of the works is to be completed within 6 months from the date of issue of work order or date of handing over of site whichever is later. The employer reserves their right to fix up the further priorities and phasing of work in which order the works are to be executed for this purpose. NAFED will be entitled to indicate the date of commencement and completion of various sections and/ or part of the work within the overall time mentioned in this clause and the contractor will be bound to abide by said dates.**

# DEDUCTION OF TAXES

* 1. All payments to Supplier/Contractor shall be subject to the deduction of income – tax, work tax or any other tax levied or imposed by the Central or State Government or any other local authority from time to time as per Income Tax Act/GST.
  2. A declaration u/s 206AB (format enclosed) may also be submitted by the bidder, as it is mandatory now as per Income Tax Act 1961.
  3. Copies of ITR V may also be submitted for proceeding 3 (three) Financial years along with GST and PAN.
  4. Further, Bidder shall be liable for any labour laws like PF, ESI applicable on the said agency and in no case NAFED shall be liable for any such provisions in any time.

# SECURITY DEPOSIT

Within 15 days of receipt of Work Order, an amount equal to 10% of the total value of the contract shall be deposited by the successful Tenderer towards security Deposit for the due fulfillment of the contract and satisfactory performance of the Cold storage for a period of 24 months from the date the site is taken over by the NAFED or alternatively the contractor should agree for deductions to be made from the “On account” bills @5% of the bill amount. (Earnest Money Deposited (EMD) with the Tender shall be adjusted against the Security Deposit.

# FORMAT FOR THE DETAILS OF THE CONSTRUCTION AGENCY STAFF AND THEIR TECHNICAL OFFICIALS (To be submitted alongwith the Technical Bid Form only)

|  |  |
| --- | --- |
| Name of the Firm/Group of Individuals /Company etc.( As applicable) |  |
| Registration No (enclose copy) |  |

|  |  |
| --- | --- |
| PAN details (enclose copy) |  |
| GST Registration(enclose copy) |  |
| Full address in capital letters |  |
| Authorized person Contact No, Mobile, Email |  |
| Qualifications of the Architect–cum-cold storage specialist.  (Copies for proof of qualification to be attached) |  |
| Professional Experience in the field of construction of cold storage upto 5000 MT capacity along with documentary evidence(extra sheet may be attached if necessary copies for proof to be  attached) |  |
| Value of the works executed during last five years as per NIT |  |
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|  |
| Any other relevant information the construction agency team would like to furnish for their qualification and experience(extra sheet maybe attached in necessary, copies for proof to be attached) |  |

# PROPOSAL EVALUATION

* 1. A two stage procedure will be adopted in evaluating the proposal.

In the first stage, eligibility of the firm will be ascertained on the basis of experience certificates, firm’s turnover and other information required to be submitted as per Tender Notice. The firms failing to meet the minimum requirement will be rejected.

In the second stage financial bid opening will be carried who will qualify in second stage. Direct preference will be given to Public sector/State or Central Govt. undertakings / Private Construction Agency.

# EVALUATION PROCESS

The Financial Bids of only the technically qualified bidders will be opened for evaluation. Construction Agency has to quote the price. The bidder with lowest Financial Quote (L1) will be the successful bidder and will be called upon for further discussion, negotiation and finalization of Tender award.

# Integrity Pact

All interested Bidders will be required to sign and submit an Integrity Pact along with their Bid. It will be assumed that the Bidder(s) has gone through the Integrity Pact (*as per the format is given in this Bid Document*) and has no objections whatsoever in signing the contract.

# Declarations and Undertakings

# It shall be incumbent upon all Applicants/intending Bidders to submit the following declarations on the letter head of their entity(ies) while submitting their applications:

* 1. The intending Bidder(s)/Applicant(s) is/are/was/were neither in litigation with NAFED at any point of time regarding any business and trade activity of NAFED nor was/were it/they ever blacklisted by NAFED on account of such litigation(s) or otherwise.
  2. Any of the present and past Directors / Partners / Promoters etc. of intending Bidder(s)/Applicant(s) was/were or is/are not part of such other and separate entity (ies) which was/were/is/are in litigation with NAFED in present or past or/and such other entity (les) has/have/had ever been blacklisted by NAFED in the past for any reason.
  3. If intending Bidder(s)/Applicant(s) is/are/was/were in litigation (s) with NAFED in present/past, it shall be incumbent upon such Bidder(s)/Applicant(s) to furnish the details of such litigation(s) and consequent blacklisting, if any, on the letter head of the entity (les). In such a scenario, the declaration as mandated above at (a&b) shall not be required.
  4. If any of the Applicant(s) /intending Bidder(s) or their promoters are found involved in litigation(s) with NAFED whether in past and present or they have/had been blacklisted by NAFED or/and any of the promoters of intending Applicant(s)/Bidder(s) was/were part of the management of such other and separate entity(ies) which was/were/ is/are in litigation(s) with NAFED in present or past or/and such other entity (les) has/have/had ever been blacklisted by NAFED in the past for any reason, NAFED shall have sole discretion to decide on the selection of such Applicant(s)/Bidder(s) even if such Applicant(s)/Bidder(s) fulfilling eligibility criteria and NAFED's decision either to select or reject such Applicants/Bidders shall be final and binding and no further communication/grievance against such decision shall be entertained in this regard.

# Force-Majeure

* 1. Due to any Act or policy of the Government /local authorities or on account of any act of Govt. it becomes impossible to perform or continue with the agreement, the agreement shall automatically come to an end and in that event, the Selected Bidder shall not seek any specific performance of the agreement or claim any damages.
  2. Force Majeure means any event or combination of events or circumstances beyond the control of the parties here to which cannot(a) by the exercise of reasonable diligence, or(b)despite the adoption of reasonable precaution and/ or alternative measures, be prevented, or caused to be prevented, and which adversely affects the abilities of the parties to perform obligations under this Agreement, which shall include but not be limited to:(a)Acts of God i.e. fire, drought, flood, earthquake, epidemics, natural disasters; (b) Explosions or accidents, air crashes and shipwrecks, act of terrorism; (c)Strikes or lock outs, industrial dispute; (e) War and hostilities of war, riots, bandh, act of terrorism or civil commotion; (f) The promulgation of or amendment in any law, rule or regulation or the issue of any injunction, court order or direction from any Governmental Authority that prevents or restricts a party from complying with any or all the terms and conditions as agreed in this Agreement; (h) Any event or circumstances analogous to the foregoing.
  3. It is agreed between the parties that the performance of obligations under this contract is subject to Force Majeure conditions which shall mean any event or combination of events or circumstances beyond the control of the parties hereto.
  4. Neither party will be liable for performance delays or non-performance due to causes beyond its reasonable control, except for payment obligations.
  5. During the continuance of the Force Majeure, NAFED reserves the right to alter or vary the terms and conditions of this agreement, or if the circumstances so warrant, the NAFED may also suspend the agreement for such period as is considered expedient, Bidder agrees and consent that they shall have no right to raise any claim, compensation of any nature whatsoever or with regard to such suspension.
  6. The Bidder agrees and understands that if the Force Majeure condition continues for a long period, then the NAFED in its judgment and discretion may terminate Agreement and in such case, Bidder agree that they shall have no right or claim of any nature whatsoever and NAFED shall be released and discharged of all its obligations and liabilities under this Agreement.

# Applicable Laws Jurisdiction and Dispute Resolution

* 1. This agreement shall be constitute and the legal relation between the parties hereto shall be determined and governed according to the law of Republic of India and only court at New Delhi or High Court of Delhi shall have the Jurisdiction in all the matter arising out of /touching and or concerning this agreement and parties to this agreement agree to irrevocable submit to the exclusive jurisdiction of those courts for purpose of any such proceeding. The aforementioned exclusive and irrevocable jurisdiction of aforesaid courts is irrespective of place of occurrence of any causes of action pertaining to any dispute between the parties.
  2. All or any dispute arising out or touching upon or in relation to the terms of this agreement including the interpretation and validity of the terms thereof and the respective right and obligation of the parties shall be settled amicably failing which the same shall be settled through arbitration, the arbitration proceeding shall be governed by the Arbitration and Conciliation Act 1996 (as amended up to date) or any statutory amendment /modification ,thereof for the time being in force .The seat and venue of the arbitration shall be at New Delhi, India and Language of Arbitration shall be English.
  3. Nothing contained in this clause shall prevent the NAFED from seeking interim injunctive relief against the Bidder in the courts having jurisdiction over the parties.

# Holiday Listing

NAFED’s policy for Holiday-Listing, which is available on the website of NAFED must be acceptable to the Bidders. Notwithstanding anything contained in this Tender documents, NAFED’s Policy of Holiday Listing is mutatis mutandis applies to this and in the event, the agency(s) while discharging its obligations under this Tender/Agreement or otherwise, come(s) within the ambit of the said policy, NAFED at its sole discretion reserves the right to suspend/discontinue dealings or take any curative measures with agency (s) in accordance with the policy in force.

# PREVENTION OF FRAUD AND CORRUPTION

* 1. The Bidder shall be bound to take all measures necessary to prevent Fraud and Corruption while dealing with NAFED. Bidder agrees and undertakes to observe the principles/provisions as laid down in "Fraud Prevention Policy of NAFED during their participation in the Tender process, during the execution of contract and in any other transaction with NAFED.
  2. The Bidder shall not, directly or through any other person or firm, offer, promise or give or otherwise allow any NAFED's employees 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 or thereafter.
  3. The Bidder shall not enter with other Bidder 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 introduce cartelization in the process.
  4. The Bidder shall not commit or allow any employees of NAFED to commit any offence under the relevant provisions of IPC/Prevention of Corruption Act; further the Bidder will not use improperly or allow any employee(s) of NAFED, for purposes of competition or personal gain, or pass onto others, any information or document provided by NAFED as per of the business relationship, including information contained or transmitted electronically.
  5. The Bidder shall not instigate third person to commit offences/activities outlined in Fraud Prevention Policy or be an accessory to such offences.
  6. The Bidder if in possession of any information regarding fraud/suspected fraud, hereby agree and undertake to inform NAFED of same without any delay.

**ANNEXTURE-1A**

**TECHNICAL BID FORM**

(To be submitted on firm’s letter head)

Tender No: Dated:

**To,**

**State Head**

**National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED), Mumbai**

## Sub:-Tender document for Appointment of Construction Agency for the Design, Execution and Construction of Cold Storage and other paraphernalia at Vashi, Navi Mumbai in Maharashtra on turnkey basis.

Sir,

With reference to above subject, I/we, having examined the Tender Documents and understood their contents, hereby submit my/our Bid for the aforesaid allotment of contract.

1. I/ We acknowledge that Nafed shall be relying on the information provided in the Bid and the documents accompanying the Bid for selection of the successful bidder for the aforesaid subject, and we certify that all information provided therein is true and correct; nothing has been omitted which renders such information misleading and all documents accompanying the Bid are true copies of their respective originals.
2. I/WeshallmakeavailabletoNafedanyadditionalinformationitmayfindnecessaryor require to supplement or authenticate the Bid.
3. I/WeacknowledgetherightofNafedtorejectourBidwithoutassigninganyreasonor otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
4. I/We declare that:
   1. I/We have examined and have no reservations to the Tender Documents, including Addendum/ Corrigendum, if any, issued by Nafed; and
   2. I/We do not have any conflict of interest in accordance with provisions of the document; and
   3. I/ We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as stipulated in the document, in respect of any Bid or request for proposal issued by or any agreement entered into with Nafed; and
   4. I/ We hereby certify that we have taken steps to ensure that in conformity with the provisions of the Tender, no person acting for us or on our behalf has engaged or shall engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice; and
   5. The undertakings given by me/us along with the Application in response to the for the above subjectweretrueandcorrectasonthedateofmakingtheApplicationandarealso true and correct as on the Bid Due Date and I/we shall continue to abide by them.
5. I/We understand that you may cancel the Bidding process at anytime and that you are neither bound to accept any Bid that you may receive nor to invite the Bidders to Bid for the above subject, without incurring any liability to the Bidders, in accordance with provisions of the Tender document.
6. I/We further undertake that after the expiry of the contract period or pre mature termination of the contract as per clause of General Terms & Conditions of Contract. We shall have no lien or any rights whatsoever on the said pillar allotted by the Nafed
7. The financial offer has been quoted by me/us after taking into consideration all the terms and conditions stated in the Tender document, addenda /corrigenda, our own estimates of costs and after a careful assessment of the site and all the conditions that may affect the PMC cost and implementation of the project. I/We are satisfied with the location of the said plot and fully understand & comprehend the technical requirements.
8. I/Weagreeandundertaketobejointlyandseverallyliableforalltheobligationsofthe contract for the contract period in accordance with our Agreement.
9. We shall keep this offer valid for 120 (one hundred twenty days) days from the Bid Due Date specified in the Tender document.
10. I/We hereby submit Tender documents duly signed on each page as token of unconditional acceptance of all terms and conditions set out here with. In witness thereof, I/we submit this Bid under and in accordance with the terms of the Tender document.

Yours faithfully,

(Signature,

Name and Designation of the Authorised Signatory)

Name and seal of Bidder/Lead Member

Date:

Place:

**ANNEXTURE-1B**

**FINANCIAL BID FORM**

**(To be submitted on firm’s letter head)**

Tender No: Dated:

To,

## State Head

**National Agricultural Cooperative Marketing Federation of India Ltd.(NAFED), Mumbai**

Sir,

With reference to the Tender No. dated inviting quotation for **Appointment of Construction Agency for the Design, Execution and Construction of Cold Storage and other paraphernalia at Vashi, Navi Mumbai in Maharashtra on turnkey basis.** We have carefully studied scope and objectives of the Tender and based on these, I/ We hereby submit our Financial Bid. If the contract is awarded tome/us, I/we agree to accept the Scope of Works, all Terms and Conditions included in but not limited to the Tender Document and agree to the payment schedule of Nafed as per terms and conditions set forth in the Tender Document.

**Affirmation:**

1. I/we affirm that the total percentage quoted represents the Net Price to be paid to us on account of our rights and duties for carrying out activities of Construction agency, as per terms and conditions of Tender and in accordance with the scope of work and is inclusive of all expenses and incidentals etc. In particular, the quote is also inclusive of all and any taxes i.e. Goods and Service Tax (GST).
2. I/We undertake to accept the payments from Nafed as /per terms and conditions of the Tender document and shall bear all the cost of running operations including travel, lodging boarding and all conveyance expenses. No extra payment on this account will be made to the contractor.
3. This offer is being made by me/ us after taking into consideration all the terms and conditions stated in the Tender document, and after careful assessment of Scope of services required, all risks and contingencies and all other conditions that may affect the financial Bid.

# FINANCIAL BID

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Particulars** | Quoted price and BOQ rate with individual items. |
| **1.** | **Design, Execution and Construction of Cold Storage of capacity 3574 MT and other paraphernalia at Vashi, Navi Mumbai in**  **Maharashtra on turnkey basis.** | ----- |

Note:

1. The total price quote given above represents the Net Quote to be paid to us on account of rights for carrying out activities of Construction agency, as per terms and conditions of Tender document and in accordance with the scope of works desired and is inclusive of all expenses and incidentals etc. In particular, the quote is also inclusive of all and any taxes i.e. Goods and Service Tax (GST).
2. Successful bidder shall be decided on the basis of **lowest percentage** quoted by bidder(s).
3. In case two bidders quote the same, then bidder having highest turnover in last financial year will be awarded the contract.
4. Allthecolumnsofbidformatshouldbefilled.Incompletefinancialbidswillbeconsidered Non-responsive and shall be rejected.

(Signature, name and designation of the Authorised signatory) Name and seal of Bidder/Lead Member

Date:

Place:

# “ANNEXURE-1C”

(On INR100/-Stamp Paper)

# INTEGRITY PACT

Between

**National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED)**, an apex-level Cooperative Marketing Organization, registered under the Multi-State Cooperative Societies Act, 2002, having its Head Office at NAFED House, Siddhartha Enclave, Ashram Chowk, New Delhi – 110014 (hereinafter referred to as **“NAFED”**),  
**And**  
**M/s** ……………., a firm/company registered under the provisions of the Companies Act of 2013 / Partnership Act, having its office at …………… through Sh. …………… S/o ……………, duly authorized (hereinafter referred to as **“SELLER / MILLER / CONTRACTOR / BIDDER”** which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees), of the second part.

Preamble

NAFED is an apex organization of marketing cooperatives in India. It is also one of the central nodal agencies for procurement of notified agricultural commodities under the Price Support Scheme (PSS). NAFED is procuring Pulses for Buffer Stocking under the Price Stabilization Fund (PSF) Scheme of Government of India. NAFED has been designated as a State Trading Enterprise (STE) vide the Foreign Trade Policy (FTP) 2015-20.

NAFED has invited tenders for supply/processing/milling/packing and intends to award contracts for the same under laid down organizational procedures. NAFED values full compliance with all relevant laws of the land, rules, regulations, economic use of resources, and fairness/transparency in its relations with bidders/contractors.

In order to achieve these goals, NAFED has appointed Independent External Monitors (IEMs), who will monitor the tender process and the execution of the contract for compliance with the above principles.

Section1 – Commitments of NAFED.

* + 1. NAFED commits itself to take all measures necessary to prevent corruption and to observe the following principles: No employee of NAFED, personally or through family members, will, in connection with the tender or execution of the contract, demand, take a promise for, or accept, for self or third person, any material or immaterial benefit which he/she is not legally entitled to. NAFED will, during the tender process, treat all bidders/contractors with equity and reason. In particular, NAFED will provide the same information to all bidders and will not provide any confidential or additional information to any bidder that could give them an advantage. NAFED will exclude from the process all known prejudiced persons.
    2. If NAFED obtains information on the conduct of any of its employees which is a criminal offence under the IPC or PC Act, or if there is substantive suspicion in this regard, it will inform its Chief Vigilance Officer and initiate disciplinary action as per laid down procedures.

Section2– Commitments of the Bidder/Contractor

1. The Bidder/Contractor commits to take all measures necessary to prevent corruption and to observe the following principles during participation in the Tender process and during the contract execution. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of NAFED’s employees involved in the Tender process or in the 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.
   1. The Bidder/Contractor will not enter with other bidder(s)/contractor(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 introduce cartelization in the bidding process.
   2. The Bidder/Contractor will not commit any offence under the relevant IPC/PC Act. Further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by NAFED as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
   3. The Bidder/Contractor of foreign origin shall disclose the name and address of its Agents/representatives in India, if any. Similarly the Bidder/Contractor of Indian nationality shall furnish the name and address of its foreign principals, if any. All the payments made to the Indian agent/representative will be in Indian Rupees only.
   4. The Bidder/Contractor will, when presenting the bid, disclose any and all payments made or committed or intended to be made to agents, brokers or any other intermediaries in connection with the award of the contract.
2. The Bidder/Contractor will not instigate third persons/firms to commit offences outlined above or be an accessory to such offences.

Section3-Disqualification from Tender process and exclusion from future Tenders/contracts

If the Bidder/Contractor, before award of the contract or during execution thereof commits a transgression through a violation of Section 2 above or in any other form such as to put its reliability or credibility in question, NAFED shall be entitled to disqualify the Bidder/Contractor from the Tender process or to terminate the contract, if already signed, on that ground.  
If the Bidder/Contractor commits a serious violation of Section 2 above or in any other form such as to put its reliability or credibility as Bidder/Contractor into question, NAFED shall also be entitled to exclude the Bidder/Contractor from participating in the future Tender processes for a duration as may be considered appropriate by it.

Section4 -Compensation for Damages and Forfeiture of EMD

If NAFED disqualifies the Bidder/Contractor from the Tender process prior to the award of the contract according to Section 3, NAFED shall be entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security, by forfeiting the same as stipulated in the Tender.

If NAFED terminates the contract according to Section 3, or if NAFED is entitled to terminate the contract according to Section 3, NAFED shall be entitled to demand and recover from the Bidder/Contractor liquidated damages as per contract or the amount equivalent to Performance Bank Guarantee stipulated in the Tender.

Section5–Previous transgression

The Bidder/Contractor declares that it did not commit any transgressions in the last 3 years with any Company in any country with regard to any anti-corruption law or practice or with any other Public Sector Enterprise in India that could justify its exclusion from the Tender process.

If the Bidder/Contractor makes incorrect statement on this subject, it may lead to disqualification from the Tender process or termination of the contract if already awarded.

Section 6 – Equal treatment of all Bidders/Contractors/Subcontractors

The Bidder/Contractor undertakes to demand from all Subcontractor(s) a commitment in conformity with this Integrity Pact, and to submit it to NAFED before signing of the contract, if awarded in its favour.

NAFED will enter into agreements with identical conditions as this one with all bidders, contractors and subcontractors. NAFED will disqualify from the Tender process any bidder/contractor who does not sign this Pact with NAFED or violates its provisions.

Section 7 – Criminal charges against Bidder(s)/Contractor(s)/Subcontractor(s)

If NAFED obtains knowledge of conduct of a bidder, contractor or subcontractor or of an employee or a representative or an associate of the bidder, contractor or subcontractor which constitutes corruption, or if NAFED has substantive suspicion in this regard, NAFED will inform the same to its Chief Vigilance Officer.

Section8–Independent External Monitor/Monitors

NAFED has appointed competent and credible Independent External Monitor(s) (IEMs) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, NAFED.

Bidders/Contractors accept that the Monitor has the right to access, without restriction, all project documentation of NAFED including that provided by the Bidder/Contractor. The Bidder/Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to its project documentation. The same will also be applicable to Subcontractor. The Monitor shall treat the information and documents of NAFED and the Bidder/Contractor/Subcontractor with confidentiality.

NAFED will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between NAFED and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of NAFED and request the Management to discontinue or take correction action or to take other relevant action. The Monitor may in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in specific manner, refrain from action or tolerate action.

The Monitor will submit a written report to the MD, NAFED within 8 to 10 weeks from the date of reference or intimation to him by NAFED and should the occasion arise, submit proposals for correcting problematic situations.

If the Monitor has reported to the MD NAFED a substantiated suspicion of an offence under relevant IPC/PC Act, and the MD NAFED has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commission.

The word Monitor would include both singular and plural.

Section 9 – Pact Duration

This pact begins when both parties have legally signed it. It expires for the Bidder/Contractor twelve months after the last payment under the contract, and for all other bidders six months after the contract has been awarded.

If any claim is made/lodged during this time by either party, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by MD, NAFED.

Section10–Other provisions

This Integrity Pact is an independent agreement between the parties and is subject to Indian Law. The arbitration clause if any in the Tender / contract shall not apply to this agreement. Place of performance and jurisdiction is the Registered Office of NAFED, i.e., New Delhi.

Changes and supplements to this Pact as well as termination notices to be issued, if any, shall be made in writing. Side agreements have not been made.

If the Bidder/Contractor is a partnership firm or a consortium, this agreement shall be signed by all partners or consortium members.

Should one or several provisions of this agreement turn out to be void, the remainder of this agreement shall remain valid In such case, the parties will strive to come to an agreement to their original intentions.

(For& On behalf of NAFED) (For& on behalf of the Bidder/Contractor)

(Office Seal) (Office Seal)

# APPENDICS – I

**(Estimates of Civil and Structural Work)**

# ABSTRACT SHEET OF PROPOSED CONSTRUCTION AT VASHI, NAVI MUMBAI

|  |  |  |
| --- | --- | --- |
| **Abstract Sheet** | | |
| **Sr.No.** | **Description** | **Amount** |
|  |  |  |
| 1 | SITECLEARANCEWORKS |  |
| 2 | EXCAVATION,FILLINGWORKS |  |
| 3 | PLAINCEMENTCONCRETEWORKS |  |
| 4 | REINFORCEDCEMENTCONCRETEWORKS |  |
| 5 | BRICKMASONARYWORKS |  |
| 6 | WATERPROOFINGWORKS |  |
| 7 | PLASTERING&POINTINGWORKS |  |
| 8 | PAVING,FLOORING&DADOWORKS |  |
| 9 | DOORS,WINDOWS WORKS |  |
| 10 | PUFPANELWORKS |  |
| 11 | COLOUR/WHITEWASHABLE&DISTAMPERWORKS |  |
| 12 | IRONWORKS&RAILINGWORKS |  |
| 13 | STRUCTURALSTEEL WORKS |  |
| 14 | ROOFING&CEILINGWORKS |  |
| 15 | PQC |  |
| 16 | COMPOUNDWALL |  |
| 17 | SEWAGEAND GUTTER |  |
| 18 | PLUMBINGSYSTEM |  |
| 19 | ELECTRICALSYSTEM |  |
| 20 | FIREFIGHTINGSYSTEM |  |
|  |  |  |
|  | **Total** |  |

**CLIENT:\_\_\_\_\_\_\_ ARCHITECT:\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No** | **DescriptionofItems** | **Unit** | **Quantity** | **Rates**  **(Rs.)** | **Amount**  **(Rs.)** |
|  |  |  |  |  |  |
| **1.0** | **SITECLEARANCEWORKS** |  |  |  |  |
| 1.1 | Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and phavaras etc. complete.  **CSR18-19/PageNo./ItemNo.678/+5%C.A.Rs.4.2+Rs.0.21=Rs.**  **4.41** | Sq.M  . | 4921.54 |  |  |
|  | **SubTotalofItemno.01** |  |  |  |  |
|  |  |  |  |  |  |
| **2.0** | **EXCAVATION,FILLING WORKS** |  |  |  |  |
| 2.1 | Excavationforfoundationinearth,soilofalltypes,sand,gravel and soft murum, including removing the excavated material. beyond the building area and stacking and spreading as directed,dewatering,preparingthebedforthefoundationand necessarybackfilling,ramming,wateringincludingshoringand strutting etc. complete including lifting of excess excavated material and dumping the same on Municipal approved dumping grounds.  **CSR18-19/PageNo./ItemNo.653/+5%C.A.**  **Rs.143.00+Rs.7.15=Rs.150.15** | Cu.  M. | 1610.66 |  |  |
| 2.2 | Excavation for foundation in hard murum and boulders includingremovingtheexcavatedmaterial,beyondthe building area and stacking and spreading as directed, dewatering, preparingthe bed forthe foundationandnecessary back filling, ramming, watering including shoringandstruttingetc.completeincludingliftingofexcessexcavat ed material and dumping the same on Municipal approved dumping grounds.  **CSR18-19/PageNo./ItemNo.658/+5%C.A.**  **Rs.215.00+Rs.10.75=Rs.225.75** | Cu.  M. | 1288.53 |  |  |
| 2.3 | Excavation for foundation in Soft rock and old cement or lime masonry foundations including removing the excavated material uptoa distanceof50metresbeyond thebuildingarea and stacking as directed, including dewatering, preparing the bedforthefoundationandnecessarybackfillingwithavailable earth/murum, ramming, watering includingshoringandstruttingetc.completeincludingliftingofexce ss excavated material and dumping the same on Municipal approved dumping grounds.  **CSR18-19/PageNo./ItemNo.659/+5%C.A.**  **Rs.298.00+Rs.14.90=Rs.312.90** | Cu.  M. | 322.13 |  |  |
| 2.4 | Filling in plinth and floors with approved excavated material in15cm.to20cm.layersincludingwateringandcompactingetc. complete. This decision of the Architect/Structural Engineer shall be taken regarding the filling.  **CSR18-19/PageNo./ItemNo.679/+5%C.A.**  **Rs.85.00+Rs.4.25=Rs.89.25** | Cu.  M. | 1288.53 |  |  |
| 2.50 | Providing preconstructional ant termite treatment as per I.S.6313(Part-I)tothesoilalongtheexternalfaceofbuildingby punching hole so f1.2 of 1.5 C.M. diameter about 30 -60 cm deep at 15 cm c/c as close to the wall as possible and to inject  0.5percentofaldrinorclorophyrifosattherateof7.5litresper hole and sealing the same with proper filling and covering 10 years guarantee on bond paper.  **CSR18-19/PageNo./ItemNo.669/+5%C.A.Rs.122.00+Rs.6.10** | Sq.M | 5637.30 |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **=Rs.128.10** |  |  | |  |  |
| 2.60 | Providing soling using 80 mm size trap metal in 15cm. layer including filling voids with Crushed sand/grit, ramming, wateringetc.complete.**CSR18-19/PageNo./ItemNo.683/**  **+5%C.A.**  **Rs.969.00+Rs.48.45=Rs.1017.45** | Cu.  M. | 0.00 | |  |  |
| 2.70 | Providing dry/trap/granite/quartzite/gneiss rubble stone soling15cm to 20 cm thick including hand packing and compactingetc.complete.**CSR18-19/PageNo./ItemNo.681/**  **+5%C.A.**  **Rs.1412.28+Rs.70.61=Rs.1482.89** | Cu.  M. | 417.45 | |  |  |
|  | **SubTotalofItemNo.02** |  |  | |  |  |
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| **3.0** | **PLAINCEMENTCONCRETEWORKS** |  |  | |  |  |
| 3.1 | Providing and laying Cast insitu/Ready Mixcementconcrete in M15oftrap/granite/quartzite/gneissmetalforstepsincluding steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing unevenandhoneycombedsurfaceandcuringetc.complete.**at all heights including all leads and lifts**. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer  /concreteBatchmixplant(Panmixer)etc.complete.Withfine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc) complete.  **CSR18-19/PageNo./ItemNo.757/+5%C.A.Rs.5394.25+Rs.**  **269.71=Rs.5663.96** | Cu.  M. | | 221.21 |  |  |
| 3.2 | ProvidingandlayinginsitucementconcreteM20withtremixtreatm ent for100mmthicknessforflooringwithgroovecuttingof4mmwidean d 20mm deep with necessary refilling with bitumenetc.complete.  **CSR18-19/PageNo./ItemNo.945/+5%C.A.Rs.614+Rs.31=Rs.**  **645** | Squa re Metr e | | 1041.88 |  |  |
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|  | **SubTotalofItemno.03** |  | |  |  |  |
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| **4.0** | **REINFORCEDCEMENTCONCRETEWORKS** |  | |  |  |  |
| 4.1 | Providingandlayinginsitu/ReadyMixcementconcreteoftrap  / granite/quartzite/gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering formwork, laying/pumping cover blocks, compactionandcuringrougheningthesurfaceifspecialfinishis to be provided (Excluding reinforcement and structural steel) etc. complete **at all heights including all leads and lifts,** with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand/Crushed sand VSI Grade finely washed etc)  **CSR18-19/PageNo./ItemNo.766/+5%C.A.Rs.6164.75+Rs.**  **308.24=Rs. 6472.99** |  | |  |  |  |
| 4.1a | **M-25** | Cu.  M. | | 408.02 |  |  |
| 4.2 | ProvidingandlayingCastinsitu/ReadyMixcementconcreteof trap/ granite/ quartzite/ gneiss metal for R.C.C. pardi of required thickness including steel centering, formwork, cover blocks, laying/pumping, compacting,curing,finishingandrougheningthemifspecialfinishis to beprovided and curing complete **at all heights including all leads and lifts**. (Excluding reinforcement and structural steel).with fully automaticmicroprocessorbasedPLCwithSCADAenabledreversibleDrumTypemixer/concreteBatchmixplant(Panmixer)etc.complet  e.Withfineaggregate(NaturalSand/CrushedsandVSIGrade finely washed etc)  **GradeM-25**  **CSR18-19/PageNo./ItemNo.787/+5%C.A.Rs.12161.75+Rs.** |  | |  |  |  |

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|  | **608.09=Rs. 12769.84** |  |  |  |  |
| 4.2a | **InRCCGradeM-25** | Cu.  M. | 56.38 |  |  |
| 4.3 | Providing and laying Cast insitu/Ready Mix cement concrete of trap / granite/quartzite/ gneissmetalforR.C.C.columns asper detailed designs and drawings or as directed including steel centering, formwork, cover blocks compacting and roughening if special finish is to be provided and curing etc. complete **atall heights including all leads and lifts.** (Excluding reinforcement and structuralsteel).with fully automaticmicroprocessor based PLCwithSCADAenabledreversibleDrumTypemixer/concrete Batchmix plant(Panmixer) etc.complete.With fineaggregate (Natural Sand / Crushed sand VSI Grade finely washed etc) **GradeM-25**  **CSR18-19/PageNo./ItemNo.771/+5%C.A.Rs.10982.75+Rs.**  **549.14=Rs. 11531.89** |  |  |  |  |
| 4.3a | **GradeM-25** | Cu.  M. | 0.00 |  |  |
| 4.4 | Providing and laying Cast in situ/Ready Mix cement concrete of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete **at all heights including all leads and lifts**. (Excluding reinforcement andstructuralsteel).withfullyautomaticmicroprocessorbased PLCwithSCADAenabledreversibleDrum Typemixer/concrete Batchmixplant(Panmixer)etc.complete.Withfineaggregate ( Natural Sand /Crushed sand VSI Grade finely washed etc) **InRCCGradeM-25**  **CSR18-19/PageNo./ItemNo.773/+5%C.A.Rs.9919.75+Rs.**  **495.99=Rs. 10415.74** |  |  |  |  |
| 4.4a | **GradeM-25** | Cu.  M. | 102.73 |  |  |
| 4.5 | Providing and laying Cast in situ/Ready Mix cement concrete of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, compaction, finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete **at all heights including all leads and lifts.** (Excluding reinforcement andstructuralsteel).Withfullyautomaticmicroprocessorbased PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer ) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)  **M-25**  **CSR18-19/PageNo./ItemNo.778/+5%C.A.Rs.10995.75+Rs.**  **549.79=Rs. 11545.54** |  |  |  |  |
| 4.5a | **M-25** | Cu.  M. | 22.70 |  |  |
| 4.6 | ProvidingandlayingCastinsitu/ReadyMixcementconcreteof trap/ granite/ quartzite/ gneiss metal for R.C.C. chajja as per detailed design and drawings including steel centering, formwork, cover blocks compacting , curing , finishing and roughening the surface if special finish is to be provided and curing complete **at all heights including all leads and lifts**. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand/Crushed sand VSI Grade finely washed etc)  **M-25**  **CSR18-19/PageNo./ItemNo.785/+5%C.A.Rs.10860.75+Rs.**  **543.04=Rs. 11403.79** |  |  |  |  |
| 4.6b | **M-25** | Cu.  M. | 0.00 |  |  |

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| 4.7 | Providing and laying Cast in situ/Ready Mix cement concrete of trap / quartzite /granite /gneiss metal for R.C.C. Waist slab, and steps of staircases as per detailed design and drawings or as directed including steel centering, formwork, steel props, laying/pumping, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. **complete at all heights including all leads and lifts**. (Excluding reinforcement,includingcoverblock).(Newlylaidconcreteshall be covered by gunny bag, plastic, tarpaulin etc.)with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand  /CrushedsandVSIGradefinelywashedetc)  **M-25**  **CSR18-19/PageNo./ItemNo.790/+5%C.A.Rs.10924.75+Rs.**  **546.24=Rs. 11470.99** |  |  |  |  |
| 4.7a | **M-25** | Cu.  M. | 0.00 |  |  |

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| 4.80 | Providing and fixing in position TMT-FE-500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawingsandschedules.Includingcutting,bending,hookingthe bars, binding with wires or tack welding and supporting as required complete **at all heights including all leads and lifts**..  **CSR18-19/PageNo./ItemNo.797/+5%C.A.Rs.63994+**  **Rs.3199.7=Rs.67193.70** | M.T. | 94.79 |  |  |
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| 4.90 | Providingandlayinginsitu/readymixM-25controlledcement concreteoftrap/granite/quartzite/gneissmetalforRCCworkin solid/ deck slab etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete **at all heights including all leads and lifts.** (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and fine aggregates of required specifications (Natural sand / VSI sand finely washed etc ) .  **CSR18-19/PageNo./ItemNo.461/+5%C.A.Rs.7545.54+**  **Rs.3778.28=Rs.7922.82** | Cubi c Metr e | 200.11 |  |  |
| 4.10 | Providing sacrificial shuttering for deck slab made up with galvanised Cold Rolled Cold Annealed (CRCA) steel of 310 MPA and 8.27kg /m2Grade with all Contractor's material, labour, erectionfixing,weldingetcComplete**atallheightsincludingall leads and lifts.** (Decking Sheet)  **CSR18-19/PageNo./ItemNo.641/+5%C.A.Rs.63208+**  **Rs.3160.4=Rs.66368.40** | M.T | 11.03 |  |  |
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|  | **SubTotalofItemno.04** |  |  |  |  |
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| **5.0** | **BRICK/BLOCKMASONARYWORKS** |  |  |  |  |
| 5.1 | ProvidingsecondclassBurntBrickmasonrywithconventional/  I.S.typebricksincementmortar1:6insuperstructureincluding striking joints, raking out joints, watering and scaffolding etc. Complete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.818/+5%C.A.**  **Rs.5475.85+Rs.273.79=Rs.5749.64** | Cu.  M. | 18.89 |  |  |
| 5.2 | ProvidingandconstructingmasonryinAutoclavedAreaclaved( Celluar) Concrete Block of approved manufacturer confirming toIS2185Part III1984ofsize(625x240x225)mm inextrafine jointingmortaroffixoblockofUltraTechorequivalentinsuper structure including, striking joints, racking out joints watering and scaffolding etc .complete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.-828/+5%C.A.Rs.5663+Rs.283.15=**  **Rs.5946.15** | Cu. M | 131.86 |  |  |
| 5.3 | Providing and constructing masonry in Autoclaved Areaclaved (Celluar)ConcreteBlockofapprovedmanufacturerconfirming toIS2185PartIII1984ofsize(625x240x100)mminextrafine jointing mortar of fixoblock of Ultra Tech or equivalent in half brick thick wall including 2 hoop iron strips 25mm x 1.6mm at every third course, properly bend and bonded at ends scaffolding racking out joint sand watering compete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.-829/+5%C.A.Rs.793.00+Rs.39.65**  **=Rs. 832.65** | Sq. M | 0.00 |  |  |

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|  | **SubTotalofItemno.05** |  |  |  |  |
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| **6.0** | **WATERPROOFINGWORKS** |  |  |  |  |

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| 6.1 | Providing cement based water proofing treatment to terraces (Indian water proofing or alike) with brick bats laid in required slope to drain the water for any span after cleaning the base surface. Applying a coat of cement slurry admixed with approved water proofing compound and laying the brick bats onbottomlayerinC.M.1:5 admixed with approved water proofing compound filling up to half depthofbrickbats,curingthislayerfor3days,applyingcementslurry over this layer joints of brick bats with C.M.1:3 admixed with approved water proofing compound and finally top finishing with average 20 mm. thick layers of same mortar added with jute fiber at1 Kg per bag including finishing the surface smooth with cement slurry admixed with approved water proofing compound.  Markingfinishedsurfacewithfalsesquaresof300mmx300  mm. making the junction sat the parapet rounded and tape red top for required height, with drip moul dat the junction of plasterandparapetandcuringandcovering10yearsGuarantee against leakproofness on Court fee stamp paper of Rs. 500/- including ponding test etc. complete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.-866/+5%C.A.Rs.886+Rs.46.30=**  **Rs.930.30** | Sq.M | 211.70 |  |  |
| 6.2 | ProvidingwaterproofplasterinW.C.andbath20mmthickfor dado in cement mortar 1:3 with neat finishing, floating using waterproofing compound at the rate of 1kg. per bag ofcement of approved make and manufacturer and curing (and filling joints of Nahani trap and any outlet by properly) etc. complete **at all heights including all lead sand lifts.**  **CSR18-19/PageNo./ItemNo.869/+5%C.A.**  **Rs.400.21+Rs.20.01=Rs.420.22** | Sq.M | 36.94 |  |  |
| 6.3 | Providing waterproofing in W.C. and bath including brick bat coba in all position including providing and laying 12mm bedding in cement mortor 1:3 on vergin concrete slab with waterproofingcompound@1kg/perbagofcementlayingbrick bat coba of required thickness in cm 1:5 with waterproofing compound 1 kg/bag of cement grouting and finishing the top layer with 20 mm thick brick bedding in cm mortor 1:3 with waterproofing compound 1 kg/per bag of cement and testing the treated portion for 48 hours by pond test and covering ten years' guarantee on requisites tamp paper including curing etc. complete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.-880+5%C.A.Rs.4712.37+Rs.**  **235.62=Rs. 4947.99** | Cu. M | 4.27 |  |  |
| 6.4 | Providing water proof bedding for flooring of Bath and WC 25 mm thickinC.M.1:3includingusingapprovedwaterproofingcompoundi n specified proportion as per manufacturers specifications for per bag of cement including leveling, curing and covering 10 years guarantee on court fee stamp paper of Rs.500/-including ponding testetc.complete**at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.867/+5%C.A.Rs.392.91+Rs.**  **19.65=Rs. 412.56** | Sq.M | 14.23 |  |  |

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| 6.5 | Providing and fixing 20 to 25 mm thick rough Shahabad box type water proofing treatment to vertical outside faces of ReinforcedCementconcretewallsofbasementorunderground floor including filling thegapof25mmbetweenrough shahabad and R.C.C. walls with cement grout mixed with water proofing liquid Algae proo for other alike with one tile lift method, brushing the joints horizontally with cement slurry mixed with waterproofing liquid forwidth 30to 35mm and slopingcoping over topmost tile with cement mortar 1:3, buttingthebottommostwithCementconcrete1:2:4mixedwithwat er proofingliquid,curing,with7yearsguaranteeoncourtfeestamp ofRs.100/-with ponding test etc complete **at all heights including all leads and lifts..**(excluding Cement concrete 1:3:6 base concrete) **CSR18-19/ Page No./ Item No. 875 / +5%C.A.**  **Rs.1003.00+Rs.50.15=Rs.1053.15** | Sq.M | 72.15 |  |  |

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| 6.6 | Providing and laying in required positions flooring of China mosaic(brokenmosaictilepieces)ofapprovedcolouredand pattern, set in a bed of 1:4 cement mortar, including neat cement/coloured cement float, giving proper slopes, compaction, curing and finishing complete at all heights including all leads and lifts..  **NMMCRateAnalysisasper17-18** | Sq.M | 38.33 |  |  |
| 6.7a | ThefirstpartconsistingWaterproofingTreatmentwithLiquid- applied 100% Polyurethane/Polyisoprene Elastomeric Waterproofing Membrane  :   1. Pre-pondingwatertesttocheckforleakagesfromhoneycomb, cracks, joints, etc.. 2. TreatingtheconstructionjointsanddampareasbyroutingoutthejointinaU-grooveapprox.25mm(w)x25mm   (d) and filling U- groove with Non-shrink Cementitious Waterproof Compound /Mortar, of approved make (site- preparedpolymer non-shrink mortar) after applicationof a primingcementitousbondingcoat.Athoneycomb/leaking areas, injecting cement slurry mixed with IWC of approved makeatthedosageof100ml/bagofcementusinginjection grouting pump.   1. CovingthejunctionofslabandverticaloffsetswithCM1:2mixe d with IWC at the dosage of 100 ml/bag of cement after application of priming cementitous bonding coat.(iv) Cleaning the surface to be waterproofed to make it free from surface laitance, contamination, etc. Surface preparation shall be by wire-bruishing to remove laitance, loose particles. 2. Providing and applying cementitous polymer modified bond priming coat (1:1.25) (1 Polymer : 1.25 cement), of approved makeaspermanufacturers’specificationatthetotalcoverage rate of 50sq.ft./kg.in 1 coat over entire slab and parapet wall upto 450 mm from the FFL of Brick-bat coba, water curing for 48 hours. 3. Providing and applying proprietary Liquid-applied 100% Polyurethane/Polyisoprene Elastomeric Waterproofing Membrane System (of approved make) as per manufacturers’ specificationatthetotalcoveragerateof20sq.ft./kg.in2 coats over entire slaband parapet wall upto450 mm fromthe FFLof Brick-batcoba.Thetimeintervalbetweentwocoatsshallbeat   least8-12 hours. | Sq.M | 261.41 |  |  |
| 6.7b | After wet-curing, protectthe surfaceoftheMembrane with15 mmthick,1:4CMplasteradmixedwithIntegralWaterproofing Compound at the dosage of 100 ml/bag of cement and mortar plasticizer @200ml/bagof cement.ProtectivePlastering shall be done only over parapet wall/ masonary walls.  **Approved IWC & Plasticizer Make: ZUPA/Sunanda/Tamms/PidiliteorEquivalentAspermarket**  **Rate.** | Sq.M | 261.41 |  |  |

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| 6.8 | Providing and laying Crystal line Water proofing System to permanently fix non-soluble crystalline grown through-out the capillary tracts and pores of concrete at a speed of 60 cms per year inside concrete. The “Catalytic” In-depth Crystal line Waterproofing System shall be ableto withstand at least 460 feet of water head pressure. The Crystalline Waterproofing System of TAMMS / ZUPA/equivalent make as approved by the Engineer In Charge make shall be applied at a total coverage of 0.7kg / sq m x2 coats on UG/OGT ank walls &1.2kg./sq.m. on UG/OH tank floor from inside on footings / inverted beams / columns, if any at all heights including all leads, lifts etc complete. Thecost shall also include base preparationincluding cleaning and wire brushing the RCC surfaces on which applicationistobecarriedoutincludingtreatingthecracks,and construction joints by routing out to a minimum1”x1”groove and grouting/filling it with a specialized non-shrink cementations compound, treating the honeycombs by routing out the loose concrete up to sound concrete and grouting with specialized non shrink cementations compound, plugging / grouting any minor leakages that coccur on the RCC floor surfacefromtheinside(ifany),curingetc.,complete.Thewater proofing treatment shall be guaranteed for minimum period of10 years on requisite stamp paper, from the date of completion.  **ModeofMeasurement:ActualSqmQty.ofapplicationarea. Approved Makes: ZUPA/TAMMS/VANDEX/PIDILITE or Equivalent**  **AspermarketRate.** |  |  |  |  |
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| 6.8a | ForHorizontalFloorSurface@totalcoveragerateof0.7kg/sq min 2  Coats | Sq.M | 57.59 |  |  |
| 6.8b | ForVertical/RetainingWallSurface@totalcoveragerateof  1.2kg/sqmin1coat | Sq.M | 85.96 |  |  |
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| 6.9a | Providing & Applying 2 coats of high performance two component pre-packed Acrylic Polymer based cementitious water proofing,, with a mix ratio of (liquid: Powder), parts by vol. - 1:2 @ 20 sqft/ to achieve DFT of 1.5mm over the wall & floor surface as per the manufacturers’ specification. The coating shall be extended over the wall minimum 1000mm above FFL. All the coats to be applied in right angle to each other. The coating shall have following properties: Tensile strength:2.6N/mm2asperASTMD412,Elongationatbreak,  %:120 asperASTMD412,Adhesionstrength:1N/mm2asper ASTM D 4541, crack bridging: 2 mm as per ASTMC836, Water penetration (5 bar pressure)  :1%asperBSEN12390,Hardness,ShoreA:60asperASTMD 2240, RCPT permeability : 92% as per ASTM C 1202-97, including proper surface preparation as per manufacturers' specification, cleaning work, removal of loose concrete and filling cracks with polymer modified mortar using All the honeycombed areas & construction.  **AspermarketRate.** | Sq.M | 19.63 |  |  |
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|  | **SubTotalofItemno.06** |  |  |  |  |
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| **7.0** | **PLASTERING&POINTINGWORKS** |  |  |  |  |
| 7.1 | Providing and applying gypsum plaster ( with Gypsum material of Gypsum India/MegaSignorequivalentmake) with finishing with gypsum material in10 to13 milli meter thickness to previously plastered surface/or on newly brick surface (Excluding rough cast plaster)inall position including preparing andFinishingthesurfacescaffoldingetc.complete**atallheights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.-910/+5%C.A.Rs.474.00+Rs.23=**  **Rs.497.70** | Sq.M | 572.16 |  |  |
| 7.2 | Providinginternalcementplaster12mmthickinsinglecoatin cement mortar 1:4 without neeru finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.884/+5%C.A.**  **Rs.220.13+Rs.11.01=Rs.231.14** | Sq.M | 906.43 |  |  |

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| 7.3 | Providingsandfacedplasterexternallyincementmortarusing approvedscreened sand, inall positions including base coatof 15 mm thick in cement mortar 1:4 using water proofing compoundat1kgpercement bagcuringthesame fornot less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar1:4finishingthesurfacebytakingoutgrainsandcuring for fourteen days scaffolding etc. complete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.891/+5%C.A.Rs.630.29+Rs.**  **31.51=Rs. 661.80** | Sq.M  . | 484.86 |  |  |
|  | **SubTotalofItemno.07** |  |  |  |  |
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| **8.0** | **PAVING,FLOORING&DADOWORKS** |  |  |  |  |
| 8.1 | Providing and laying polished hand cut **Kotah Stone flooring 25mm to 30mmthick** and45cm to55cm wide in plain/diamond patternonabedof1:6 C.M.includingcementfloat,fillingjoints with neat cement slurry, curing, polishing and cleaning complete **at all heights including all leads and lifts..**  **CSR18-19/PageNo./ItemNo.923/+5%C.A.Rs.1070.86+Rs.**  **53.54=Rs. 1124.40** | Sq.M | 1190.38 |  |  |
| 8.2 | Providing and fixing in required position **skirting or dado** of polished Kotah Stone slab 25 mm to 30 mm thick fixed on base on plaster of cement mortar 1:4 including cement float, filling jointswithcementslurry,curingrubbing,polishingandcleaning complete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.987/+5%C.A.**  **Rs.1020.51+Rs.51.03=Rs.1071.54** | Sq.M | 334.27 |  |  |
| 8.3 | Providingandlayingmachinecutmachinepolishedmachinecut Kota stone slabs 20 to 25 mm thick for **treads and risers of steps** and staircases, with rounded nosing for the treads on a bed of 1:4 cement mortar including cement float, filling joints with neat cement slurry, curing, polishing and cleaning etc. complete **at all heights including all leads and lifts.**  **CSR18-19/PageNo./ItemNo.933/+5%C.A.**  **Rs.1194.86+Rs.59.74=Rs.1254.60** | Sq.M | 3.65 |  |  |
| 8.4 | Providingandlayingceramictilesofhavingsize30cmx30cm confirmingtoI.S.15622/2006(group DII-A) and 7 to 8mm thick for flooring in required position laid on a bed of 1:4 cement mortar including cement float, filling joint with white/colour cement slurry cleaning curing etc. complete.  **CSR18-19/PageNo./ItemNo.939+5%C.A.**  **Rs.983.48+Rs.49.17=Rs.1032.65** | Sq.M | 14.23 |  |  |
| 8.5 | Providing and laying ceramic tiles of having size30 cm. x 30 cm. and confirming to corresponding I.S. for dado and skirting in requiredpositionwithreadymadeadhesivemortarofapproved quality on plaster of 1:2 cement mortar including joint filling with white/ colour cement slurry cleaning curingetc.complete. **CSR18-19/PageNo./ItemNo.940/+5%C.A.**  **Rs.1034.48+Rs.51.72=Rs.1086.20** | Sq.M | 53.09 |  |  |
| 8.6 | Providingandfixinggreenmarbleof18to20mmthickfordoor frame/ dado/ window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing / moulding the sharp edges wherever necessary, curing, etc. complete.  **CSR18-19/PageNo./ItemNo.940/+5%C.A.**  **Rs.2065.61+Rs.103.28=Rs.2168.89** | Sq.M | 14.22 |  |  |

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| 8.7 | Providing and fixing 1st quality ceramic glazed floor 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-Chargein**skirting,risersofstepsanddados**over12 mm thick bed of cement Mortar 1:3 (1 cement:3 coarse sand) and jointing withgrey cement slurry@ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete **at all heights including all leads and lifts.**  **CPWDDSR16-17/PageNo.669/ItemNo.11.37(a)**  **Rs.660.20+66.02(10%extraconsideredfor2yearsescalation)= 726.22** | Sq.M | 39.85 |  |  |
|  | **SubTotalofItemno.08** |  |  |  |  |
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| 9.0 | DOORS&WINDOWSWORKS |  |  |  |  |
| 9.1 | Providing and erecting Engineered door frames from engineered plywood, The core of the entire frame shall be of Plywood and cladded with 1mmthick laminate on exposed surface and shall be glued to the frame with glue of Henkel or equivalent make on a hot press The face thickness of the laminate shall not be less than 1 mm. The frame shall be fixed onto the plastered brick masonry with Hilti bolts as instructed by the Architect/ EIC. Providing and erecting 35mm thick flush door(core)havingHardwoodRailandStileframeworkwithlock rail and filled with Hardwood batten and cladded with 3.5mm thick Plywood on both sides. The door shall be cladded with 1mm thick laminate both sides. The face thickness of the laminate shall not be less than 1mm. The laminate shall be pressedwithD3glue.Theedgesofthedoorshallbelippedona CNC edge banded with EVA glue with matching 3mm thick edgeband of Furwa- Germany or equivalent make. The boring, notching routing and grooving for the hardware shall be done on CNC machines for accuracy. The hardware shall consist of Ball Bearing Butt hinges of size 102X76X3mm S.S. 316 grade matt finished, concealed door closer for door thickness of 40mm, ‘H’ type handle for back to back application in S.S. 316 grade finish, dead lock double throw with S.S. finished forend and strike plate and S.S. tower bolt. The hardware shall be of Dorma/ Geze/ Hafeleor equivalent make with prior approval of theArchitect/EIC.Thedoorshallhaveavisionpanelifspecified by the Architect/ EIC . The Door size Shall be of 0.9M x 2.1M  Aspermarket Rate | Nos. |  |  | - |
|  | DLaminatedFlushDoor(2.4x2.1) |  | 4.00 |  |  |
|  | D1LaminatedFlushDoor(1.2x2.1 ) |  | 5.00 |  |  |
|  | D2LaminatedFlushDoor(1x2.1) |  | 2.00 |  |  |
|  |  |  |  |  |  |
| 9.2 | Providingandfixingfireresistantdoorframeofsection143x57 mm having built in rebate made out of 16 SWG G.I. sheet (zinc coating not less than 120 gm/sqm) duly filled with vermuculite basedconcretemix,suitableformounting60minutesfirerated door shutters. The frame is fitted with intumuscent fire seal strip of size 10x4 mm (minimum) alround the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistant primer etc. complete as per direction of Engineer-in-charge.  **AspermarketRate** | Nos. | 4.00 |  |  |
| 9.30 | Providing and fixing fiber glass reinforced polyster door shutter 35 mm thick as per IS 14856 (2000) (Reaffirmed 2006) without ventilator including chromium plated fixtures and fasteningwithchromiumplatedhandlesonbothsides,etccompleteatall heights including all leads and lifts. The Door size Shall be of 0.75M x 2.1M  **CSR18-19/PageNo./ItemNo.1174/+5%C.A.Rs.2617+Rs.**  **130.85=Rs. 2747.85/sq.m.** | Nos. | 7.00 |  |  |

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| 9.40 | Providing and fixing in position powder coated aluminium louvered windows / ventilator of various sizes with powder coating as per detailed drawing and specifications including aluminiumframes80x38mmx1.22mmboxtype,5mmthick sheet glass louvers, of approved quality etc. complete at all heights including all leads and lifts.  **CSR18-19/PageNo./ItemNo.1183+5%C.A.Rs.2688.00+**  **Rs.134.40=Rs.2822.40** | Sq.M | 2.70 |  |  |
| 9.50 | Providing and fixing in position. (as per I.S.1868 / 1982) Aluminiumslidingwindowoftwotrackswithrectangularpipe having overall dimension 63.50 x 38.10 x 1.02 mm at weight  0.547kg/Rmt.andwindowframebottomtracksection61.85x  31.75 x 1.20 mm at weight 0.695 kg/Rmt. Top and side track section 61.85 x 31.75 x 1.30 mm at weight 0.659 kg/Rmt. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight0.417kg/Rmt.Interlockingsection40x18x1.10mmat  weight0.469kg/Rmt.Andhandlesection40x 18x1.25mmat  weight 0.417 kg/Rmt. and top section 40 x 18 x 1.25 mm at weight0.417kg/Rmt.Asperdetaileddrawingsandasdirected by Engineer in charge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass with all required screws and nuts etc, complete. With powder coating with box  **CSR18-19/PageNo./ItemNo.-1156/+5%C.A.Rs.4796.00+Rs.**  **239.80=Rs. 5035.80** | Sq.M | 19.44 |  |  |
|  | **SubTotalofItemNo.09** |  |  |  |  |
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| **10.0** | **Puff Panel** |  |  |  |  |
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| 10.1 | Providing&erectingInsulationwallsandPartitionusing120mm thick PUF Panels. The insulated panels shall comprising of pre coated galvanized sheets of 0.50 mm thick on both sides shallbe used for pre cooling chambers and Multi commodity cold stores as per the technical requirements and Installation. PUF insulationmaterialwith40kgpercu.m.densityandInstallation etc. complete. The length and width of the panels shall be suitable for the span of the proposed outer dimensions of the cold chambers. The panels shall be joined together with heavy duty action panel fasteners sealed perfectly with suitable sealant. The PUF panels shall be either continuous type with male & female grooves or cam and lock type. All the corners shall be perfectly sealed and covered with the angle of the pre- coated sheets. The work shall also include the fixing necessary hardware during erection like SS bolts, washers, woodmaterials, raw plugs, wood screws, sealant materials, flashings etc  **AsPerMarketRate.** | Sq.M | 2683.23 |  |  |
| 10.2 | Providing & erecting Insulation Ceiling using 120mm thick PUF panels. The insulated panels shall comprising of pre coated galvanized sheets of 0.50 mm thick on both sides & shall be usedfor precoolingchambersandMulticommoditycoldstores as per the technical requirements and Installation. PUF insulation material with 40 kg per cu. m. density etc. complete. Thelengthandwidthofthepanelsshallbesuitableforthespan of the proposed outer dimensions of the cold chambers. The panels shall be joined together with heavy duty action panel fasteners sealed perfectly with suitable sealant. The PUF panels shall be either continuous type with male & female grooves or cam and lock type. All the corners shall be perfectly sealed and covered withthe angle of the pre-coatedsheets. Thework shall also include the fixing necessary hardware during erection like SS bolts, washers, wood materials, raw plugs, wood screws, sealant materials, flashings etc. The Ceiling panels shall be  designedforselfsupportingtypeandshallbesuitablefor | Sq.M | 940.12 |  |  |

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|  | hangingtheairhandlingunits,ifnecessary.  **AsPerMarketRate.** |  |  |  |  |
| 10.3 | Providing & erecting Insulation walls, ceiling & partitions using **120mm** thick PUF panels. The insulated panels with pre coated galvanized sheets of 0.50 mm thick on both sides shall be used for pre cooling chambers and Multi commodity cold stores as per the technical requirements and Installation. PUF insulation materialwith40kgpercu.m.densityetc.complete.Thelength and width of the panels shall be suitable for the span of the proposed outer dimensions of the cold chambers. The panels shall be joined together with heavy duty action panel fasteners sealed perfectly with suitable sealant. The PUF panels shall be either continuoustype with male & female grooves or cam and lock type. All the corners shall be perfectly sealed and covered with the angle of the pre-coated sheets. The work shall also include the fixing necessary hardware during erection like SS bolts, washers, wood materials, raw plugs, wood screws, sealant materials, flashings etc. The Ceiling panels shall be designed for self supporting type and shall be suitable for hanging the air handling units, if necessary.  **AsPerMarketRate.** | Sq.M | 209.7446 |  |  |
| 10.4 | Providing&erectingInsulationwallsandPartitionusing100mm thick PUF Panels. The insulated panels is comprising of pre coated galvanized sheets of 0.50 mm thick on both sides shallbe used for pre cooling chambers and Multi commodity cold stores as per the technical requirements and Installation. PUF insulationmaterialwith40kgpercu.m.densityandInstallation etc. complete. The length and width of the panels shall be suitable for the span of the proposed outer dimensions of the cold chambers. The panels shall be joined together with heavy duty action panel fasteners sealed perfectly with suitable sealant. The PUF panels shall be either continuous type with male & female grooves or cam and lock type. All the corners shall be perfectly sealed and covered with the angle of the pre- coated sheets. The work shall also include the fixing necessary hardware during erection like SS bolts, washers, woodmaterials, raw plugs, wood screws, sealant materials, flashings etc.  **AsPerMarketRate.** | Sq.M | 0.00 |  |  |
| 10.5 | Providing & erecting insulation floor using 80mm thick Conventional PUF Panels. The surface shall be cleaned thoroughly and applied one coat of salicot ont this surface hot bitumenonelayerofbitumensheet(tarfelt)ofthickness2mm thick shall be pasted with 200 mm overlapping on all the four walls. above this layer fix the 120 mm thick insulation of polyurethane foam (PUF) slab of density 40 kg/m3 in one/ two layers with bitumen. over this PUF put 2 mm thick bitumen sheet on the top with 100 mm overlapping on all sides.  **AsPerMarketRate.** | Sq.M | 40.18 |  |  |
| 10.6 | Providing & erecting insulation floor using 80mm thick Conventional PUF Panels. The surface shall be cleaned thoroughly and applied one coat of salicot ont this surface hot bitumenonelayerofbitumensheet(tarfelt)ofthickness2mm thick shall be pasted with 200 mm overlapping on all the four walls. above this layer fix the 80 mm thick insulation of polyurethane foam (PUF) slab of density 40 kg/m3 in one/ two layers with bitumen. over this PUF put 2 mm thick bitumen sheet on the top with 100 mm overlapping on all sides. s.  **AsPerMarketRate.** | Sq.M | 913.73 |  |  |

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| 10.7 | **Providing & ercting the Insulated doors** using 80mm thick PUF Panels. The door Size with clear opening shall be of 1200mm x 2100mm.AlldoorsshallbeSwingtypewithimportedcompact. Door shall be made of 100 mm, PUF insulation material with 40 kg per cu. m. density cladded on both sides with 0.50 mm thick pre coated GI imported or equivalent sheets. The clear dimensions shall be as specified in the drawing. The door shall have a heavy duty, compact and lockable latch. It should have the radium indication and the facility to open from inside. The shutter shall have dual gaskets with good quality material. The frame shall be sturdy and suitable for installation with the insulated panels. Note: - The drawings and make for the insulated doors should be submitted to the Architect before execution Installation etc. complete. size  **AsPerMarketRate.** |  |  |  |  |
| a | Cold Chambers | Nos. | 20.00 |  |  |
|  | Providing & ercting the Insulated doors using 100mm thick PUF Panels. The door Sizewithclear opening shall be of as per given chamber wise. All doors shall be Swing type with imported compact. Door shall be made of 100 mm, PUF insulation material with 40 kg per cu. m. density cladded on both sides with 0.50 mm thick pre coated GI imported or equivalent sheets. The clear dimensions shall be as specified in the drawing. The door shall have a heavy duty, compact and lockable latch. It should have the radium indication and the facility to open from inside. The shutter shall have dual gaskets with good quality material. The frame shall be sturdy and suitable for installation with the insulated panels. Note: - The drawingsandmakefortheinsulateddoorsshouldbesubmitted totheArchitectbeforeexecutionInstallationetc.complete.size  **AsPerMarketRate.** |  |  |  |  |
| b | PreCoolingChamber | Nos. | 2.00 |  |  |
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| 10.8 | FLASHINGSforPUFPanelsGirthUpto300mm  **AsPerMarketRate.** | R.M. | 3117.00 |  |  |
|  | FLASHINGSforPUFPanelsGirth300-600mmGirth  **AsPerMarketRate.** | R.M. | 150.00 |  |  |
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| 10.90 | CeilingSupportSystem100MMwideALTSection(Hanging Arrangement Upto - 1 mtr) Insulated  **AsPerMarketRate.** | R.M. | 0.00 |  |  |
|  | CeilingSupportSystem120MMwideALTSection(Hanging Arrangement Upto - 1 mtr) Insulated  **AsPerMarketRate.** | R.M. | 180.00 |  |  |
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|  | **SubTotalofItemno.10** |  |  |  |  |
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| **11.0** | **COLOUR/WHITEWASHABLE&DISTAMPERWORKS** |  |  |  |  |
| 11.1 | Providingandapplyingprimingcoatonconcrete/masonary/ Asbestos Cement plastered surfaces including scaffolding if necessary, preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter and sand papering as required etc. complete.  **CSR18-19/PageNo./ItemNo.1018+5%C.A.Rs.28.00+Rs.1.40=**  **Rs.29.40** | Sq.M  . | 906.43 |  |  |

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| 11.2 | Providing and applying plastic emulsion paint of approved quality, colour and shade to new surface in three coats includingscaffolding,preparingthesurface.(excludingprimer coat) etc. complete  **CSR18-19/PageNo./ItemNo.1037+5%C.A.**  **Rs.87.00+Rs.4.35=Rs.91.35** | Sq.M | 906.43 |  |  |
| 11.3 | Providing and applying white-wash in one coat on old / new plastered or masonry surfaces and asbestos cement sheets includingscaffoldingandpreparingthesurfacebybrushingand brooming down etc. complete.  **CSR18-19/PageNo./ItemNo.1025+5%C.A.Rs.5.40+Rs.0.25=**  **Rs.5.67** | Sq.M  . | 484.86 |  |  |

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| 11.4 | Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning , preparing the plaster surface ,applying primer coat ,scaffolding if necessary, and wateringthesurfacefortwodaysetccomplete.NOTE:ForItem No. 15 to 18 prior approval of Superintending Engineer will be necessary  **CSR18-19/PageNo./ItemNo.1023+ 5%C.A.**  **Rs.194.00+Rs.9.70=Rs.203.70** | Sq.M | 484.86 |  |  |
|  | **SubTotalofItemno.11** |  |  |  |  |
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| **12.0** | **IRONWORKS&RAILINGWORKS** |  |  |  |  |
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| 12.1 | **M.S. Railing** Providing and fixing mild steel grill railing 15 kg/sq.m forstaircases, including fabricating, fixtures,erecting, paintingthegrillworkwithonecoatofanticorrosivepaintand two coats of oil painting with approved colours  **AsPerMarketRate.** | Sq.M | 29.58 |  |  |
| 12.2 | **M.S hand railing** Providing and erecting the M.S. hand rail of 75mm dia pipe near wall side including fabricating, fixtures, erecting,paintingonecoatofanticorrosivepaintandtwocoats of oil painting with approved colours and polishing.  **AsperMarketRate.** | R.M. | 39.80 |  |  |
|  | **SubTotalofItemno.12** |  |  |  |  |
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| **13.0** | **STRUCTURALSTEELFORROOFINGWORKS** |  |  |  |  |
| 13.1 | Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed design and drawings or as directed by Engineer - In - Charge.,includingcutting,fabricating,hoisting,erectingfixingin position, making riveted / bolted / welded connection and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete  **CSR18-19/PageNo./ItemNo.-748/+5%C.A.**  **Rs.83516.00+Rs.4175.80=Rs.87691.80** | M.T. | 63.11 |  |  |
| 13.2 | Providingstructuralsteelworkinsinglestanchionscomposed of  R.S.J. channel etc. with caps bases, mild steel plates, angle brackets, cleats, gusset plates, anchor bolts etc. as per detailed designanddrawingsorasdirected,includingcuttingfabricating hosting, erecting & fixing in position, making reverted/bolted/ weldedconnectionandonecoatofapprovedqualityandshade etc. complete.  **CSR18-19/PageNo./ItemNo.747+5%C.A.Rs.68325.00+Rs.**  **3416.25=Rs.71741.25** | M.T. | 451.29 |  |  |
|  | **SubTotalofItemno.13** |  |  |  |  |
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| **14.0** | **ROOFING&CEILINGWORKS** |  |  |  |  |
| 14.1 | Providing and fixing corrugated galvanised iron sheets of 0.63mm thick (24 B.W.G.) for roofing without wind tiles includingfasteningwithgalvanisedironscrews&bolts,lead& bitumen washers as per drawing etc. complete.(Weight of 5.5kg/sq.m.).  **CSR18-19/PageNo./ItemNo.-1072/+5%C.A.**  **Rs.686+Rs.34.3=Rs.720.3** | Sq.  M. | 984.65 |  |  |

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| 14.2 | Providing and fixing 15 cm wide, 45 cm overall semi-circular plain G.S. sheet gutter with iron brackets 40x3mm size, bolts, nuts and washers etc.,includingmakingnecessaryconnections withrainwaterpipescomplete.0.63mmthickwithzinccoating not less than 275 gm/m².  **DSR16-17/PageNo.703/Itemno.-12.7.2/+5%C.A**  **Rs.507.05+Rs.51.5=578.55** | R.m | 70.66 |  |  |
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|  | **SubTotalofItemNo.14** |  |  |  |  |
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| **15.0** | **CONCRETEROADWORKS** |  |  |  |  |

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| 15.1 | Excavationforroadwayinearth,soilofallsorts,sand,gravelor soft murum including dressing section to the required grade, camberand side slopesand conveyingthe excavatedmaterials with all heights including all leads and lifts. . and spreading for embankment or stacking as directed.  **CSR18-19/PageNo./ItemNo.-86/+5%C.A.**  **Rs.216+Rs.10.80=Rs.226.80** | Cu.  M. | 214.43 |  |  |
| 15.2 | Providing earth work in embankment with approved materials obtainedfromdepartmentallandorothersourcesuptoleadof 50m. including all lifts, laying in layers of 20cm. to 30cm. thicknessbreaking clods,dressingto therequired lines, curves, gradesandsection,wateringandcompactionwithPowerroller to achieve not less than 97 % of standard proctor density etc. complete. ( Material obtained from Other sources)  **CSR18-19/PageNo./ItemNo.-100/+5%C.A.**  **Rs.151+Rs.7.55=Rs.158.55** | Cu.  M. | 107.22 |  |  |
| 15.3 | Providingandfillinginthefoundationwithsandofapproved qualityincludingwatering,compactingetc.complete.(Tobe executed with prior approval of Superintending Engineer) **CSR18-19/PageNo./ItemNo.-682/+5%C.A. Rs.2487.53 +**  **Rs.124.38=Rs.2611.91** | Cu.  M. | 107.22 |  |  |
| 15.4 | Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motorgrader/ Paver onprepared surface andcompactingwith vibratorypowerrollertoachievethedesireddensity,complete as per clause 401 -- Plant Mix Method and Grading - I Material **CSR18-19/PageNo./ItemNo.-113/+5%C.A. Rs.1902.95 + Rs.**  **95.15=Rs. 1998.10** | Cu.  M. | 214.43 |  |  |
| 15.5 | Wet Mix Macadam -- Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tippertosite,layinginuniformlayerswithpaverinsub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver  **CSR18-19/PageNo./ItemNo.-134/+5%C.A.Rs.2027.17+Rs.**  **101.36=Rs. 2128.53** | Cu.  M. | 107.22 |  |  |
| 15.6 | Construction of dry lean cement concrete Sub- base over a prepared subgrade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, , cement content not to be less than 150 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days,mixedinabatchingplant/Weighbatchmixer,transported to site with all leads and lifts, laid with a paver with electronic sensor /by suitable means as approved by Engineer- incharge , compacting with vibratory roller, finishing, curing and including preparation of sub-grade surface if required etc. complete **CSR18-19/ Page No./ ItemNo. - 182 / + 5%C.A.**  **Rs.3481.52+Rs.174.08=Rs.3655.60** | Cu.  M. | 107.22 |  |  |

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| 15.7 | Providing and laying in-situ M35 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement, coarse andfine aggregateconformingto IS383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver,compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6mX0.6mcentretocentre,admeasuring80mmatbottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.  **SSR18-19/PageNo.48/ItemNo.-5.02/+5%C.A.Rs.5679.00+Rs.**  **283.95=Rs. 5962.95** | Cu.  M. | 0.00 |  |  |
| 15.8 | Providing and laying in-situ M40 Grade unreinforced plain cement concrete pavement over a prepared sub base with 43 grade cement, coarse andfine aggregateconformingto IS383, using fine and coarse aggregates combined gradation as per Table 600-3 of MORTH Specification 2013, mixed in a batching and mixing plant/ non tilting mixer and Weigh batcher as per approved mix design, admixtures, transporting to site, spreading, laying with approved make paver,compacted and finished in a continuous operation, finishing to lines and grades as directed by Engineer-in-charge and curing by curing compound /by providing cement vata in cement Mortar 1:8 @0.6mX0.6mcentretocentre,admeasuring80mmatbottom and 40 mm at top with depth of 75mm and maintaining the same throughout curing period by any other method approved by Engineer-in-charge.  **CSR18-19/PageNo./ItemNo.-172/+5%C.A.Rs.6340.86+Rs.**  **317.04=Rs. 6657.90** | Cu.  M. | 214.43 |  |  |
| 15.9 | Providing and laying Cast in situ/Ready Mix cement concrete M 30 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement andstructuralsteel).withfullyautomaticmicroprocessorbased PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With (natural sand/V.S.I. quality Artificial Sand)  **CSR18-19/PageNo./ItemNo.-774/+5%C.A.Rs.10027.75+Rs.**  **501.39=Rs. 10529.14** | Cu.  M. | 9.95 |  |  |
| 15.10 | Providing,cutting,bending,hooking,tyingandlayinginposition TMT FE 500 steel bars for reinforcement for all RCC works asper detailed drawings etc. complete.( 1 kg/sq m ).  **CSR18-19/PageNo./ItemNo.-454/+5%C.A.Rs.62257+**  **Rs.3112.85=Rs.65369.85** | MT | 1.31 |  |  |
|  | **SubTotalofItemNo.15** |  |  |  |  |
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| **16.0** | **AreaDevelopmentandCompoundWall** |  |  |  |  |

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| 16.1 | Excavationforfoundationinearth,soilofalltypes,sand,gravel and softmurum,includingremovingtheexcavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete  **CSR18-19/PageNo./ItemNo.653/+5%C.A.**  **Rs.143.00+Rs.7.15=Rs.150.15** | Cu.  M. | 138.74 |  |  |
| 16.2 | Excavation for foundation in hard murum including removing the excavatedmaterialuptodistanceof50metresbeyondthebuildingar ea and stackingand spreadingasdirected, dewatering, preparingthebed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete.  **CSR18-19/PageNo./ItemNo.655/+5%C.A.**  **Rs.157.00+Rs.7.85=Rs.164.85** | Cu.  M. | 83.24 |  |  |
| 16.3 | Excavation for foundation in Soft rock and old cement or lime masonry foundations including removing the excavated materialuptoadistanceof50metresbeyondthebuildingarea and stacking as directed, including dewatering, preparing the bedforthefoundationandnecessarybackfillingwithavailable earth /murum, ramming, watering including shoring and strutting etc.  **CSR18-19/PageNo./ItemNo.659/+5%C.A.**  **Rs.298.00+Rs.14.90=Rs.312.90** | Cu.  M. | 55.49 |  |  |
| 16.4 | Providingdry/trap/granite/quartzite/gneissrubblestone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.  **CSR18-19/PageNo./ItemNo.681/ +5%C.A.**  **Rs.1412.28+Rs.70.61=Rs.1482.89** | Cu.  M. | 23.12 |  |  |
| 16.5 | Providing and laying Cast insitu/Ready Mixcement concrete M- 15oftrap/granite/quartzite/gneissmetalforcopingtoplinthor parapet, moulded or chamfered as per drawing or as directed including steel centering, plywood/ steel formworkcompacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete.  The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shallbecoveredbygunnybag,plastic,tarpaulinetc.(Wooden centering will not be allowed.) With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)  **CSR18-19/PageNo./ItemNo.764/+5%C.A.Rs.5394.25+Rs.**  **269.71=Rs.5663.96** | Cu.  M. | 9.25 |  |  |
| 16.6 | Providingandlayinginsitu/ReadyMixcementconcreteoftrap  /granite/quartzite/gneissmetalforR.C.C.work infoundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, formwork,laying/pumpingcoverblocks,compactionandcuring roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand  **M-30**  **CSR18-19/PageNo./ItemNo.767/+5%C.A.Rs.6164.75+Rs.**  **308.24=Rs. 6472.99** | Cu.  M. | 4.62 |  |  |

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| 16.7 | Providing and laying Cast insitu/Ready Mix cement concrete of trap/ granite/quartzite/gneissmetalforR.C.C.Columnsasper detaileddesignsanddrawingorasdirectedincludingcentering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLCwithSCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand  **M-30**  **AsperRateAnalysis** | Cu.  M. | 8.17 |  |  |
| 16.8 | Providing and laying Cast in situ/Ready Mix cement concrete in of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement andstructuralsteel).withfullyautomaticmicroprocessorbased PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand  **M-30**  **CSR18-19/PageNo./ItemNo.774/+5%C.A.Rs.10027.75+Rs. 501.39=Rs. 10529.14** | Cu.  M. | 31.91 |  |  |
| 16.9 | Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc.asperdetaileddesigns,drawingsandschedules.including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.  **CSR18-19/PageNo./ItemNo.797/+5%C.A.Rs.63994+**  **Rs.3199.7=Rs.67193.70** | M.T. | 3.58 |  |  |
| 16.10 | Providing fly ash brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints,rakingoutjoints,wateringandscaffoldingetc.Complete. **CSR18-19/PageNo./ItemNo.825/+5%C.A.**  **Rs.5273.16+Rs.263.66=Rs.5536.82** | Cu.  M. | 106.36 |  |  |
| 16.11 | Providingsandfacedplasterexternallyincementmortarusing approvedscreened sand, inall positions including base coatof 15 mm thick in cement mortar 1:4 using waterproofing compoundat1kgpercement bagcuringthesame fornot less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar1:4finishingthesurfacebytakingoutgrainsandcuring for fourteen days scaffolding etc.complete.  **CSR18-19/PageNo./ItemNo.891/+5%C.A.Rs.630.29+Rs.**  **31.51=Rs. 661.80** | Sq.M  . | 924.90 |  |  |
| 16.12 | Providing and applying white-wash in one coat on old / new plastered or masonry surfaces and asbestos cement sheets includingscaffoldingandpreparingthesurfacebybrushingand brooming down etc. complete.  **CSR18-19/PageNo./ItemNo.1025+5%C.A.Rs.5.40+Rs.0.25=**  **Rs.5.67** | Sq.M  . | 924.90 |  |  |
| 16.13 | Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary, and wateringthesurfacefortwodaysetccomplete.NOTE:ForItem No. 15 to 18 prior approval of Superintending Engineer will be necessary.  **CSR18-19/PageNo./ItemNo.1023+5%C.A.Rs.194.00+Rs.9.70**  **=Rs. 203.70** | Sq.M | 924.90 |  |  |

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| 16.14 | Providingandlaying60mmthickfactorymadecementconcrete interlocking paver block of M -30 grade made by block making 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 jointswithlinesandetc.allcomplete**atall heightsincluding all leads and lifts**. as per the direction of Engineer-in-charge **CPWDDSR16-17/PageNo.1042/ItemNo.16.68**  **Rs.615.70+61.57(10%extraconsideredfor2yearsescalation)=**  **677.27** | Sq.M | 2978.23 |  |  |

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| 16.16 | Providing and fixing mild steel grill gate with angle iron frame 65mm x65mm x 10mm with iron bars at 150mm C/C and diagonalflatsasperthedetaileddrawingincludinghinges,pivot block locking arrangement, welding riveting and oil painting of three coats of approved shade Weight of gate 35 Kg/Smt  **CSR18-19/PageNo./ItemNo.1431+5%C.A.**  **Rs.2386+Rs.119.3=Rs.2505.30** | Sq.  M. | 28.13 |  |  |
|  |  |  |  |  |  |
|  | **SubTotalofItemNo.16** |  |  |  |  |
|  |  |  |  |  |  |
| **17** | **SEWAGEANDGUTTER** |  |  |  |  |
| 17.1 | Excavationforfoundationinearth,soilsofalltypes,sandgravel and softmurum including removingtheexcavatedmaterials up to a distance of 50 meters beyond the building area and lift as specified, stacking and spreading, necessary dewatering unless provided elsewhere, preparing the bed for the foundation and required backfilling, ramming, watering, shoring and strutting etc. complete. as directed. Lift upto 1.50 meters.  **CSR18-19/PageNo./ItemNo.653/+5%C.A.Rs.143.00 +**  **Rs.7.15=Rs.150.15** | Cu.  M. | 334.03 |  |  |
| 17.2 | Fillinginplinthandfloorswithapprovedexcavatedmaterialsin 15cm to 20cm layers including watering and compaction etc. complete.  **CSR18-19/PageNo./ItemNo.679/+5%C.A.Rs.85.00+Rs.4.25**  **=Rs.89.25** | Cu.  M. | 83.51 |  |  |
| 17.3 | Providing dry trap/ rubble stone soling 15cm to 20cm thick including hand packing and compacting etc. complete. **CSR18- 19/PageNo./ItemNo.681/+5%C.A.Rs.1412.28+Rs.70.61=Rs.**  **1482.89** | Cu.  M. | 84.60 |  |  |
| 17.4 | Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for steps including steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. at all heights including all leads and lifts. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface, only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concreteBatchmixplant(Panmixer)etc.complete.With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc) complete.  **CSR18-19/PageNo./ItemNo.757/+5%C.A.Rs.5394.25+Rs.**  **269.71=Rs.5663.96** | Cu.  M. | 36.99 |  |  |
| 17.5 | Providing & laying M-20 grade cement concrete of trap metalforplumwall….etccompactingbyvibratingandcuringcomplete with plums 15 percent. With CM 1:3 of sufficient minimum thk to give a smooth and even surface or roughning surface ifspecial finish is to be provided curing and bailing out water .CM 1:3 plaster is considered foe rendering uneven and honey combed surface only. Newly laid concrete shall be covered by  gunnybags.Plastictarpaulinetc.complete**AsPerRateAnalysis** | Cu.  M. | 35.92 |  |  |
| 17.6 | Providing & fiixing M-20 grade RCC cover (1x1x0.075) withbeam(0.15x0.15)asperdetaileddrawingsanddesign,including centering, formwork, comapcting, roughening the surface if  specialfinishistobeprovidedandcuringetc.complete. | Sq.m | 319.55 |  |  |

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|  | (includingsteelreinforcement)etc.complete.  **AsPerRateAnalysis** |  |  |  |  |
| 17.7 | Providing ISI standard R.C.C. pipes in standard lengths of followingclassanddiametersuitableforeithercollarjointsor rubber ring joints, including all taxes (Central and local), inspection charges, transport to departmental stores/ site, unloadingandstackingetc.completeasperIS458/1988.Class NP - II 225mm dia. **( For 2.00 m. length** )  **MJP18-19/PageNo.147/ItemNo.V(1)(b)(v)+5%C.A.Rs.588.00+**  **Rs.28.4=Rs.617.40** | R.M. | 48.27 |  |  |
|  | **SubTotalofItemNo.17** |  |  |  |  |
| **Note** | **The items of work are not given in BOQ but it is required to complete the cold storage of capacity of 3574 Mt. The remaining item of BOQ may be obtained from the Office of State Head, Nafed Mumbai for further necessary action by the bidder.TheaboveBOQattachedisob600ltainedfromtheofficeof**  **StateHead,NafedMumbai.** |  |  |  |  |

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|  | **ConstructionCost** |  |  |  |  |
|  |  |  |  |  |  |
| **18.00** | **PLUMBINGSYSTEM(3%ofconstruction cost)** |  |  |  |  |
|  |  |  |  |  |  |
| **19.00** | **ELECTRICALSYSTEM(5%ofconstruction cost)** |  |  |  |  |
|  |  |  |  |  |  |
| **20.00** | **FIREFIGHTINGSYSTEM(5%ofconstructioncost)** |  |  |  |  |
|  |  |  |  |  |  |
|  | **\*Since the proposed site is located in NMMC area the CorporationAllowanceof5%hasbeennotifiedinthetableas**  **perNMMCC.S.R.butnotconsideredinthecalculationrates** |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | **ConstructionCostComprisingofCivil,Plumbing,FireFighting,ElectricalWorks,Refrigeration**  **system** | | | |  |

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| **MEASUREMENTSHEET** | | | | | | | | | |
| **S. No.** |  | **N**  **o.** | **L** | **B** | **D** | **Thk**  **.** | **Area** | **Volume** | **R.L.** |
|  |  |  |  |  |  |  |  |  |  |
| **1.0** | **SITECLEARANCE** |  |  |  |  |  |  |  |  |
| 1.1 | ClearingGrass,dressing&cuttingshrubs&bushes removal rubbish upto required distance etc….  Complete |  | 74.91 | 85.67 |  |  | **4921.54** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **2.0** | **EXCAVATION,FILLING** |  |  |  |  |  |  |  |  |
|  | **Building(24FootingaddedinF1)** |  |  |  |  |  |  |  |  |
|  | FT1typeFootings | 40 | 2.40 | 2.40 | 6.00 |  |  | 1382.40 |  |
|  | FT2typeFootings | 16 | 2.80 | 2.80 | 6.00 |  |  | 752.64 |  |
|  | FT3typeFootings | 8 | 3.00 | 3.00 | 6.00 |  |  | 432.00 |  |
|  | FT4typeFootings | 18 | 2.20 | 2.20 | 6.00 |  |  | 522.72 |  |
|  | UG tank | 1 | 13.00 | 5.06 | 2.00 |  |  | 131.56 |  |
|  | **Total Quantity** |  |  |  |  |  |  | **3221.32** |  |
|  |  |  |  |  |  |  |  |  |  |
| 2.1 | Excavationforfoundationinearth,soilsofalltypesLift  upto1.50meters Consider50%oftotalquantity |  |  |  |  |  |  | **1610.66** |  |
|  |  |  |  |  |  |  |  |  |  |
| 2.2 | Excavationforfoundationinhardmurumand  bouldersLiftupto1.50meters.….Consider40%oftotal quantity |  |  |  |  |  |  | **1288.53** |  |
|  |  |  |  |  |  |  |  |  |  |
| 2.3 | ExcavationforfoundationinSoft rock/Old cement/  line |  |  |  |  |  |  | **322.13** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 2.4 | Fillinginplinthandfloorswithapprovedexcavated  materials |  |  |  |  |  |  | **1288.53** |  |
|  |  |  |  |  |  |  |  |  | |
| 2.5 | ProvidingPre-constructional**Antitermitetreatment**  by |  |  |  |  |  |  |  |  |
|  | **Building** |  |  |  |  |  |  |  |  |
|  | FT1-VerticalSurface | 40 | 2.40 | 2.40 | 6.00 |  | 2304.00 |  |  |
|  | FT2-VerticalSurface | 16 | 2.80 | 2.80 | 6.00 |  | 1075.20 |  |  |
|  | FT3-VerticalSurface | 8 | 3.00 | 3.00 | 6.00 |  | 576.00 |  |  |
|  | FT4-VerticalSurface | 18 | 2.20 | 2.20 | 6.00 |  | 950.40 |  |  |
|  | UndergroundTank-VerticalSurface | 1 | 13.00 | 5.06 | 2.00 |  | 72.24 |  |  |
|  | FT1 -horizontalSurface | 21 | 2.40 | 2.40 |  |  | 120.96 |  |  |
|  | FT2 -horizontalSurface | 40 | 2.80 | 2.80 |  |  | 313.60 |  |  |
|  | FT3 -horizontalSurface | 8 | 3.00 | 3.00 |  |  | 72.00 |  |  |
|  | FT4- horizontalSurface | 18 | 2.20 | 2.20 |  |  | 87.12 |  |  |
|  | UndergroundTank-HorizontalSurface | 1 | 13.00 | 5.06 |  |  | 65.78 |  |  |
|  |  |  |  |  |  |  | **5637.30** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 2.6 | Providingsolingusing80mmsizetrapmetalin layers  of 15cm |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | **0.00** |  |
| 2.7 | Providingdrytrap/rubblestonesoling15cmto20cm  thick |  |  |  |  |  |  |  |  |
|  | **Building** |  |  |  |  |  |  |  |  |

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|  | FT1 | 40 | 2.20 | 2.20 | 0.40 |  |  | 77.44 |  |
|  | FT2 | 16 | 2.70 | 2.70 | 0.40 |  |  | 46.66 |  |
|  | FT3 | 8 | 2.90 | 2.90 | 0.40 |  |  | 26.91 |  |
|  | FT4 | 18 | 2.10 | 2.10 | 0.40 |  |  | 31.75 |  |
|  | UndergroundTank | 1 | 13.00 | 5.06 | 0.40 |  |  | 26.31 |  |
|  | SolingatplinthLevel | 1 | 1041.88 | | 0.20 |  |  | 208.38 |  |
|  |  |  |  |  |  |  |  | **417.45** |  |
|  |  |  |  |  |  |  |  |  |  |
| **3.0** | **P.C.CM15** |  |  |  |  |  |  |  |  |
| 3.1 | Providingandlayinginsitucementconcretein  proportion |  |  |  |  |  |  |  |  |
|  | **Building** |  |  |  |  |  |  |  |  |
|  | FT1 | 40 | 2.00 | 2.00 | 0.10 |  |  | 16.00 |  |
|  | FT2 | 16 | 2.50 | 2.50 | 0.10 |  |  | 10.00 |  |
|  | FT3 | 8 | 2.70 | 2.70 | 0.10 |  |  | 5.83 |  |
|  | FT4 | 18 | 1.90 | 1.90 | 0.10 |  |  | 6.50 |  |
|  | Underground Tank | 1 | 13.00 | 5.06 | 0.10 |  |  | 6.578 |  |
|  | PlinthSlabarea | 1 | 1154.66 | | 0.10 |  |  | 115.466 |  |
|  | PCCofPlinthBeam | 1 | 608.31 | 0.33 | 0.10 |  |  | 60.831 |  |
|  |  |  |  |  |  |  |  | **221.21** |  |
| 3.2 | **PlinthSlabarea** | 1 | 1041.88 | |  |  | **1041.880** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4.0** | **R.C.C.WORKS** |  |  |  |  |  |  |  |  |
| 4.1 | ProvidingandlayinginsituCast-in-situ/Readymix  Cement |  |  |  |  |  |  |  |  |
| 4.1(a) | **M-25 (SingleStepFooting)** |  |  |  |  |  |  |  |  |
|  | FT1 | 40 | 1.90 | 1.90 | 0.50 |  |  | 72.20 |  |
|  | FT2 | 16 | 2.30 | 2.30 | 0.60 |  |  | 50.78 |  |
|  | FT3 | 8 | 2.50 | 2.50 | 0.60 |  |  | 30.00 |  |
|  | FT4 | 18 | 1.70 | 1.70 | 0.55 |  |  | 28.61 |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **Pedastal(4.9Mdepth)(Thedepthmayvary**  **dependinguponthesoilstrata)** |  |  |  |  |  |  |  |  |
|  | PD1 | 1 | 1.30 | 0.90 | 4.9 |  |  | 5.733 |  |
|  | PD2 | 1 | 0.60 | 0.90 | 4.9 |  |  | 2.646 |  |
|  | PD3 | 1 | 1.30 | 0.90 | 4.9 |  |  | 5.733 |  |
|  | PD4 | 1 | 0.60 | 0.90 | 4.9 |  |  | 2.646 |  |
|  | PD5 | 1 | 1.30 | 0.90 | 4.9 |  |  | 5.733 |  |
|  | PD6 | 1 | 1.30 | 0.90 | 4.9 |  |  | 5.733 |  |
|  | PD7 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD8 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD9 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD10 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD11 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD12 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD13 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD14 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD15 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD16 | 1 | 1.20 | 1.20 | 4.9 |  |  | 7.056 |  |
|  | PD17 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD18 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD19 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD20 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |

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|  | PD21 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD22 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD23 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD24 | 1 | 1.20 | 1.20 | 4.9 |  |  | 7.056 |  |
|  | PD25 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD26 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD27 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD28 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD29 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD30 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD31 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD32 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD33 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD34 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD35 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD36 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD37 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD38 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD39 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD40 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD41 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD42 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD43 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD44 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD45 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD46 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD47 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD48 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD49 | 1 | 0.55 | 0.55 | 4.9 |  |  | 1.482 |  |
|  | PD50 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD51 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD52 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD53 | 1 | 0.60 | 0.45 | 4.9 |  |  | 1.323 |  |
|  | PD54 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD55 | 1 | 0.60 | 0.90 | 4.9 |  |  | 2.646 |  |
|  | PD56 | 1 | 1.30 | 0.90 | 4.9 |  |  | 5.733 |  |
|  | PD57 | 1 | 0.60 | 0.90 | 4.9 |  |  | 2.646 |  |
|  | PD58 | 1 | 1.30 | 0.55 | 4.9 |  |  | 3.504 |  |
|  | PD59new | 24 | 0.60 | 0.90 | 4.9 |  |  | 63.504 |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | **408.02** |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.2 | Providingandcastinginsitu/ReadyMix Cement  Concretein |  |  |  |  |  |  |  |  |
| 4.2(a) | **M-25** |  |  |  |  |  |  |  |  |
|  | UGTank pardi |  |  |  |  |  |  |  |  |
|  | FireTank | 1 | 30.930 | 0.230 | 4.60  0 |  |  | 32.724 |  |
|  | DomesticTank | 1 | 7.440 | 0.230 | 4.60  0 |  |  | 7.872 |  |
|  | OHtankFireTank | 1 | 10.274 | 0.230 | 3.30  0 |  |  | 7.798 |  |
|  | OHtankDomesticTank | 1 | 10.529 | 0.230 | 3.30 |  |  | 7.992 |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0 |  |  |  |  |
|  |  |  |  |  |  |  |  | **56.385** |  |
| 4.3 | Providingandcastinginsitu/ReadyMixCement  Concretein |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.3(a) | **M-25** |  |  |  |  |  |  | **0.000** |  |
|  | **GroundFloorColumn** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalColumnQuantity** |  |  |  |  |  | **Total** | **0.000** |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.4 | Providingandcastinginsitu/ReadyMix Cement  Concretein |  |  |  |  |  |  |  |  |
| 4.4(a) | **M-25** |  |  |  |  |  |  | **0.000** |  |
|  | **PlinthBeam Level** |  |  |  |  |  |  |  |  |
|  | PB1 | 1 | 3.71 | 0.23 | 0.60 |  |  | 0.51 |  |
|  | PB2 | 1 | 4.30 | 0.23 | 0.60 |  |  | 0.59 |  |
|  | PB3 | 1 | 2.52 | 0.23 | 0.60 |  |  | 0.35 |  |
|  | PB4 | 1 | 4.06 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB5 | 1 | 4.05 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB6 | 1 | 4.04 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB7 | 1 | 4.09 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB8 | 1 | 3.71 | 0.23 | 0.60 |  |  | 0.51 |  |
|  | PB9 | 1 | 4.30 | 0.23 | 0.60 |  |  | 0.59 |  |
|  | PB10 | 1 | 2.52 | 0.23 | 0.60 |  |  | 0.35 |  |
|  | PB11 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB12 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB13 | 1 | 4.06 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB14 | 1 | 4.11 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB15 | 1 | 3.71 | 0.23 | 0.60 |  |  | 0.51 |  |
|  | PB16 | 1 | 4.30 | 0.23 | 0.60 |  |  | 0.59 |  |
|  | PB17 | 1 | 2.52 | 0.23 | 0.60 |  |  | 0.35 |  |
|  | PB18 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB19 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB20 | 1 | 4.06 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB21 | 1 | 4.11 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB22 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB23 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB24 | 1 | 4.06 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB25 | 1 | 4.11 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB25A | 1 | 3.71 | 0.23 | 0.60 |  |  | 0.51 |  |
|  | PB26 | 1 | 4.30 | 0.23 | 0.60 |  |  | 0.59 |  |
|  | PB27 | 1 | 3.05 | 0.23 | 0.60 |  |  | 0.42 |  |
|  | PB28 | 1 | 3.71 | 0.23 | 0.60 |  |  | 0.51 |  |
|  | PB29 | 1 | 4.49 | 0.23 | 0.60 |  |  | 0.62 |  |
|  | PB30 | 1 | 2.63 | 0.23 | 0.60 |  |  | 0.36 |  |
|  | PB31 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB32 | 1 | 4.13 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB33 | 1 | 4.11 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB34 | 1 | 4.11 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB35 | 1 | 4.63 | 0.23 | 0.60 |  |  | 0.64 |  |
|  | PB36 | 1 | 2.26 | 0.23 | 0.60 |  |  | 0.31 |  |
|  | PB37 | 1 | 2.54 | 0.23 | 0.60 |  |  | 0.35 |  |
|  | PB38 | 1 | 1.57 | 0.23 | 0.60 |  |  | 0.22 |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | PB39 | 1 | 4.13 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB40 | 1 | 4.11 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB41 | 1 | 4.11 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB42 | 1 | 2.86 | 0.23 | 0.60 |  |  | 0.39 |  |
|  | PB43 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB44 | 1 | 4.08 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB45 | 1 | 4.06 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB46 | 1 | 4.11 | 0.23 | 0.60 |  |  | 0.57 |  |
|  | PB47 | 1 | 4.05 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB48 | 1 | 4.05 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB49 | 1 | 4.04 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB50 | 1 | 4.09 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB51 | 1 | 1.48 | 0.23 | 0.60 |  |  | 0.20 |  |
|  | PB52 | 1 | 4.55 | 0.23 | 0.60 |  |  | 0.63 |  |
|  | PB53 | 1 | 3.00 | 0.23 | 0.60 |  |  | 0.41 |  |
|  | PB54 | 1 | 2.96 | 0.23 | 0.60 |  |  | 0.41 |  |
|  | PB55 | 1 | 1.48 | 0.23 | 0.60 |  |  | 0.20 |  |
|  | PB56 | 1 | 4.55 | 0.23 | 0.60 |  |  | 0.63 |  |
|  | PB57 | 1 | 3.00 | 0.23 | 0.60 |  |  | 0.41 |  |
|  | PB58 | 1 | 2.96 | 0.23 | 0.60 |  |  | 0.41 |  |
|  | PB59 | 1 | 4.09 | 0.23 | 0.60 |  |  | 0.56 |  |
|  | PB60 | 1 | 5.68 | 0.23 | 0.60 |  |  | 0.78 |  |
|  | PB61 | 1 | 4.55 | 0.23 | 0.60 |  |  | 0.63 |  |
|  | PB62 | 1 | 2.99 | 0.23 | 0.60 |  |  | 0.41 |  |
|  | PB63 | 1 | 2.96 | 0.23 | 0.60 |  |  | 0.41 |  |
|  | PB64 | 1 | 5.06 | 0.23 | 0.60 |  |  | 0.70 |  |
|  | PB65 | 1 | 5.06 | 0.23 | 0.60 |  |  | 0.70 |  |
|  | PB66 | 1 | 3.60 | 0.23 | 0.60 |  |  | 0.50 |  |
|  | PB67 | 1 | 3.25 | 0.23 | 0.60 |  |  | 0.45 |  |
|  | PB68 | 1 | 2.87 | 0.23 | 0.60 |  |  | 0.40 |  |
|  | PB69 | 1 | 3.05 | 0.23 | 0.60 |  |  | 0.42 |  |
|  | PB70 | 1 | 3.00 | 0.23 | 0.60 |  |  | 0.41 |  |
|  | PB72 | 1 | 5.06 | 0.23 | 0.60 |  |  | 0.70 |  |
|  | PB73 | 1 | 4.99 | 0.23 | 0.60 |  |  | 0.69 |  |
|  | PB74 | 1 | 2.33 | 0.23 | 0.60 |  |  | 0.32 |  |
|  | PB75 | 1 | 3.15 | 0.23 | 0.60 |  |  | 0.43 |  |
|  | PB76 | 1 | 2.87 | 0.23 | 0.60 |  |  | 0.40 |  |
|  | PB77 | 1 | 3.05 | 0.23 | 0.60 |  |  | 0.42 |  |
|  | PB78 | 1 | 3.02 | 0.23 | 0.60 |  |  | 0.42 |  |
|  | PB79 | 1 | 5.06 | 0.23 | 0.60 |  |  | 0.70 |  |
|  | PB80 | 1 | 5.04 | 0.23 | 0.60 |  |  | 0.69 |  |
|  | PB81 | 1 | 2.43 | 0.23 | 0.60 |  |  | 0.33 |  |
|  | PB82 | 1 | 3.20 | 0.23 | 0.60 |  |  | 0.44 |  |
|  | PB83 | 1 | 2.87 | 0.23 | 0.60 |  |  | 0.40 |  |
|  | PB84 | 1 | 3.05 | 0.23 | 0.60 |  |  | 0.42 |  |
|  | PB85 | 1 | 3.02 | 0.23 | 0.60 |  |  | 0.42 |  |
|  | PB86 | 1 | 5.06 | 0.23 | 0.60 |  |  | 0.70 |  |
|  | PB87 | 1 | 4.99 | 0.23 | 0.60 |  |  | 0.69 |  |
|  | PB88 | 1 | 2.33 | 0.23 | 0.60 |  |  | 0.32 |  |
|  | PB89 | 1 | 3.15 | 0.23 | 0.60 |  |  | 0.43 |  |
|  | PB90 | 1 | 2.87 | 0.23 | 0.60 |  |  | 0.40 |  |
|  | PB91 | 1 | 3.05 | 0.23 | 0.60 |  |  | 0.42 |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | PB92 | 1 | 3.02 | 0.23 | 0.60 |  |  | 0.42 |  |
|  | PB93 | 1 | 5.06 | 0.23 | 0.60 |  |  | 0.70 |  |
|  | PB94 | 1 | 5.06 | 0.23 | 0.60 |  |  | 0.70 |  |
|  | PB95 | 1 | 3.65 | 0.23 | 0.60 |  |  | 0.50 |  |
|  | PB96 | 1 | 3.25 | 0.23 | 0.60 |  |  | 0.45 |  |
|  | PB97 | 1 | 2.87 | 0.23 | 0.60 |  |  | 0.40 |  |
|  | PB98 | 1 | 3.05 | 0.23 | 0.60 |  |  | 0.42 |  |
|  | PB99 | 1 | 3.00 | 0.23 | 0.60 |  |  | 0.41 |  |
|  | SteelColumnBracketsFootingnew | 87 | 0.60 | 0.60 | 0.60 |  |  | 18.79 |  |
|  | PB 100new | 5 | 8.19 | 0.23 | 0.60 |  |  | 5.65 |  |
|  | PB 101new | 2 | 27.63 | 0.23 | 0.60 |  |  | 7.62 |  |
|  | PB 102new | 2 | 35.33 | 0.23 | 0.60 |  |  | 9.75 |  |
|  | PB 103new | 8 | 9.76 | 0.23 | 0.60 |  |  | 10.78 |  |
|  | **TotalofPlinth Beam** |  |  |  |  |  |  | **102.73** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.5 | Providingandcastinginsitu/ReadyMix Cement  Concretein |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.5(a) | **M-25** |  |  |  |  |  |  |  |  |
|  | BottomSlabofUGtank | 1 | 13.08 | 5.36 |  | 0.1  5 |  | 10.516 |  |
|  | TopCoverof UGtank | 1 | 13.08 | 5.06 |  | 0.1  5 |  | 9.928 |  |
|  | TopcoverofOHtank | 1 | 6.83 | 3.30 |  | 0.1 |  | 2.254 |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalSlab Quantity** |  |  |  |  |  |  | **22.698** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.6 | Providingandcastinginsitu/ReadyMix Cement  Concrete of |  |  |  |  |  |  |  |  |
| 4.6(a) | **M-25** |  |  |  |  |  |  | **0.000** |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.7 | Providingandcastinginsitu/ReadyMixCement Concrete of trap metal **R.C.C. Waist Slab** etc. ….  Complete |  |  |  |  |  |  |  |  |
| 4.7(a) | **M-25** |  |  |  |  |  |  | **0.000** |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.80 | Providingandfixinginposition**T.M.T**.bar  Reinforcementof |  |  |  |  |  |  |  |  |
|  | Considered120kg/Cu.M.ofConrecteVolume523.16  Cu.M | 789.95 | | | | | | **94.79** |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.9 | Providingandlayinginsitu/readymixM-25  controlled |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | DDeckslabMezzanineFloor | 1 | 13.00 | 23.02 |  | 0.1  5 | 299.300 | 44.895 |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | DeckslabMezzanineFloor | 1 | 13.00 | 13.61 |  | 0.1  5 | 176.940 | 26.541 |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | MezzanineFloor | 1 | 13.00 | 23.02 |  | 0.1  5 | 299.300 | 44.895 |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | StaircaseLobbyand staircase | 1 | 13.00 | 23.02 |  | 0.1  5 | 299.300 | 44.895 |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TerraceFloor** |  |  |  |  |  |  |  |  |
|  | StaircaseLobbyand staircase | 1 | 13.00 | 14.97 |  | 0.1  5 | 194.580 | 29.187 |  |
|  |  |  |  |  |  |  |  |  |  |
|  | OHtanklevelSlab | 1 | 6.76 | 9.56 |  | 0.1  5 | 64.640 | 9.696 |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | **200.11** |  |
|  |  |  |  |  |  |  |  |  |  |
| 4.1 | Providing sacrificial shuttering for deck slab made up with galvanised Cold Rolled Cold Annealed (CRCA) steelof310MPAGradewithallContractor'smaterial,  labour,erectionfixing,weldingetc.(DeckingSheet) |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | MezzanineFloor | 1 | 13.00 | 23.02 |  |  | 299.300 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | MezzanineFloor | 1 | 13.00 | 13.61 |  |  | 176.940 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | MezzanineFloor | 1 | 13.00 | 23.02 |  |  | 299.300 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | StaircaseLobby | 1 | 13.00 | 23.02 |  |  | 299.300 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TerraceFloor** |  |  |  |  |  |  |  |  |
|  | StaircaseLobby | 1 | 13.00 | 14.97 |  |  | 194.580 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | OHtanklevelSlab | 1 | 6.76 | 9.56 |  |  | 64.640 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **DeckingSheetingArea** |  |  |  |  |  | **1334.060** | **11.03** |  |
|  |  |  |  |  |  |  |  |  |  |
| **5.0** | **BRICK WORKS** |  |  |  |  |  |  |  |  |
| 5.1 | SecondclassBurntBrickmasonrywith  conventional/I.S.type |  |  |  |  |  |  |  |  |
|  | **BelowGroundFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | MasonaryWorkUptoPlinthLevel | 1 | 139.94 |  | 0.90  0 | 0.1  5 | **18.89** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 5.2 | ProvidingAutoclavedareatedconcreteblockmasonry  in |  |  |  |  |  |  |  |  |
|  | SubstationWalls |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **GroundFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | passageareaandstaircasewall | 1 | 23.684 |  | 2.7 |  | 63.947 |  |  |
|  | FD | 1 |  | 1.2 | 2.1 |  | -2.520 |  |  |
|  | W1 | 1 |  | 1.8 | 1.2 |  | -2.160 |  |  |
|  | **Internalwall** |  |  |  |  |  |  |  |  |
|  | Staircasesidewall | 1 | 3.98 |  | 2.70  0 |  | 10.746 |  |  |
|  | Wallbetweenductwall | 1 | 1.8 |  | 2.7 |  | 4.860 |  |  |
|  | Wallbetweenmainpassageandcoldstoragepassage | 1 | 3.50 |  | 2.7 |  | 9.450 |  |  |
|  | WallofFDon side | 1 | 0.9 |  | 2.7 |  | 2.430 |  |  |
|  | D1 | 1 | 1.2 |  | 2.1 |  | -2.520 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalofGroundFloor150mmWall** |  |  |  |  |  | **84.233** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls -150mmthk**. |  |  |  |  |  |  |  |  |
|  | ExternalWallofofficearea | 1 | 49.142 |  | 2.7 | 0.1  5 | **132.683** |  |  |
|  | V | 4 |  | 0.60 | 0.90  0 | 0.1  5 | -2.160 |  |  |
|  | W1 | 1 |  | 1.8 | 1.2 | 0.1  5 | -2.160 |  |  |
|  | PreCool1 | 1 | 8.99 |  | 2.7 | 0.1  5 | -24.273 |  |  |
|  | PreCool2 | 1 | 4.48 |  | 2.7 | 0.1  5 | -12.096 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **InternalWall-150mmThk** |  |  |  |  |  |  |  |  |
|  | Ch.room1 | 1 | 5.81 |  | 2.7 | 0.1  5 | 15.687 |  |  |
|  | WC1 | 1 | 3.15 |  | 2.7 | 0.1  5 | 8.505 |  |  |
|  | ChRoom2 | 1 | 5.29 |  | 2.7 |  | 14.283 |  |  |
|  | WC2 | 1 | 3.38 |  | 2.7 |  | 9.126 |  |  |
|  | P.M.S | 1 | 6.84 |  | 2.7 | 0.1  5 | 18.468 |  |  |
|  | Holding Room | 1 | 6.84 |  | 2.7 |  | 18.468 |  |  |
|  | DuctWall | 1 | 13.27 |  | 2.7 | 0.1  5 | 35.821 |  |  |
|  | WallbetweenDuct wall | 1 | 2.11 |  | 2.7 |  | 5.697 |  |  |
|  | 3.5mpassageDoorWall | 1 | 3.50 |  | 2.7 | 0.1  5 | 9.450 |  |  |
|  | FireDoor wall | 1 | 1.05 |  | 2.7 | 0.1  5 | 2.835 |  |  |
|  | FD | 1 |  | 1.2 | 2.1 | 0.1  5 | -2.520 |  |  |
|  | D | 1 |  | 2.4 | 2.1 | 0.1  5 | -5.040 |  |  |
|  | D1 | 1 |  | 1.2 | 2.1 | 0.1  5 | -2.520 |  |  |
|  | D2 | 2 |  | 1.00 | 2.10  0 | 0.1  5 | -4.200 |  |  |
|  | D3 | 3 |  | 0.90 | 2.10 | 0.1 | -5.670 |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0 | 5 |  |  |  |
|  | D4 | 4 |  | 0.75 | 2.10  0 | 0.1  5 | -6.300 |  |  |
|  | **TotalofFirstFloor150mmWall** |  |  |  |  |  | **204.084** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | ExternalWallofofficearea | 1 | 49.14 |  | 2.70  0 |  | 132.667 |  |  |
|  | W1 | 1 |  | 1.8 | 1.2 | 0.1  5 | -2.160 |  |  |
|  | W2 | 2 |  | 1.8 | 1.2 | 0.1  5 | -4.320 |  |  |
|  | PreCool | 1 | 4.48 |  | 2.7 | 0.1  5 | -12.096 |  |  |
|  | PreCool | 1 | 8.94 |  | 2.7 | 0.1  5 | -24.138 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **InternalWall-150mmThk** |  |  |  |  |  |  |  |  |
|  | Ductwall | 1 | 13.27 |  | 2.70  0 |  | 35.821 |  |  |
|  | Wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | Wall of1.8mwidepassage | 1 | 1.79 |  | 2.70  0 |  | 4.833 |  |  |
|  | Staircasewall | 1 | 3.98 |  | 2.70  0 |  | 10.746 |  |  |
|  | wallbetweenstaircasepassageandcold storage  passage | 1 | 3.50 |  | 2.70  0 |  | 9.450 |  |  |
|  | FdWall | 1 | 1.05 |  | 2.70  0 |  | 2.835 |  |  |
|  | FD | 1 |  | 1.2 | 2.1 | 0.1  5 | -2.520 |  |  |
|  | D | 1 |  | 2.4 | 2.1 | 0.1  5 | -5.040 |  |  |
|  | D1 | 1 |  | 1.2 | 2.1 |  | -2.520 |  |  |
|  | **TotalofSecondFloor150mmWall** |  |  |  |  |  | **151.775** |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | Externalwalls | 1 | 49.12 |  | 2.70  0 |  | 132.624 |  |  |
|  | W1 | 5 |  | 1.8 | 1.2 | 0.1  5 | -10.800 |  |  |
|  | **InternalWall** |  | | | | | |  |  |
|  | Ductwall | 1 | 13.267 |  | 2.7 |  | 35.821 |  |  |
|  | Wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | wallbetween1.8mwidepassageandstaircasepassage | 1 | 1.79 |  | 2.7 |  | 4.833 |  |  |
|  | Wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | Wall of1.8mwidepassage | 1 | 1.79 |  | 2.70  0 |  | 4.833 |  |  |
|  | Staircasewall | 1 | 3.98 |  | 2.70 |  | 10.746 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0 |  |  |  |  |
|  | **TotalofThirdFloor150mmWall** |  |  |  |  |  | **189.451** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | Externalwalls | 1 | 49.12 |  | 2.70  0 |  | 132.624 |  |  |
|  | W1 | 5 |  | 1.8 | 1.2 | 0.1  5 | -10.800 |  |  |
|  | **InternalWall** |  | | | | | |  |  |
|  | Ductwall | 1 | 13.267 |  | 2.7 |  | 35.821 |  |  |
|  | Wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | wallbetween1.8mwidepassageandstaircasepassage | 1 | 1.79 |  | 2.7 |  | 4.833 |  |  |
|  | Wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | Wall of1.8mwidepassage | 1 | 1.79 |  | 2.70  0 |  | 4.833 |  |  |
|  | Staircasewall | 1 | 3.98 |  | 2.70  0 |  | 10.746 |  |  |
|  | **TotalofFourthFloor150mmWall** |  |  |  |  |  | **189.451** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **RoofFloor** |  |  |  |  |  |  |  |  |
|  | **Parapetwall** | 1 | 50.073 |  | 1.2 |  | **60.088** |  |  |
|  | **Totalof150mmwallQuantity** |  |  |  |  |  | **879.082** | **131.86** |  |
|  |  |  |  |  |  |  |  |  |  |
| 5.3 | Providingandconstructingmasonryin Autoclaved  Areaclaved |  |  |  |  |  | **0.00** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **6.0** | **WATERPROOFINGWORKS** |  |  |  |  |  |  |  |  |
| 6.1 | Providingandlayingwaterproofingtreatmentof112  mmaveragethicknessconsisting |  |  |  |  |  |  |  |  |
|  | Terrace | 1 | 12.55 | 15.07 |  |  | 189.160 |  |  |
|  | OHtanklevelSlab | 1 | 6.83 | 3.30 |  |  | 22.539 |  |  |
|  |  |  |  |  |  |  | **211.699** |  |  |
| 6.2 | ProvidingwaterproofplasterinWCandbath 20mm  thkfor |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | WC1 | 1 | 7.36 |  | 1.20  0 |  | 8.832 |  |  |
|  | WC2 | 1 | 9.00 |  | 1.20  0 |  | 10.800 |  |  |
|  | CH.Room1 | 1 | 7.42 |  | 1.20  0 |  | 8.904 |  |  |
|  | CH.Room2 | **1** | 7.00 |  | 1.20  0 |  | 8.400 |  |  |
|  |  | |  |  |  |  | **36.936** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 6.3 | ProvidingwaterproofinginW.C..andbath including  brick bat cobaetc.…. Complete |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | WC1 | 1 | 1.65 | 2.03 | 0.30 |  | 3.35 | 1.00 |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0 |  |  |  |  |
|  | WC2 | 1 | 1.95 | 2.55 | 0.30  0 |  | 4.97 | 1.49 |  |
|  | Ch.Room1 | 1 | 1.50 | 1.65 | 0.30  0 |  | 2.48 | 0.74 |  |
|  | Ch.Room2 | 1 | 1.76 | 1.95 | 0.30  0 |  | 3.43 | 1.03 |  |
|  |  |  |  |  |  |  |  | **4.269** |  |
| 6.4 | Providingwaterproofingbeddingforflooringofbath  andW.C.25mmthkincementmortar1:3 |  |  |  |  |  |  |  |  |
|  | FirstFloor |  |  |  |  |  |  |  |  |
|  | WC1 | 1 | 1.65 | 2.03 |  |  | 3.35 |  |  |
|  | WC2 | 1 | 1.95 | 2.55 |  |  | 4.97 |  |  |
|  | Ch.Room1 | 1 | 1.50 | 1.65 |  |  | 2.48 |  |  |
|  | Ch.Room2 | 1 | 1.76 | 1.95 |  |  | 3.43 |  |  |
|  |  |  |  |  |  |  | **14.229** |  |  |
| 6.5 | Providing&applyingBoxtypewaterproofing  treatmentetc….complete |  |  |  |  |  |  |  |  |
|  | UGDomesticTankwall(RWT,Domestic,Fire&  Flushing | 1 | 8.36 |  | 2.00  0 |  | 16.720 |  |  |
|  | UGFireWaterTank | 1 | 27.72 |  | 2.00  0 |  | 55.432 |  |  |
|  |  |  |  |  |  |  | **72.152** |  |  |
| 6.6 | Providingandlayinginrequiredpositionsflooringof  tukdamosaicetc….Complete |  |  |  |  |  |  |  |  |
|  | Terrace | 1 | 12.55 | 15.07 |  |  | 189.160 |  |  |
|  | OHtanklevelSlab | 1 | 6.53 | 5.87 |  |  | 38.331 |  |  |
|  |  |  |  |  |  |  | **38.331** |  |  |
| 6.70 | TERRACESLABAREAWATERPROOFING |  |  |  |  |  |  |  |  |
| 6.7 a | The first part consisting Waterproofing Treatment withLiquidapplied100%Polyurethane/Polyisoprene  ElastomericWaterproofingMembrane: |  |  |  |  |  |  |  |  |
|  | Terrace @RoofFloor | 1 | 12.55 | 15.07 |  |  | 189.160 |  |  |
|  | Wall area | 1 | 60.21 | 1.20 |  |  | 72.252 |  |  |
|  |  |  |  |  |  |  | **261.412** |  |  |
| 6.7 b | ProtectiveWaterproofPlasterforwalls/sides: |  |  |  |  |  |  |  |  |
|  | Terrace @RoofFloor | 1 | 12.55 | 15.07 |  |  | 189.160 |  |  |
|  | Wall area | 1 | 60.21 | 1.20 |  |  | 72.252 |  |  |
|  |  |  |  |  |  |  | **261.412** |  |  |
| 6.8 | WATERTANK/UGT/OHT– INTERNALAREAS |  |  |  |  |  |  |  |  |
| 6.8 a | ForHorizontalFloorSurface@totalcoveragerate of  0.7kg/sqmin2coats |  |  |  |  |  |  |  |  |
|  | UGT | 1 | 12.52 | 4.60 |  |  | 57.592 |  |  |
|  |  |  |  |  |  |  | **57.592** |  |  |
| 6.8 b | ForVertical/RetainingWallSurface@totalcoverage  rateof |  |  |  |  |  |  |  |  |
|  | UGDomesticTankwall(RWT,Domestic,Fire&  Flushing | 1 | 12.04 |  | 2.00  0 |  | 24.080 |  |  |
|  | UGFireWaterTank | 1 | 30.94 |  | 2.00  0 |  | 61.876 |  |  |
|  |  |  |  |  |  |  | **85.956** |  |  |
| 6.90 | WaterproofingTreatment |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6.9 a | Providing&Applying2coatsofhighperformancetwo component pre-packed Acrylic Polymer based cementitious waterproofing,, with a mix ratio of  (liquid:Powder) |  |  |  |  |  |  |  |  |
|  | WC1 | 1 | 7.36 | 1.20 |  |  | 8.832 |  |  |
|  | WC2 | 1 | 9.00 | 1.20 |  |  | 10.800 |  |  |
|  |  |  |  |  |  |  | **19.632** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **7.0** | **PLASTERING&POINTING** |  |  |  |  |  |  |  |  |
| 7.1 | Providing&supplying**Gypsum**wallrendering15to  20mm |  |  |  |  |  |  |  |  |
|  | QtySameas12mmthkInternalcementplaster  comprising |  |  |  |  |  | 906.427 |  |  |
|  | Lessskirting&dadoo |  |  |  |  |  | 334.266 |  |  |
|  |  |  |  |  |  |  | **572.161** |  |  |
| 7.2 | Providinginternalcementplaster12mmthickinsingle  coatincementmortar1:4withoutneerufinishto concrete or brick surfaces |  |  |  |  |  |  |  |  |
|  | **GroundFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | passageareaandstaircasewall | 1 | 23.684 |  | 2.7 |  | 63.947 |  |  |
|  | FD | 1 |  | 1.2 | 2.1 |  | -2.520 |  |  |
|  | W1 | 1 |  | 1.8 | 1.2 |  | -2.160 |  |  |
|  | **ExternalWallTotal** |  |  |  |  |  | **59.267** |  |  |
|  | **Internalwall** |  |  |  |  |  |  |  |  |
|  | Staircasesidewall | 1 | 3.98 |  | 2.70  0 |  | 10.746 |  |  |
|  | Wallbetweenductwall | 1 | 1.8 |  | 2.7 |  | 4.860 |  |  |
|  | Wallbetweenmainpassageandcoldstoragepassage | 1 | 3.50 |  | 2.7 |  | 9.450 |  |  |
|  | WallofFDon side | 1 | 0.9 |  | 2.7 |  | 2.430 |  |  |
|  | D1 | 1 | 1.2 |  | 2.1 |  | -2.520 |  |  |
|  | **InternalwallTotal** |  |  |  |  |  | **24.966** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | ExternalWallofofficearea | 1 | 49.142 |  | 2.7 | 0.1  5 | 132.683 |  |  |
|  | V | 4 |  | 0.60 | 0.90  0 | 0.1  5 | -2.160 |  |  |
|  | W1 | 1 |  | 1.8 | 1.2 | 0.1  5 | -2.160 |  |  |
|  | PreCool1 | 1 | 8.99 |  | 2.7 | 0.1  5 | -24.273 |  |  |
|  | PreCool2 | 1 | 4.48 |  | 2.7 | 0.1  5 | -12.096 |  |  |
|  | **ExternalWallTotal** |  |  |  |  |  | **91.994** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **InternalWall-150mmThk** |  |  |  |  |  |  |  |  |
|  | Ch.room1 | 1 | 5.81 |  | 2.7 | 0.1  5 | 15.687 |  |  |
|  | WC1 | 1 | 3.15 |  | 2.7 | 0.1  5 | 8.505 |  |  |
|  | ChRoom2 | 1 | 5.29 |  | 2.7 |  | 14.283 |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | WC2 | 1 | 3.38 |  | 2.7 |  | 9.126 |  |  |
|  | P.M.S | 1 | 6.84 |  | 2.7 | 0.1  5 | 18.468 |  |  |
|  | Holding Room | 1 | 6.84 |  | 2.7 |  | 18.468 |  |  |
|  | DuctWall | 1 | 13.27 |  | 2.7 | 0.1  5 | 35.821 |  |  |
|  | WallbetweenDuct wall | 1 | 2.11 |  | 2.7 |  | 5.697 |  |  |
|  | 3.5mpassageDoorWall | 1 | 3.50 |  | 2.7 | 0.1  5 | 9.450 |  |  |
|  | FireDoorwall | 1 | 1.05 |  | 2.7 | 0.1  5 | 2.835 |  |  |
|  | FD | 1 |  | 1.2 | 2.1 | 0.1  5 | -2.520 |  |  |
|  | D | 1 |  | 2.4 | 2.1 | 0.1  5 | -5.040 |  |  |
|  | D1 | 1 |  | 1.2 | 2.1 | 0.1  5 | -2.520 |  |  |
|  | D2 | 2 |  | 1.00 | 2.10  0 | 0.1  5 | -4.200 |  |  |
|  | D3 | 3 |  | 0.90 | 2.10  0 | 0.1  5 | -5.670 |  |  |
|  | D4 | 4 |  | 0.75 | 2.10  0 | 0.1  5 | -6.300 |  |  |
|  | **InternalwallTotal** |  |  |  |  |  | **112.090** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | ExternalWallofofficearea | 1 | 49.14 |  | 2.70  0 |  | 132.667 |  |  |
|  | W1 | 1 |  | 1.8 | 1.2 | 0.1  5 | -2.160 |  |  |
|  | W2 | 2 |  | 1.8 | 1.2 | 0.1  5 | -4.320 |  |  |
|  | PreCool | 1 | 4.48 |  | 2.7 | 0.1  5 | -12.096 |  |  |
|  | PreCool | 1 | 8.94 |  | 2.7 | 0.1  5 | -24.138 |  |  |
|  | **ExternalWallTotal** |  |  |  |  |  | **89.953** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **InternalWall-150mmThk** |  |  |  |  |  |  |  |  |
|  | Ductwall | 1 | 13.27 |  | 2.70  0 |  | 35.821 |  |  |
|  | Wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | Wall of1.8mwidepassage | 1 | 1.79 |  | 2.70  0 |  | 4.833 |  |  |
|  | Staircasewall | 1 | 3.98 |  | 2.70  0 |  | 10.746 |  |  |
|  | wallbetweenstaircasepassageandcold storage  passage | 1 | 3.50 |  | 2.70  0 |  | 9.450 |  |  |
|  | FdWall | 1 | 1.05 |  | 2.70  0 |  | 2.835 |  |  |
|  | FD | 1 |  | 1.2 | 2.1 | 0.1  5 | -2.520 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | D | 1 |  | 2.4 | 2.1 | 0.1  5 | -5.040 |  |  |
|  | D1 | 1 |  | 1.2 | 2.1 |  | -2.520 |  |  |
|  | **InternalwallTotal** |  |  |  |  |  | **59.302** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | Externalwalls | 1 | 49.12 |  | 2.70  0 |  | 132.624 |  |  |
|  | W1 | 5 |  | 1.8 | 1.2 | 0.1  5 | -10.800 |  |  |
|  | **ExternalWallTotal** |  |  |  |  |  | **121.824** |  |  |
|  | **InternalWall** |  |  |  |  |  |  |  |  |
|  | Ductwall | 1 | 13.267 |  | 2.7 |  | 35.821 |  |  |
|  | wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | wallbetween1.8mwidepassageand staircase  passage | 1 | 1.79 |  | 2.7 |  | 4.833 |  |  |
|  | wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | Wallof1.8mwide passage | 1 | 1.79 |  | 2.70  0 |  | 4.833 |  |  |
|  | Staircasewall | 1 | 3.98 |  | 2.70  0 |  | 10.746 |  |  |
|  | **InternalwallTotal** |  |  |  |  |  | **67.627** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWalls-150mmthk.** |  |  |  |  |  |  |  |  |
|  | Externalwalls | 1 | 49.12 |  | 2.70  0 |  | 132.624 |  |  |
|  | W1 | 5 |  | 1.8 | 1.2 | 0.1  5 | -10.800 |  |  |
|  | **ExternalWallTotal** |  |  |  |  |  | **121.824** |  |  |
|  | **InternalWall** |  |  |  |  |  |  |  |  |
|  | Ductwall | 1 | 13.267 |  | 2.7 |  | 35.821 |  |  |
|  | wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | wallbetween1.8mwidepassageand staircase  passage | 1 | 1.79 |  | 2.7 |  | 4.833 |  |  |
|  | wallbetweenductwall | 1 | 2.11 |  | 2.70  0 |  | 5.697 |  |  |
|  | Wallof1.8mwide passage | 1 | 1.79 |  | 2.70  0 |  | 4.833 |  |  |
|  | Staircasewall | 1 | 3.98 |  | 2.70  0 |  | 10.746 |  |  |
|  | **InternalwallTotal** |  |  |  |  |  | **67.627** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalofFourthFloor150mmWall** |  |  |  |  |  | **311.275** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | TotalInternalwallplasterArea | 2 | 421.56 | |  |  |  |  |  |
|  | ExternalWallplasterInternalSurface | 1 | 484.86 | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalofWalls,ColumnSurfacearea** | | | | | | **906.43** |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
| 7.3 | Providingsandfaceplasterexternallyintwocoats  using |  |  |  |  |  |  |  |  |
|  | ExternalWallPlaster | **1** | 484.86 | |  |  | **484.862** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **8.0** | **PAVING,FLOORING&DADOFLOORING&DADO** | |  |  |  |  |  |  |  |
| 8.1 | PProvidingandlayinginpositionpolished**Kota Stone**  **flooring** |  |  |  |  |  |  |  |  |
|  | **GroundFloor** |  |  |  |  |  |  |  |  |
|  | Loading/Unloading Platform | 1 | 8.83 | 12.77 |  |  | 112.780 |  |  |
|  | Staircaselobby | 1 | 9.46 | 4.34 |  |  | 41.060 |  |  |
|  | ColdstoragePassage | 1 | 16.12 | 3.50 |  |  | 56.420 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | GradingandPackingHall | 1 | 8.24 | 9.16 |  |  | 75.478 |  |  |
|  | Holding | 1 | 2.67 | 4.17 |  |  | 11.134 |  |  |
|  | P.M.S | 1 | 2.67 | 4.17 |  |  | 11.134 |  |  |
|  | PassageBetweenCH.roomandHoldingRoom | 1 | 5.57 | 4.80 |  |  | 26.710 |  |  |
|  | 1.8mWidepassage | 1 | 4.25 | 1.79 |  |  | 7.608 |  |  |
|  | Staircaselobby | 1 | 9.46 | 4.34 |  |  | 41.060 |  |  |
|  | Passage | 1 | 16.12 | 3.50 |  |  | 56.420 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | Room | 1 | 12.85 | 5.12 |  |  | 65.750 |  |  |
|  | 1.8mWidepassage | 1 | 4.25 | 1.79 |  |  | 7.608 |  |  |
|  | Staircaselobby | 1 | 9.46 | 4.34 |  |  | 41.060 |  |  |
|  | Passage | 1 | 16.12 | 3.50 |  |  | 56.420 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | PakingMaterialstorage | 1 | 12.85 | 14.38 |  |  | 184.780 |  |  |
|  | 1.8mWidepassage | 1 | 4.25 | 1.79 |  |  | 7.608 |  |  |
|  | Staircase lobby | 1 | 9.46 | 4.34 |  |  | 41.060 |  |  |
|  | Passage | 1 | 16.12 | 3.50 |  |  | 56.420 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | PakingMaterialstorage | 1 | 12.85 | 14.38 |  |  | 184.780 |  |  |
|  | 1.8mWidepassage | 1 | 4.25 | 1.79 |  |  | 7.608 |  |  |
|  | Staircase lobby | 1 | 9.46 | 4.34 |  |  | 41.060 |  |  |
|  | Passage | 1 | 16.12 | 3.50 |  |  | 56.420 |  |  |
|  |  |  |  |  |  |  | **1190.376** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 8.2 | Providingandlayinginposition**skirtingordado**of  polishedProvidingandlayinginpositionskirtingor dado of polished |  |  |  |  |  |  |  |  |
|  | **GroundFloor** |  |  |  |  |  |  |  |  |
|  | Loading/Unloading Platform | 1 | 43.16 |  | **0.10** |  | 4.316 |  |  |
|  | Staircase lobby | 1 | 27.60 |  | **0.10** |  | 2.760 |  |  |
|  | Coldstorage Passage | 1 | 39.24 |  | **0.10** |  | 3.924 |  |  |
|  | D1 | 1 | 1.20 |  | **0.10** |  |  |  |  |
|  | D | 4 | 2.40 |  | **0.10** |  |  |  |  |
|  | FD |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Duct |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | GradingandPackingHall | 1 | 34.80 |  | 0.10 |  | 3.480 |  |  |
|  | Holding | 1 | 13.68 |  | 0.10 |  | 1.368 |  |  |
|  | P.M.S | 1 | 13.68 |  | 0.10 |  | 1.368 |  |  |
|  | PassageBetweenCH.RoomandHoldingRoom | 1 | 20.74 |  | 0.10 |  | 2.074 |  |  |
|  | 1.8mWidepassage | 1 | 12.08 |  | 0.10 |  | 1.208 |  |  |
|  | Staircase lobby | 1 | 27.60 |  | **0.10** |  | 2.760 |  |  |
|  | Passage | 1 | 39.24 |  | **0.10** |  | 3.924 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | Room | 1 | 35.94 |  | **0.10** |  | 3.594 |  |  |
|  | 1.8mWidepassage | 1 | 12.08 |  | **0.10** |  | 1.208 |  |  |
|  | Staircase lobby | 1 | 27.60 |  | **0.10** |  | 2.760 |  |  |
|  | Passage | 1 | 39.24 |  | **0.10** |  | 3.924 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | PakingMaterialstorage | 1 | 54.46 |  | **0.10** |  | 5.446 |  |  |
|  | 1.8mWidepassage | 1 | 12.08 |  | **0.10** |  | 1.208 |  |  |
|  | Staircase lobby | 1 | 27.60 |  | **0.10** |  | 2.760 |  |  |
|  | Passage | 1 | 39.24 |  | **0.10** |  | 3.924 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | PakingMaterialstorage | 1 | 54.46 |  | **0.10** |  | 184.780 |  |  |
|  | 1.8mWidepassage | 1 | 12.08 |  | **0.10** |  | 0.000 |  |  |
|  | Staircase lobby | 1 | 13.80 |  | **0.10** |  | 41.060 |  |  |
|  | Passage | 1 | 39.24 |  | **0.10** |  | 56.420 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalSkirtingbyKotaStone** |  |  |  |  |  | **334.266** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 8.3 | Providingandlayingmachinecutmachinepolished machinecutKotastoneslabs20to25mmthick for  treadsandrisersetc.complete |  |  |  |  |  |  |  |  |
|  | Riser | **6** | **1.52** |  | **0.15**  **0** |  | **1.37** |  |  |
|  | Tread | **5** | **1.52** | **0.30** |  |  | **2.28** |  |  |
|  |  |  |  |  |  |  | **3.648** |  |  |
| 8.40 | Providing and fixing **ceramic tiles** of IS Std. and approvedquality30x30cm.sizefor**flooring**etc.…..  Complete |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | WC1 | 1 | 1.65 | 2.03 |  |  | 3.35 |  |  |
|  | WC2 | 1 | 1.95 | 2.55 |  |  | 4.97 |  |  |
|  | Ch.Room1 | 1 | 1.50 | 1.65 |  |  | 2.48 |  |  |
|  | Ch.Room2 | 1 | 1.76 | 1.95 |  |  | 3.43 |  |  |
|  |  |  |  |  |  |  | **14.229** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 8.50 | Providingandlaying**ceramictiles**ofISStd.and  approvedquality30x30cm.cmsizefor**dado**etc.… complete |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | WC1 | 1 | 7.36 |  | 2.10 |  | 15.456 |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0 |  |  |  |  |
|  | WC2 | 1 | 9.00 |  | 2.10  0 |  | 18.900 |  |  |
|  | Ch.Room1 | 1 | 6.30 |  | 2.10  0 |  | 13.230 |  |  |
|  | Ch.Room2 | 1 | 7.42 |  | 2.10  0 |  | 15.582 |  |  |
|  | D4 | 4 | 0.75 |  | 2.10  0 |  | -6.300 |  |  |
|  | D3 | 2 | 0.90 |  | 2.10  0 |  | -3.780 |  |  |
|  |  |  |  |  |  |  | **53.09** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 8.60 | Providingandfixinggreenmarbleof18to20mmthick  fordoorframe/dado/windowboxingetc. |  |  |  |  |  |  |  |  |
|  | Toiletdoor |  |  |  |  |  |  |  |  |
|  | D4Door | 4 | 0.75 |  | 2.10  0 | 0.1  5 | 3.420 |  |  |
|  | D3 | 3 | 0.90 |  | 2.10  0 | 0.1  5 | 2.700 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Window |  |  |  |  |  |  |  |  |
|  | W1 | 5 | 1.80 |  | 1.20  0 | 0.1  5 | 4.500 |  |  |
|  | W2 | 4 | 1.80 |  | 1.20  0 | 0.1  5 | 3.600 |  |  |
|  | V | 4 | 0.90 |  | 0.60  0 | 0.1  5 | 1.800 |  |  |
|  |  |  |  |  |  |  | **14.220** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 8.70 | Providingandfixing1stqualityceramicglazed floor  tiles…..etccomplete |  |  |  |  |  |  |  |  |
|  | DomesticOHtank floor |  | 2.43 | 2.84 |  |  | 6.901 |  |  |
|  | DomesticOHwall |  | 10.53 |  | 0.94  8 |  | 9.981 |  |  |
|  | FirefightingOHtankfloor |  | 3.71 | 2.84 |  |  | 10.536 |  |  |
|  | FirefightingOHtankwall |  | 13.11 |  | 0.94  8 |  | 12.432 |  |  |
|  |  |  |  |  |  |  | **39.851** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **9.0** | **DOORS&WINDOWS** |  |  |  |  |  |  |  |  |
| 9.1 | Providingandfixingframewith/withoutventilatorof |  |  |  |  |  |  |  |  |
|  | DLaminatedFlushDoor(2.4x2.1) | 2 | 2.1 | 0.15 |  | 0.1 |  | 0.063 |  |
|  |  | 1 | 2.4 | 0.15 |  | 0.1 |  | 0.036 |  |
|  | 2nd=4nosfrom(1stto4th) | 4 |  |  |  |  |  | 0.396 |  |
|  |  |  |  |  |  |  |  |  |  |
|  | D1LaminatedFlushDoor(1.2x2.1) | 2 | 2.1 | 0.15 |  | 0.1 |  | 0.063 |  |
|  |  | 1 | 1.2 | 0.15 |  | 0.1 |  | 0.018 |  |
|  | 5nos | 5 |  |  |  |  |  | 0.405 |  |
|  |  |  |  |  |  |  |  |  |  |
|  | D2LaminatedFlushDoor(1x2.1) | 2 | 2.1 | 0.15 |  | 0.1 |  | 0.063 |  |
|  |  | 1 | 1 | 0.15 |  | 0.1 |  | 0.015 |  |
|  | 1stFloor=2 | 2 |  |  |  |  |  | 0.156 |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalNumberofDoor** | | | | | | | **11.000** |  |
|  |  |  |  |  |  |  |  |  |  |
| 9.2 | Providingandfixing**FireResistanceDoors**43mm thick  etc……complete |  |  |  |  |  |  |  |  |
|  | **Internal** |  |  |  |  |  |  |  |  |
|  | AllFloorFDincludingFirecheckfloordoor | 4 | 1.20 |  | 2.10  0 |  | 10.080 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | TotalNumberofDoor |  |  |  |  |  | **4.000** |  |  |
| 9.30 | Providingandfixingfiberglassreinforcedpolyster  door |  |  |  |  |  |  |  |  |
|  | D3 | **3** |  |  |  |  |  |  |  |
|  | D4 | 4 |  |  |  |  |  |  |  |
|  | TotalNumberofDoor |  |  |  |  |  | 7.000 |  |  |
|  | **Total** | | | | | | **7.000** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 9.40 | Providingandfixinginpositionaluminumlouvers  windows/ |  |  |  |  |  |  |  |  |
|  | V | 4 | 0.75 |  | 0.90  0 |  | 2.700 |  |  |
|  |  |  |  |  |  |  | **2.700** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 9.50 | Supplyingandfixinginpositionanodizedextruded  modular |  |  |  |  |  |  |  |  |
|  | **AllFloorExternalWindow** |  |  |  |  |  |  |  |  |
|  | W1 | 5 | 1.80 |  | 1.20  0 |  | 10.800 |  |  |
|  | W2 | 4 | 1.80 |  | 1.20  0 |  | 8.640 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **19.440** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **10.0** | **PuffPanels** |  |  |  |  |  |  |  |  |
| 10.1 | Providing & erecting Insulation walls and Partition jusing120mmthickPUFPanels.Theinsulatedpanels shall comprising of pre coated galvanized sheets of  0.50mmthicketc |  |  |  |  |  | **0.00** |  |  |
|  | **GroundFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWallof Building** | 1 | 162.49 |  | 2.70  0 |  | 438.726 |  |  |
|  | **InternalwallBetweenC.S1&2** | 1 | 15.72 |  | 2.70  0 |  | 42.444 |  |  |
|  | **InternalwallBetweenC.S2&3** | 1 | 8.66 |  | 2.70  0 |  | 23.382 |  |  |
|  | **InternalwallBetweenC.S3&4** | 1 | 15.62 |  | 2.70  0 |  | 42.174 |  |  |
|  | **D(1.2\*2.1)** | 4 | 1.20 |  | 2.10  0 |  | -10.080 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | **ExternalWallof Building** | 1 | 162.49 |  | 2.70  0 |  | 438.726 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **InternalwallBetweenC.S1&2** | 1 | 15.72 |  | 2.70  0 |  | 42.444 |  |  |
|  | **InternalwallBetweenC.S2&3** | 1 | 8.66 |  | 2.70  0 |  | 23.382 |  |  |
|  | **InternalwallBetweenC.S3&4** | 1 | 15.62 |  | 2.70  0 |  | 42.174 |  |  |
|  | **D(1.2\*2.1)** | 4 | 1.20 |  | 2.10  0 |  | -10.080 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWallof Building** | 1 | 162.49 |  | 2.70  0 |  | 438.726 |  |  |
|  | **InternalwallBetweenC.S1&2** | 1 | 15.72 |  | 2.70  0 |  | 42.444 |  |  |
|  | **InternalwallBetweenC.S2&3** | 1 | 8.66 |  | 2.70  0 |  | 23.382 |  |  |
|  | **InternalwallBetweenC.S3&4** | 1 | 15.62 |  | 2.70  0 |  | 42.174 |  |  |
|  | **D(1.2\*2.1)** | 4 | 1.20 |  | 2.10  0 |  | -10.080 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWallof Building** | 1 | 162.49 |  | 2.70  0 |  | 438.726 |  |  |
|  | **InternalwallBetweenC.S1&2** | 1 | 15.72 |  | 2.70  0 |  | 42.444 |  |  |
|  | **InternalwallBetweenC.S2&3** | 1 | 8.66 |  | 2.70  0 |  | 23.382 |  |  |
|  | **InternalwallBetweenC.S3&4** | 1 | 15.62 |  | 2.70  0 |  | 42.174 |  |  |
|  | **D(1.2\*2.1)** | 4 | 1.20 |  | 2.10  0 |  | -10.080 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | **ExternalWallof Building** | 1 | 162.49 |  | 2.70  0 |  | 438.726 |  |  |
|  | **InternalwallBetweenC.S1&2** | 1 | 15.72 |  | 2.70  0 |  | 42.444 |  |  |
|  | **InternalwallBetweenC.S2&3** | 1 | 8.66 |  | 2.70  0 |  | 23.382 |  |  |
|  | **InternalwallBetweenC.S3&4** | 1 | 15.62 |  | 2.70  0 |  | 42.174 |  |  |
|  | **D(1.2\*2.1)** | 4 | 1.20 |  | 2.10  0 |  | -10.080 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **2683.229** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 10.2 | **Insulation Panel for ceiling 120mm thick The insulatedpanelswithprecoatedgalvanizedsheetsof**  **0.50mmthickonbothsides etc** |  |  |  |  |  |  |  |  |
|  | **ColdStorageChamber** |  |  |  |  |  |  |  |  |
|  | **ColdStorageChamber1** | 1 | 13.57 | 15.72 |  |  | 213.320 |  |  |
|  | **ColdStorageChamber2** | 1 | 13.62 | 17.49 |  |  | 238.214 |  |  |
|  | **ColdStorageChamber3** | 1 | 13.57 | 17.44 |  |  | 236.661 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **ColdStorageChamber4** | 1 | 13.57 | 15.62 |  |  | 211.963 |  |  |
|  | **Pre-coolingChamber1** | 1 | 4.46 | 4.48 |  |  | 19.981 |  |  |
|  | **Pre-coolingChamber2** | 1 | 4.46 | 4.48 |  |  | 19.981 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **940.120** |  |  |
| 10.3 | InsulationPanelforwalls,ceiling&partitions 120mm  thickTheinsulatedpanelswithprecoatedgalvanized sheets of 0.50 mm thick on both sides etc. |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | PreCool | 1 | 13.42 |  | 2.7 |  | 36.234 |  |  |
|  | PreCool | 1 | 17.98 |  | 2.7 |  | 48.546 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | PreCool | 1 | 13.42 |  | 2.7 |  | 36.234 |  |  |
|  | PreCool | 1 | 17.98 |  | 2.7 |  | 48.546 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Precool(CeilingInsulation) | 1 | 4.46 | 4.48 |  |  | 19.9808 |  |  |
|  | Precool(CeilingInsulation) | 1 | 4.46 | 4.53 |  |  | 20.2038 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **Quantity of120mmthkpanel** |  |  |  |  |  | **209.745** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 10.4 | Providing & erecting Insulation walls and Partition using100mmthickPUFPanels.Theinsulatedpanelsis comprising of pre coated galvanized sheets of 0.50  mm thick |  |  |  |  |  | **0.000** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 10.5 | Floorinsulation80mmthickConventionalPUFcase  may be |  |  |  |  |  |  |  |  |
|  | PreCoolingChamber(80mmThick) | 1 | 4.46 | 4.48 |  |  | **19.981** |  |  |
|  | PreCoolingChamber(80mmThick) | 1 | 4.46 | 4.53 |  |  | **20.204** |  |  |
|  |  | |  |  |  |  | **40.185** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 10.6 | Floorinsulation80mmthickconventionalPUF case  may be, |  |  |  |  |  |  |  |  |
|  | **ColdStorageChamber** |  |  |  |  |  |  |  |  |
|  | **ColdStorageChamber1** | 1 | 13.57 | 16.72 |  |  | 226.890 |  |  |
|  | **ColdStorageChamber2** | 1 | 13.62 | 17.49 |  |  | 238.214 |  |  |
|  | **ColdStorageChamber3** | 1 | 13.57 | 17.44 |  |  | 236.661 |  |  |
|  | **ColdStorageChamber4** | 1 | 13.57 | 15.62 |  |  | 211.963 |  |  |
|  |  |  |  |  |  |  | **913.728** |  |  |
| 10.7 | Insulated doors All doors shall be Swing/ Sliding type withimportedcompactslidingarrangement.Itshallbe  madeof100/150mm, |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **GroundFloor** |  |  |  |  |  |  |  |  |
|  | D | 4 |  | 1.20 | 2.10  0 |  | 10.080 |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | D5 | 2 |  | 1.20 | 2.10  0 |  | 5.040 |  |  |
|  | D | 4 |  | 1.20 | 2.10  0 |  | 10.080 |  |  |
|  | **SecondFloor** |  |  |  |  |  |  |  |  |
|  | D | 4 |  | 1.20 | 2.10 |  | 10.080 |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0 |  |  |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | D | 4 |  | 1.20 | 2.10  0 |  | 10.080 |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | D | 4 |  | 1.20 | 2.10  0 |  | 10.080 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalNumberofDoor** | 22 |  |  |  |  | **55.440** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 10.8 | **FLASHINGSforPUFPanelsGirthUpto300mm** | R. M  . |  |  |  |  |  |  | 3117.0  0 |
|  | **FLASHINGSforPUFPanelsGirth300-600mmGirth** | R. M  . |  |  |  |  |  |  | 150.00 |
|  |  |  |  |  |  |  |  |  |  |
| 10.90 | **CeilingSupportSystem100MMwideALTSection (Hanging** | R. M  . |  |  |  |  |  |  | 0.00 |
|  | **CeilingSupportSystem120MMwideALTSection (Hanging** | R. M  . |  |  |  |  |  |  | 180.00 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **11.0** | **COLOUR/WHITEWASHABLE&DISTAMPER** |  |  |  |  |  |  |  |  |
| 11.1 | Providingandapplyingprimercoatofapproved  qualitytoold/new wallsurfaceetc.….Complete |  |  |  |  |  |  |  |  |
|  | Totalwallsurfaceandcolumnssurfacearea | 1 | 906.43 | |  |  | **906.427** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 11.2 | Providing and applying plastic emulsion paint…etc  complete |  |  |  |  |  |  |  |  |
|  | Totalwallsurfaceandcolumnssurfacearea | 1 | 906.43 | |  |  | **906.427** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 11.3 | Providingandapplyingwhite-washinonecoatonold  / new |  |  |  |  |  |  |  |  |
|  | SameasExternalwallsurfacearea | 1 | 484.86 | |  |  | **484.862** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 11.4 | Providingandapplyingtwocoatsofexteriorweathe |  |  |  |  |  |  |  |  |
|  | SameasExternalwallsurfacearea | 1 | 484.86 | |  |  | **484.862** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **12.0** | **IRONWORKS&RAILINGWORKS** |  |  |  |  |  |  |  |  |
| 12.1 | **M.S.RailingProvidingandfixingmildsteelgrill railing**  **15** |  |  |  |  |  |  |  |  |
|  | Ground Floor | 1 | 5.38 |  | 1.10  0 |  | 5.917 |  |  |
|  | FirstFloor | 1 | 5.38 |  | 1.10  0 |  | 5.917 |  |  |
|  | 2ndFloor | 1 | 5.38 |  | 1.10  0 |  | 5.917 |  |  |
|  | 3rdFloor | 1 | 5.38 |  | 1.10 |  | 5.917 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0 |  |  |  |  |
|  | 4th Floor | 1 | 5.38 |  | 1.10  0 |  | 5.917 |  |  |
|  | **Total ofMS Railing** |  |  |  |  |  | **29.585** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 12.2 | **M.Shand railing** |  |  |  |  |  |  |  |  |
|  | Main Staircase | 1 | 7.96 |  |  |  |  |  | 7.960 |
|  | FirstFloor | 1 | 7.96 |  |  |  |  |  | 7.960 |
|  | 2ndFloor | 1 | 7.96 |  |  |  |  |  | 7.960 |
|  | 3rdFloor | 1 | 7.96 |  |  |  |  |  | 7.960 |
|  | 4th Floor | 1 | 7.96 |  |  |  |  |  | 7.960 |
|  | **TotalofMShandRailing** |  |  |  |  |  |  |  | **39.800** |
|  |  |  |  |  |  |  |  |  |  |
| **13.0** | **STRUCTURALSTEELFORPEBWORKS** |  |  |  |  |  |  |  |  |
| 13.1 | Providingstructuralsteelworkintrusses,othersimilar |  |  |  |  |  |  |  |  |
|  | Steelconsidering6Kg/sq.ftforRoofingTruss |  | 27.67 | 35.33 |  |  | 977.581 |  |  |
|  |  |  |  |  |  |  | **63112.636** | **63.113** |  |
|  |  |  |  | Wtpermt | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Purlin200\*60\*20thk(P1,P2,P3,P4,P5) | **15** | 30.70 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | IsectionFlange(150\*6mmthik)web(450-750) | **6** | 20.00 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Stiffner(180\*100\*6mmthick) | **90** | 0.10 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | PerlinCleat(180\*200\*6thick) | **90** | 0.20 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BoltsOnCleatPurlin(12mmdia) | **36**  **0** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 13.2 | Providingstructuralsteelworkinsinglestanchionscompo  sed |  |  |  |  |  | **0.000** |  |  |
|  | **GroundFloor** |  |  |  |  |  |  |  |  |
|  | ColdStorage1 |  | Length | Wtpermt | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate1(0.45\*0.45\*0.016)newcolumnadded | 10  2 | 0.45 | 56.59 |  |  | 2597.481 |  |  |
|  | BasePlate2(0.5\*0.2\*0.016) | 16 | 0.50 | 62.88 |  |  | 503.040 |  |  |
|  | Column1(SHS250\*250\*8)newcolumnadded | 10  2 | 2.70 | 51.96 |  |  | 14309.784 |  |  |
|  | Column3(MB250) | 16 | 2.70 | 59.50 |  |  | 2570.400 |  |  |
|  | FoundationBoltforBasePlate1newcolumnadded | 80  8 | 0.45 | 4.50 |  |  | 1636.200 |  |  |
|  | FoundationBoltforBasePlate2 | 96 | 0.45 | 4.50 |  |  | 194.400 |  |  |
|  | Grating(25\*25\*[2.6)@27.58newarea](mailto:2.6)@27.58newarea)added | 70  6 | 27.58 | 1.69 |  |  | 32906.801 |  |  |
|  | **GroundFloor** |  |  |  |  |  | **54718.106** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **First Floor** |  |  |  |  |  |  |  |  |
|  | ColdStorage1 |  | Length | Wtpermt | |  |  |  |  |
|  | B1External | 1 | 47.64 | 52.40 |  |  | 2496.336 |  |  |
|  | B1H.Internal | 3 | 9.25 | 52.40 |  |  | 1454.100 |  |  |
|  | B1V.Internal | 1 | 14.40 | 52.40 |  |  | 754.560 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage2 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 51.75 | 52.40 |  |  | 2711.700 |  |  |
|  | B1H.Internal | 3 | 9.35 | 52.40 |  |  | 1469.820 |  |  |
|  | B1V.Internal | 1 | 14.25 | 52.40 |  |  | 746.700 |  |  |
|  | B1H.Internal | 1 | 4.75 | 52.40 |  |  | 248.900 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage3 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 47.64 | 52.40 |  |  | 2496.336 |  |  |
|  | B1H.Internal | 3 | 9.25 | 52.40 |  |  | 1454.100 |  |  |
|  | B1V.Internal | 1 | 14.40 | 52.40 |  |  | 754.560 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage4 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 41.19 | 52.40 |  |  | 2158.356 |  |  |
|  | B1H.Internal | 1 | 9.05 | 52.40 |  |  | 474.220 |  |  |
|  | B1V.Internal | 1 | 10.90 | 52.40 |  |  | 571.160 |  |  |
|  | B4 | 6 | 10.95 | 30.40 |  |  | 1997.280 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate1(0.45\*0.45\*0.016) | 10  2 | 0.45 | 56.59 |  |  | 2597.481 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate2(0.5\*0.2\*0.016) | 16 | 0.50 | 62.88 |  |  | 503.040 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Column1(SHS250\*250\*8) | 10  2 | 2.70 | 51.96 |  |  | 14309.784 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Column3(MB250) | 16 | 2.70 | 59.50 |  |  | 2570.400 |  |  |
|  | FoundationBoltforBasePlate1 | 80  8 | 0.45 | 4.50 |  |  | 1636.200 |  |  |
|  | FoundationBoltforBasePlate2 | 96 | 0.45 | 4.50 |  |  | 194.400 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | PassageArea |  |  |  |  |  | 0.000 |  |  |
|  | Mainbeam B1 | 1 | 31.50 | 52.40 |  |  | 1650.600 |  |  |
|  | DistributariB1 | 2 | 2.95 | 52.40 |  |  | 309.160 |  |  |
|  | DistributariB1 | 1 | 5.00 | 52.40 |  |  | 262.000 |  |  |
|  | B4 | 14 | 3.75 | 30.40 |  |  | 1596.000 |  |  |
|  | StaircaseLobbyB1 | 1 | 23.26 | 52.40 |  |  | 1219.034 |  |  |
|  | StaircaseLobbyB4 | 2 | 4.20 | 30.40 |  |  | 255.360 |  |  |
|  |  |  |  |  |  |  | 0.000 |  |  |
|  | OfficeareaB1 | 1 | 90.57 | 52.40 |  |  | 4745.868 |  |  |
|  | B4 | 3 | 7.15 | 30.40 |  |  | 652.080 |  |  |
|  | B4 | 3 | 2.05 | 30.40 |  |  | 186.960 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  | B2 | 2 | 5.15 | 86.90 |  |  | 895.070 |  |  |
|  | B3 | 2 | 5.15 | 35.80 |  |  | 368.740 |  |  |
|  | Grating(25\*25\*[2.6)@27.58newarea](mailto:2.6)@27.58newarea)added | 70  6 | 27.58 | 1.69 |  |  | 32906.801 |  |  |
|  | **First Floor** |  |  |  |  |  | **74686.554** |  |  |
|  | **SecondFloorMezanineFloor** |  |  |  |  |  |  |  |  |
|  | ColdStorage1 |  | Length | Wtpermt | |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | B1External | 1 | 47.64 | 52.40 |  |  | 2496.336 |  |  |
|  | B1H.Internal | 3 | 9.25 | 52.40 |  |  | 1454.100 |  |  |
|  | B1V.Internal | 1 | 14.40 | 52.40 |  |  | 754.560 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage2 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 51.75 | 52.40 |  |  | 2711.700 |  |  |
|  | B1H.Internal | 3 | 9.35 | 52.40 |  |  | 1469.820 |  |  |
|  | B1V.Internal | 1 | 14.25 | 52.40 |  |  | 746.700 |  |  |
|  | B1H.Internal | 1 | 4.75 | 52.40 |  |  | 248.900 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage3 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 47.64 | 52.40 |  |  | 2496.336 |  |  |
|  | B1H.Internal | 3 | 9.25 | 52.40 |  |  | 1454.100 |  |  |
|  | B1V.Internal | 1 | 14.40 | 52.40 |  |  | 754.560 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage4 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 41.19 | 52.40 |  |  | 2158.356 |  |  |
|  | B1H.Internal | 1 | 9.05 | 52.40 |  |  | 474.220 |  |  |
|  | B1V.Internal | 1 | 10.90 | 52.40 |  |  | 571.160 |  |  |
|  | B4 | 6 | 10.95 | 30.40 |  |  | 1997.280 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate1(0.45\*0.45\*0.016) | 10  1 | 0.45 | 56.59 |  |  | 2572.016 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate2(0.5\*0.2\*0.016) | 16 | 0.50 | 62.88 |  |  | 503.040 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Column1(SHS250\*250\*8) | 10  2 | 2.70 | 51.96 |  |  | 14309.784 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Column3(MB250) | 16 | 2.70 | 59.50 |  |  | 2570.400 |  |  |
|  | FoundationBoltforBasePlate1 | 80  8 | 0.45 | 4.50 |  |  | 1636.200 |  |  |
|  | FoundationBoltforBasePlate2 | 96 | 0.45 | 4.50 |  |  | 194.400 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | PassageArea |  |  |  |  |  | 0.000 |  |  |
|  | Mainbeam B1 | 1 | 31.50 | 52.40 |  |  | 1650.600 |  |  |
|  | DistributariB1 | 2 | 2.95 | 52.40 |  |  | 309.160 |  |  |
|  | DistributariB1 | 1 | 5.00 | 52.40 |  |  | 262.000 |  |  |
|  | B4 | 14 | 3.75 | 30.40 |  |  | 1596.000 |  |  |
|  | StaircaseLobbyB1 | 1 | 23.26 | 52.40 |  |  | 1219.034 |  |  |
|  | StaircaseLobbyB4 | 2 | 4.20 | 30.40 |  |  | 255.360 |  |  |
|  |  |  |  |  |  |  | 0.000 |  |  |
|  | OfficeareaB1 | 1 | 90.57 | 52.40 |  |  | 4745.868 |  |  |
|  | B4 | 3 | 7.15 | 30.40 |  |  | 652.080 |  |  |
|  | B4 | 3 | 2.05 | 30.40 |  |  | 186.960 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  | B2 | 2 | 5.15 | 86.90 |  |  | 895.070 |  |  |
|  | B3 | 2 | 5.15 | 35.80 |  |  | 368.740 |  |  |
|  | Grating(25\*25\*[2.6)@27.58newarea](mailto:2.6)@27.58newarea)added | 70  6 | 27.58 | 1.69 |  |  | 32906.801 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **SecondFloorMezanineFloor** |  |  |  |  |  | **97127.880** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **ThirdFloor** |  |  |  |  |  |  |  |  |
|  | ColdStorage1 |  | Length | Wtpermt | |  |  |  |  |
|  | B1External | 1 | 47.64 | 52.40 |  |  | 2496.336 |  |  |
|  | B1H.Internal | 3 | 9.25 | 52.40 |  |  | 1454.100 |  |  |
|  | B1V.Internal | 1 | 14.40 | 52.40 |  |  | 754.560 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage2 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 51.75 | 52.40 |  |  | 2711.700 |  |  |
|  | B1H.Internal | 3 | 9.35 | 52.40 |  |  | 1469.820 |  |  |
|  | B1V.Internal | 1 | 14.25 | 52.40 |  |  | 746.700 |  |  |
|  | B1H.Internal | 1 | 4.75 | 52.40 |  |  | 248.900 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage3 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 47.64 | 52.40 |  |  | 2496.336 |  |  |
|  | B1H.Internal | 3 | 9.25 | 52.40 |  |  | 1454.100 |  |  |
|  | B1V.Internal | 1 | 14.40 | 52.40 |  |  | 754.560 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage4 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 41.19 | 52.40 |  |  | 2158.356 |  |  |
|  | B1H.Internal | 1 | 9.05 | 52.40 |  |  | 474.220 |  |  |
|  | B1V.Internal | 1 | 10.90 | 52.40 |  |  | 571.160 |  |  |
|  | B4 | 6 | 10.95 | 30.40 |  |  | 1997.280 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate1(0.45\*0.45\*0.016) | 10  1 | 0.45 | 56.59 |  |  | 2572.016 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate2(0.5\*0.2\*0.016) | 16 | 0.50 | 62.88 |  |  | 503.040 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Column1(SHS250\*250\*8) | 10  2 | 2.70 | 51.96 |  |  | 14309.784 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Column3(MB250) | 16 | 2.70 | 59.50 |  |  | 2570.400 |  |  |
|  | FoundationBoltforBasePlate1 | 80  8 | 0.45 | 4.50 |  |  | 1636.200 |  |  |
|  | FoundationBoltforBasePlate2 | 96 | 0.45 | 4.50 |  |  | 194.400 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | PassageArea |  |  |  |  |  |  |  |  |
|  | B1 | 1 | 7.90 | 52.40 |  |  | 413.960 |  |  |
|  | B4 | 2 | 4.20 | 30.40 |  |  | 255.360 |  |  |
|  | Grating(25\*25\*[2.6)@27.58newarea](mailto:2.6)@27.58newarea)added | 70  6 | 27.58 | 1.69 |  |  | 32906.801 |  |  |
|  | **ThirdFloor** |  |  |  |  |  | **83029.769** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **FourthFloor** |  |  |  |  |  |  |  |  |
|  | ColdStorage1 |  | Length | Wtpermt | |  |  |  |  |
|  | B1External | 1 | 47.64 | 52.40 |  |  | 2496.336 |  |  |
|  | B1H.Internal | 3 | 9.25 | 52.40 |  |  | 1454.100 |  |  |
|  | B1V.Internal | 1 | 14.40 | 52.40 |  |  | 754.560 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage2 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 51.75 | 52.40 |  |  | 2711.700 |  |  |
|  | B1H.Internal | 3 | 9.35 | 52.40 |  |  | 1469.820 |  |  |
|  | B1V.Internal | 1 | 14.25 | 52.40 |  |  | 746.700 |  |  |
|  | B1H.Internal | 1 | 4.75 | 52.40 |  |  | 248.900 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage3 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 47.64 | 52.40 |  |  | 2496.336 |  |  |
|  | B1H.Internal | 3 | 9.25 | 52.40 |  |  | 1454.100 |  |  |
|  | B1V.Internal | 1 | 14.40 | 52.40 |  |  | 754.560 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ColdStorage4 |  |  |  |  |  |  |  |  |
|  | B1External | 1 | 41.19 | 52.40 |  |  | 2158.356 |  |  |
|  | B1H.Internal | 1 | 9.05 | 52.40 |  |  | 474.220 |  |  |
|  | B1V.Internal | 1 | 10.90 | 52.40 |  |  | 571.160 |  |  |
|  | B4 | 6 | 10.95 | 30.40 |  |  | 1997.280 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | PassageArea |  |  |  |  |  |  |  |  |
|  | B1 | 1 | 7.90 | 52.40 |  |  | 413.960 |  |  |
|  | B4 | 2 | 4.20 | 30.40 |  |  | 255.360 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate1(0.45\*0.45\*0.016) | 10  1 | 0.45 | 56.59 |  |  | 2572.016 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | BasePlate2(0.5\*0.2\*0.016) | 16 | 0.50 | 62.88 |  |  | 503.040 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Column1(SHS250\*250\*8) | 10  2 | 2.70 | 51.96 |  |  | 14309.784 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Column3(MB250) | 16 | 2.70 | 59.50 |  |  | 2570.400 |  |  |
|  | FoundationBoltforBasePlate1 | 80  8 | 0.45 | 4.50 |  |  | 1636.200 |  |  |
|  | FoundationBoltforBasePlate2 | 96 | 0.45 | 4.50 |  |  | 194.400 |  |  |
|  | Grating(25\*25\*[2.6)@27.58newarea](mailto:2.6)@27.58newarea)added | 70  6 | 27.58 | 1.69 |  |  | 32906.801 |  |  |
|  | **FourthFloor** |  |  |  |  |  | **83029.769** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | **TotalSteelStructureinMetricTon** |  |  |  |  |  | **392592.07**  **8** | **392.592** |  |
|  | **RamMikheSir** |  |  |  |  |  |  |  |  |
|  | BasePlate1(450\*450\*16) | 79 | 0.45 | 56.59 |  |  | 2212.952 |  |  |
|  | BasePlate2(500\*200\*16) | 16 | 0.50 | 62.88 |  |  | 553.344 |  |  |
|  | Column1(SHS220\*220\*8) | 56 | 13.50 | 51.96 |  |  | 43209.936 | **43209.93**  **6** |  |
|  | Column2(SHS250\*250\*8) | 16 | 9.90 | 59.50 |  |  | 10367.280 | **10367.28**  **0** |  |
|  | Column2A(SHS250\*250\*8) | 7 | 13.50 | 59.50 |  |  | 6185.025 | **6185.025** |  |
|  | Column3MB250 | 16 | 13.50 | 37.30 |  |  | 8862.480 | **8862.480** |  |
|  | PrimaryBeam1MB350 | 40 | 19.50 | 52.40 |  |  | 44959.200 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 16 | 29.85 | 52.40 |  |  | 27528.864 |  |  |
|  |  | 8 | 14.50 | 52.40 |  |  | 6686.240 |  |  |
|  |  | 4 | 11.30 | 52.40 |  |  | 2605.328 |  |  |
|  |  | 4 | 15.00 | 52.40 |  |  | 3458.400 |  |  |
|  | PrimaryBeam2MB350 | 6 | 23.50 | 52.40 |  |  | 8127.240 |  |  |
|  |  | 21 | 3.40 | 52.40 |  |  | 4115.496 |  |  |
|  | PrimaryBeam3MB350 | 9 | 14.60 | 52.40 |  |  | 7573.896 |  |  |
|  |  | 15 | 9.30 | 52.40 |  |  | 8040.780 |  |  |
|  | Secondarybeam | 64 | 29.85 | 30.40 |  |  | 63883.776 |  |  |
|  | Secondarybeam-2 | 9 | 23.50 | 30.40 |  |  | 7072.560 |  |  |
|  | Secondarybeam-3 | 21 | 14.60 | 30.40 |  |  | 10252.704 |  |  |
|  | DeckSheet(for238.21m2) |  |  |  |  |  | 111.330 |  |  |
|  | GratingMembers(SHS25\*25\*2.6) | 59  7 | 19.50 | 1.69 |  |  | 21641.000 | **21641.00**  **0** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Total |  |  | **287447.83**  **1** |  |  |
|  |  |  | 287.45 | 845.24 |  |  |  |  |  |
|  |  |  | x | 1240.1  9 |  |  | **421.765** |  |  |
|  | 3rdFloorSteel |  |  |  |  |  |  |  |  |
|  | PassageArea |  |  |  |  |  | 0.000 |  |  |
|  | Mainbeam B1 | 1 | 31.50 | 52.40 |  |  | 1650.600 |  |  |
|  | DistributariB1 | 2 | 2.95 | 52.40 |  |  | 309.160 |  |  |
|  | DistributariB1 | 1 | 5.00 | 52.40 |  |  | 262.000 |  |  |
|  | B4 | 14 | 3.75 | 30.40 |  |  | 1596.000 |  |  |
|  | StaircaseLobbyB1 | 1 | 23.26 | 52.40 |  |  | 1219.034 |  |  |
|  | StaircaseLobbyB4 | 2 | 4.20 | 30.40 |  |  | 255.360 |  |  |
|  |  |  |  |  |  |  | 0.000 |  |  |
|  | OfficeareaB1 | 1 | 90.57 | 52.40 |  |  | 4745.868 |  |  |
|  | B4 | 3 | 7.15 | 30.40 |  |  | 652.080 |  |  |
|  | B4 | 3 | 2.05 | 30.40 |  |  | 186.960 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  | B2 | 2 | 5.15 | 86.90 |  |  | 895.070 |  |  |
|  | B3 | 2 | 5.15 | 35.80 |  |  | 368.740 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 4thFloorSteel |  |  |  |  |  |  |  |  |
|  | PassageArea |  |  |  |  |  | 0.000 |  |  |
|  | Mainbeam B1 | 1 | 31.50 | 52.40 |  |  | 1650.600 |  |  |
|  | DistributariB1 | 2 | 2.95 | 52.40 |  |  | 309.160 |  |  |
|  | DistributariB1 | 1 | 5.00 | 52.40 |  |  | 262.000 |  |  |
|  | B4 | 14 | 3.75 | 30.40 |  |  | 1596.000 |  |  |
|  | StaircaseLobbyB1 | 1 | 23.26 | 52.40 |  |  | 1219.034 |  |  |
|  | StaircaseLobbyB4 | 2 | 4.20 | 30.40 |  |  | 255.360 |  |  |
|  |  |  |  |  |  |  | 0.000 |  |  |
|  | OfficeareaB1 | 1 | 90.57 | 52.40 |  |  | 4745.868 |  |  |
|  | B4 | 3 | 7.15 | 30.40 |  |  | 652.080 |  |  |
|  | B4 | 3 | 2.05 | 30.40 |  |  | 186.960 |  |  |
|  | B4 | 6 | 14.40 | 30.40 |  |  | 2626.560 |  |  |
|  | B2 | 2 | 5.15 | 86.90 |  |  | 895.070 |  |  |
|  | B3 | 2 | 5.15 | 35.80 |  |  | 368.740 |  |  |
|  |  |  |  |  |  |  | **29.535** |  |  |
|  | TotalSteelStructureinMetricTon(By Interpolation) |  |  |  |  |  |  | **451.295** |  |

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| **14.0** | **ROOFING&CEILING** |  |  |  |  |  |  |  |  |
| 14.1 | Providingandfixingcorrugatedgalvanisedironsheets of 0.63mm thick (24B.W.G.)for roofing without wind tilesincludingfasteningwithgalvanisedironscrews& bolts, lead & bitumen washers as per drawing etc.  complete.(Weightof5.5kg/sq.m.) |  |  |  |  |  |  |  |  |
|  | Roof area |  | 27.87 | 35.33 |  |  | 984.65 |  |  |
|  |  |  |  |  |  |  | **984.65** |  |  |
| 14.2 | Providing and fixing valley gutter of 22 B.W.G. (0.8 mm) plain galvanised iron sheets 120 cm wide with teakwoodplanking20mmthickincludingtwocoatsof coaltarring the upper surface of plank etc. complete.  (excludingpaintingtoundersideofplank) |  |  |  |  |  |  |  |  |
|  | Sidesof SlopingRoof |  |  |  |  |  |  |  | 70.66 |
|  |  |  |  |  |  |  |  |  | **70.66** |
|  |  |  |  |  |  |  |  |  |  |
| **15.0** | **CONCRETING,S.W.DRAINS&SITEDEVELOPMENT** |  |  |  |  |  |  |  |  |
| **15.1** | **CONCRETEROADWORKS** |  |  |  |  |  |  |  |  |
|  | **TotalareaofRoadWorks=6369** |  |  |  |  |  |  |  |  |
|  | **PQCarea=714.77m2** |  |  |  |  |  |  |  |  |
| 15.1 | **Excavationforroadwaysinsoftstratasuchasearth**  **soilofall** |  |  |  |  |  |  |  |  |
|  | **ForConcrete Road** |  |  |  | 0.30  0 |  | 714.770 | **214.43** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 15.2 | Providingearthworkinembankmentwithapproved  materials |  |  |  | 0.15  0 |  | 714.770 | **107.216** |  |
|  |  |  |  |  |  |  |  |  |  |
| 15.3 | Providingandfillinginthefoundationwithsandof  approved |  |  |  | 0.15  0 |  | 714.770 | **107.216** |  |
|  |  |  |  |  |  |  |  |  |  |
| 15.40 | ConstructionofGranularSubbasebyprovidingclose  graded |  |  |  | 0.30  0 |  | 714.770 | **214.431** |  |
|  |  |  |  |  |  |  |  |  |  |
| 15.5 | Providing and laying, spreading and compacting gradedstoneaggregatetoWetMixMacadam(WMM)  specificatoinsincludingpremixingetc…complete |  |  |  | 0.15  0 |  | 714.770 | **107.216** |  |
|  |  |  |  |  |  |  |  |  |  |
| 15.6 | ProvidingandlayinginsituDryLeancementconcrete  subbase oftrapmetal etc…complete |  |  |  | 0.15  0 |  | 714.770 | **107.216** |  |
|  |  |  |  |  |  |  |  |  |  |
| 15.7 | ProvidingandlyingPavementQualityConcreteofM  40 |  |  |  | 0.30  0 |  | 714.770 | **214.431** |  |
|  |  |  |  |  |  |  |  |  |  |
| 15.8 | ProvidingandcastinginsitucementconcreteM-30of trap metal of R.C.C. Runner Beam as per detailed  drawingsanddesignsetc…complete | 1 | 144.14 | 0.23 | 0.30 |  |  | **9.946** |  |
|  |  |  |  |  |  |  |  |  |  |
| 15.9 | ProvidingandfixinginpositionT.M.T.bar  reinforcementof |  |  |  |  |  |  |  |  |
|  | 60Kg/cumforBeam | 1 |  |  |  |  |  | 0.60 |  |
|  | dowelbarsforroadjoints@1.0kgpersq.m. | 1 |  |  |  |  |  | 0.71 |  |

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|  |  |  |  |  |  |  |  | **1.312** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **16** | **CompoundWall** |  |  |  |  |  |  |  |  |
|  | Excavation(Coumpoundwalllenth319.55- 11.25=308.3 |  |  |  |  |  |  |  |  |
|  | ForCompoundWall | 1 | 308.30 | 0.60 | 1.50  0 |  |  | **277.470** |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.1 | Excavationforroadwayinsoftstratasuchasearthsoil  ofallsortssand,gravel,orsoftmurumincluding dressing etc…complete (50% of Quantity) |  |  |  |  |  |  | **138.735** |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.2 | Excavationforroadwayinsoft stratasuchashard  murum |  |  |  |  |  |  | **83.241** |  |
|  | ForCompoundWallBeam |  |  |  |  |  |  |  |  |
|  | ForCompoundWallFooting30% |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.3 | ExcavationforroadwayinhardstratasuchasSoft rock  by |  |  |  |  |  |  | **55.494** |  |
|  | ForCompoundWallFooting20% |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.4 | Providingdrytrap/rubblestonesoling15cmto20cm  thickincludinghandpackingandcompactingetc. complete. |  |  |  |  |  |  |  |  |
|  | ForCompoundWall | 1 | 308.30 | 0.50 | 0.15  0 |  |  | **23.123** |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.5 | ProvidingandcastinginsitucementconcreteM-15of  trapmetalforcopingetc.….complete |  |  |  |  |  |  |  |  |
|  | CompoundWall | 1 | 308.30 | 0.20 | 0.15  0 |  |  | **9.249** |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.6 | ProvidingandcastinginsitucementconcreteM-30of trap metal for R.C.C. work like raft, grillage, strip,  foundationsandfootingetc….Complete |  |  |  |  |  |  |  |  |
|  | CompoundwallRaft | 10  3 | 0.30 | 0.30 | 0.50  0 |  |  | **4.625** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.70 | ProvidingandcastinginsitucementconcreteM-30of  trapmetalforR.C.C.columnsetc.…. Complete |  |  |  |  |  |  |  |  |
|  | ColumnsforCompoundWall | 10  3 | 0.23 | 0.23 | 1.50  0 |  |  | **8.173** |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.8 | ProvidingandcastinginsitucementconcreteM-30of  trapmetalforR.C.C.BeamsandLintelsetc.…. complete |  |  |  |  |  |  |  |  |
|  | Belowcompound Wall | 1 | 308.30 | 0.23 | 0.45  0 |  |  | **31.909** |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.9 | ProvidingandfixinginpositionT.M.T.bar |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reinforcementof |  |  |  |  |  |  |  |  |
|  | TotalAreaofR.C.C.\*80/kg.cu.m. |  |  |  |  |  |  | **3.577** |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.10 | PProvidingsecondclassburntbrickmasonry with |  |  |  |  |  |  |  |  |
|  | Compoundwall | 1 | 308.30 | 0.23 | 1.50  0 |  |  | **106.364** |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.11 | Providingsandfaceplasterexternallyincement  mortar |  |  |  |  |  |  |  |  |
|  | Compoundwall | 2 | 308.30 |  | 1.50  0 |  | **924.900** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.12 | Providingandapplyingoneprimercoatof approved  quality |  |  |  |  |  |  |  |  |
|  | Sameas Plaster |  |  |  |  |  | **924.900** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.13 | Providingandapplyingtwocoatsofexteriorweather |  |  |  |  |  |  |  |  |
|  | Same AsPrimer |  |  |  |  |  | **924.900** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.14 | Providing&fixing,60mmthickLacquercoated (Reflective) interlocking ….etc complete |  |  |  |  |  |  |  |  |
|  | Road Work | 1 | 2978.23 | |  |  | 2978.23 |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 16.15 | Providingandfixingmildsteelgrillgatewithangleiron  frame | 1 | 11.25 |  | 2.50  0 |  | **28.125** |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **17** | SEWAGE&GUTTER |  |  |  |  |  |  |  |  |
| 17.1 | Excavationforfoundationinearth,soilsofalltypes,  sand |  |  |  |  |  |  |  |  |
|  | Exacavation |  |  |  |  |  |  |  |  |
|  | Sewage |  | 48.274 | 1 | 0.30 |  |  | 14.48 |  |
|  | Gutter |  | 319.55 | 1 | 1.00 |  |  | 319.55 |  |
|  |  |  |  |  |  |  |  | **334.03** |  |
| 17.2 | Filling in plinth and floors with approved excavated materialsin15cmto20cmlayersincludingwatering and compaction etc. complete. 25% of Excavated  material |  |  |  |  |  |  | **83.508** |  |
| 17.3 | Providingdrytrap/rubblestonesoling15cmto20cm  thick |  |  |  |  |  |  |  |  |
|  | Sewage |  | 48.274 | 1 | 0.23 |  |  | 11.10 |  |
|  | Gutter |  | 319.55 | 1 | 0.23 |  |  | 73.50 |  |
|  |  |  |  |  |  |  |  | **84.60** |  |
|  |  |  |  |  |  |  |  |  |  |
| 17.4 | Providing and laying in situ cement concrete in proportionM15oftrapmetalforfoundationand bedding, including bailing out water manually,  formwork,compactingandcuring.etc complete. |  |  |  |  |  |  |  |  |
|  | Sewage |  | 48.274 | 1 | 0.10 |  |  | 4.83 |  |
|  | Gutter |  | 319.55 | 1 | 0.10 |  |  | 31.96 |  |
|  | Jointincasingforsewagepipe | 7 | 0.5 | 0.5 | 0.10 |  |  | 0.18 |  |

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|  | TopincasingforGutterpipe | 35 | 0.6 | 0.6 | 0.10 |  |  | 0.04 |  |
|  |  |  |  |  |  |  |  | **36.99** |  |
| 17.5 | Providing & laying M-15 grade cement concrete of trapmetalforplumwall….etccompactingbyvibrating and curing complete with plums 15 percent. With CM 1:3 of sufficient minimum thk to give a smooth and evensurfaceorroughningsurfaceifspecialfinishisto be provided curing and bailing out water .CM 1:3 plaster isconsideredfoe rendering uneven and honey combed surface only. Newly laid concrete shall be  coveredbygunnybags.Plastictarpaulinetc.complete | 1 | 199.53  9 | 0.3 | 0.60 |  |  | **35.917** |  |
| 17.6 | Providing&fiixingM-20grade**RCCcover**(1x1x0.075) with beam (0.15x0.15) as per detailed drawings and design, including centering, formwork, comapcting, roughening the surface if special finish is to be provided and curing etc. complete. (including steel  reinforcement)etc.complete. |  | 319.55 | 1.00 |  |  | **319.550** |  |  |
| 17.7 | ProvidingISIstandardR.C.C.pipesinstandardlengths of following class and diameter suitable for either collar joints or rubber ring joints, including all taxes (Central and local), inspection charges, transport to departmentalstores/site,unloadingandstackingetc.  completeasperIS-458/1988.ClassNP-II225mmdia. | 1 | 48.274 |  |  |  |  |  | **48.274** |
| **18** | **FireFighting System** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 1 | **HydrantInstallation** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | **270.00**  **0** |
|  |  |  |  |  |  |  |  |  | **390.00**  **0** |

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| **ItemNo.-16.7 :RateanalysisofRCCColumnM30grade** | | | | | | | | | |
| **Sr.No.** | **Description** | **Unit** | **Nos.** | **L** | **B** |  | **Qty** | **Rate(Rs)** | **Amount(Rs)** |
| i | Cement0.4mt/ cu.m.@4700/mt. |  | **0.4x4700** | | | | | 1880.00 |  |
| ii | Sand0.425cu.m./cu.m.@1500/cu.m. |  | **0.425x1500** | | | | | 637.50 |  |
| iii | 20mmcourseaggreagate0.57cu.m./cu.m.@  800 |  | **0.57x800** | | | | | 456.00 |  |
| iv | 10mmcourseaggreagate0.28cu.m./cu.m.@  800 |  | **0.28x800** | | | | | 224.00 |  |
| v |  |  |  |  |  |  |  | 7902.75 |  |
|  |  |  |  |  |  |  |  | 11100.2  5 |  |
|  | **AddCoporationArea5%** |  |  |  |  |  |  | 555.01 |  |
|  |  |  |  |  |  |  |  | **11655.2**  **6** |  |

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| **ItemNo.18:M-20gradecementconcretewithplums15 percent** | | | | | | | | | |
| **Sr.No.** | **Description** | **Unit** | **Nos.** | **L** | **B** |  | **Qty** | **Rate(Rs.**  **)** | **Amount** |
|  | Qty.forM-20concrete=0.85Cu.M |  |  |  |  |  |  |  |  |
|  | 15%i.e.0.15=0.15Cu.M. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 1 | P/CinsituCCM20oftrapmetalforstep…etc.  complete.NMMCCSR2018-19/I-758+5% Rs.5655.03 + 282.75=5937.78 |  |  |  |  |  |  |  |  |
|  | **AmountofA** |  |  |  |  |  | 0.85 | 5937.78 | 5047.113 |
| 2 | P/C in situ CC M20 of trap metal for step … etc.complete.NMMCCSR2018-19/I-758+5% Rs. 5655.03 + 282.75 = 5937 |  |  |  |  |  |  |  |  |
|  | **AmountofB** |  |  |  |  |  | 0.15 | 1017.45 | 152.6175 |
|  | **Total=[A+B]** |  |  |  |  |  |  |  | 5199.7305 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **Say** |  | **5199.72** |

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| **ItemNo.126 :M-20gradeRCCcover(1.00x1.00x0.075)** | | | | | | | | | |
| **Sr.No.** | **Description** | **Unit** | **Nos.** | **L** | **B** |  | **Qty** | **Rate(Rs.**  **)** | **Amount** |
| 1 | Providing&Casting insituCCM20forRCC  Slab… etc. complete. |  |  |  |  |  |  |  |  |
|  | x1.00x0.075= 0.075m3 | m3 | 1 | 1 | 1 | 0 | 0.075 | 11248.7  0 | 843.6525 |
|  | NMMC-CSR2018-19/P-/Sr.no.777+5%CA |  |  |  |  |  |  |  |  |
|  | Rs.10713.03+5%=Rs.11248.7 |  |  |  |  |  |  |  |  |
|  | **A** |  |  |  |  |  |  |  | 843.6525 |
|  |  |  |  |  |  |  |  |  |  |
| 2 | P/FinpositionH.Y.S.D./T.M.T.Steelbar  reinforcement… etc.complete |  |  |  |  |  |  |  |  |
|  | Forslab=0.075x200kg/m2= 15.000  kg.=0.015MT | M.T | 1 |  |  |  | 0.015 | 67193.7 | 1007.9055 |
|  | CSR18-19/PageNo./ItemNo.797/+5%C.A.  Rs.63994+Rs.3199.7=Rs. 67193.70 |  |  |  |  |  |  |  |  |
|  | **B** |  |  |  |  |  |  |  | 1007.9055 |
|  |  |  |  |  |  |  |  |  |  |
| 3 | Labourforfixing…etc.complete. |  |  |  |  |  |  |  |  |
|  | =(A+B)x5% |  |  |  |  |  |  |  | 92.5779 |
|  | **C** |  |  |  |  |  |  |  | 92.5779 |
|  | Total=(A+B+C) |  |  |  |  |  |  |  | 1944.1359 |

|  |  |  |  |  |  |  |  |  |  |
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|  | **CompletedRate** |  |  |  |  |  |  |  | **1944.13/Sq.M** |

# APPENDICS - II

## (Quotation for Plant and Machinery)

**Subject:-OfferforSupply&InstallationofRefrigerationSystemforVashiSector-18ColdStorage.**

Dear Sir,

Thisreferstoourdiscussion;wearegivingOfferforcompletescopeasmentioned below.

# DESIGN BASIS-

1. **COLDSTORAGE:**MULTI-COMMODITYPRODUCT,CS-1,2,3&4
   1. CS-1)SIZE:13.57x15.72x13.5(H)Mtr–01NO.(850MT,25.0kWx04Nos.) CS-2)SIZE:13.62x17.49x13.5(H)Mtr–01NO.(950MT,25.0kWx04Nos.) CS-3)SIZE:13.57x17.44x13.5(H)Mtr–01NO.(950MT,25.0kWx04Nos.) CS-4)SIZE:13.57x15.62x13.5(H)Mtr–01NO.(850MT,25.0kWx04Nos.)
   2. CHAMBER:04 Nos.(FLOOR:G+4)
   3. STORAGECAPACITY:3600MT
   4. ROOMTEMPERATURE:-+4DegC
   5. INCOMINGPRODUCTTEMPERATURE:+25DegC
   6. PULDOWNTIME:24HRS
   7. DAILYLOADINGLOAD:30.0MT/EACHCHAMBER
   8. REFRIGERATIONCAPACITY:400.0kW(25.0kWx16Nos.) l)ELECTRICALLOAD: 240.0kWx01 Nos. (15.0k Wx16 Nos.)
      1. **PRE-COOLING:**PC-1&2

PC-1)SIZE:4.46x4.48x2.7(H)Mtr–01NO.(6MT/Batch,25.0kWx01No.) PC-2) SIZE: 4.46x4.52x2.7(H) Mtr–01NO.(6MT/Batch,25.0kWx01No.)

TOTALREFRIGERATIONCAPACITY:450kWTOTALELECTRICALLOAD:270kW

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SRN**  **O** | **DESCRIPTION** | **QT**  **Y** | **UNI**  **T** | **RATE** | **AMOUNT** |
| **A** | **REFRIGERATIONEQUIPMENTSUPPLY: COLDSTORAGE(+ve)-CS1,2,3&4**   1. Evaporatorsofceilingsuspendedtype 2. AircooledCondensingunitforChiller–Carriermake, Refrigeration Capacity- 25.0kW,   @EvaporationTemp.-5DegC& Condensing Temp.: 50Deg C  **PRE-COOLING-PC1&2**   1. Evaporatorsofceilingsuspendedtype 2. AircooledCondensingunitforChiller–Carriermake, Refrigeration Capacity- 25.0 kW,   @EvaporationTemp.-5DegC& Condensing Temp.: 50Deg C |  |  |  |  |
| 1 |  |  |
|  | 16 | Nos  . |
| 2 |  |  |
|  | 2 | Nos  . |
|  | **SUB-TOTAL(A)** |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **B**  2  3  4 | **REFRIGERATIONSYSTEM-SUPPLY&INSTALLATION**  RefrigerationsystemAccessoriesconsistingofRefrigerationcontrol,valves,copperpipe,CondensatedrainPVCpipe,RefrigerationGas R404a,Oil, etc.  ElectrialPanel&RelatedCabling MachineInstallation | 18  1  18 | Nos  .  Job Nos  . |  |  |
|  | **SUB-TOTAL(B)** |  |  |  |  |
|  |  |  |  |  |  |
|  | **GRANDTOTAL(A+B)** |  |  |  |  |

**TERMS&CONDITIONS**

**Exclusion:**

* + - 1. CivilworkforfloorofRefrigerationSystemwork.
      2. Civilopeningforinstallationofrefrigerationsystem,forroutingofpipingandcables.
      3. TerminationofPowersupplycablestoourcoldroomcontrolpanelsandcompressorcontrolPanels.
      4. Waterandelectricityforerectionandcommissioning.
      5. StructuralSupportingWorkforCondensingUnit.
      6. MainEle.PowerrequiredatMainElectricalPanel
      7. Scaffolding,ForkLiftoranyEquipmentforInstallation.

**Delivery:**

SupplyofEquipments–3to4weeks

ForInstallationandcommissioning-4to6weekfromsupply&siteclearance.

**Validity:**

This offer for 30 days from the date of offer.

**Warranty:**

Equipment warranty & Guarantee are effective for period of 12months from the date of start-up of units or 15months from the date of supply.

We trust the above is in line with your requirement and look forward to receive your valuable order. Yours Truly,

(ON YOUR COMPANY’S LETTER HEAD)

**Declaration cum Undertaking pursuant to Section 206AB of the Income Tax Act, 1961**

To,

M/s NAFED

India.

Dear Sir/Madam,

**Subject: Declaration confirming filing of Income Tax Return for immediate 3 preceding years**

I, Ms/Mr/M/s. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in capacity of Self/Proprietor/Partner/Director of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Name of entity) having TMID\_\_\_\_\_\_\_\_\_\_, PAN \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (PAN of Entity) registered office/permanent address at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ do hereby confirm that our income tax return filing status for last 3 Financial Years is as given under:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Financial Year for which Income Tax Return was due as per Section 139(1)** | **Filed / Not filed** | **Date of Filing** | **ITR Acknowledgement No.** | **TDS/TCS is Rs. 50000/- or more (Yes/No)** |
| 2021-22 |  |  |  |  |
| 2022-23 |  |  |  |  |
| 2023-24 |  |  |  |  |

I/We hereby undertake to indemnify M/s NAFED for any claim/loss/liability/cause of action fully including any Tax, interest, penalty, etc. that may arise due to inaccurate/false/incorrect reporting of any of the above information.

For \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Name of Entity)

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of person: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**AGREEMENT**

1. This agreement made at NAFED Branch office at Naman centre, ‘A’ Wing, Unit No. 803, 8th Floor, C-31, G-Block, Opp. PNB & Dena Bank, Bandra Kurla Complex, Bandra (East), Mumbai-51. This date

/ / of June,2025 between NAFED Mumbai (hereinafter referred as employer NAFED) which expression, where the context show admits, shall include its successor and assignee of the own part and M/s. shall prevail and having its/their registered office at (hereinafter called contracted) which expression where the context show admits includes its successor and assignee of the other parts.

1. The employer invited quotation and several firms submitted quotations in response to the invitation. After due consideration NAFED has decided to entrust the work of Construction of Cold Storage and other paraphernalia at Vashi, Navi Mumbai in Maharashtra on turnkey basis.
2. For the consideration payable under this agreement, the contractor hereby agreed to complete the institution of cold storage and handover the work after completing the same in a satisfactory manner, within a period specified in the contract.
3. It is here by agreed between the parties as follows:
   1. Time is the essence of the agreement and all works shall be completed in time.
   2. The General Terms & Conditions of Contract governing the Agreement shall be as contained in the Quotation documents annexed.
   3. The items of the below quantity work entrusted to the contractor, the detailed specifications of each item of work, approximate quantities for each item of work to be executed with required materials and labour etc.
   4. The terms and conditions stipulated in the Quotation documents and the letter of award of work vide no. dated placed at Appendix, shall be applicable.
   5. The detailed technical specification relating to the work shall be totally in accordance with and as per provisions in quotation document & as agreed to in this Contract/Work Order: and for items not contained, shall be as approved by NAFED.
   6. The party has advised to visit office of State Head, NAFED Mumbai for detailed know how about design, drawing, BOQ and their specification of the materials/equipments before to submit the bid document (Quotations) for the participation in the current bid. All the terms and condition will be carried out as per the earlier contract or will be modified amicably for a standards format for appointment of construction of cold storage agency.
   7. The bidders to the contract have gone through the entire quotation documents and have understood them.

CONTRACTOR (STATE HEAD)

NAFED

WITNESS WITNESS

1. 1.

2. 2.